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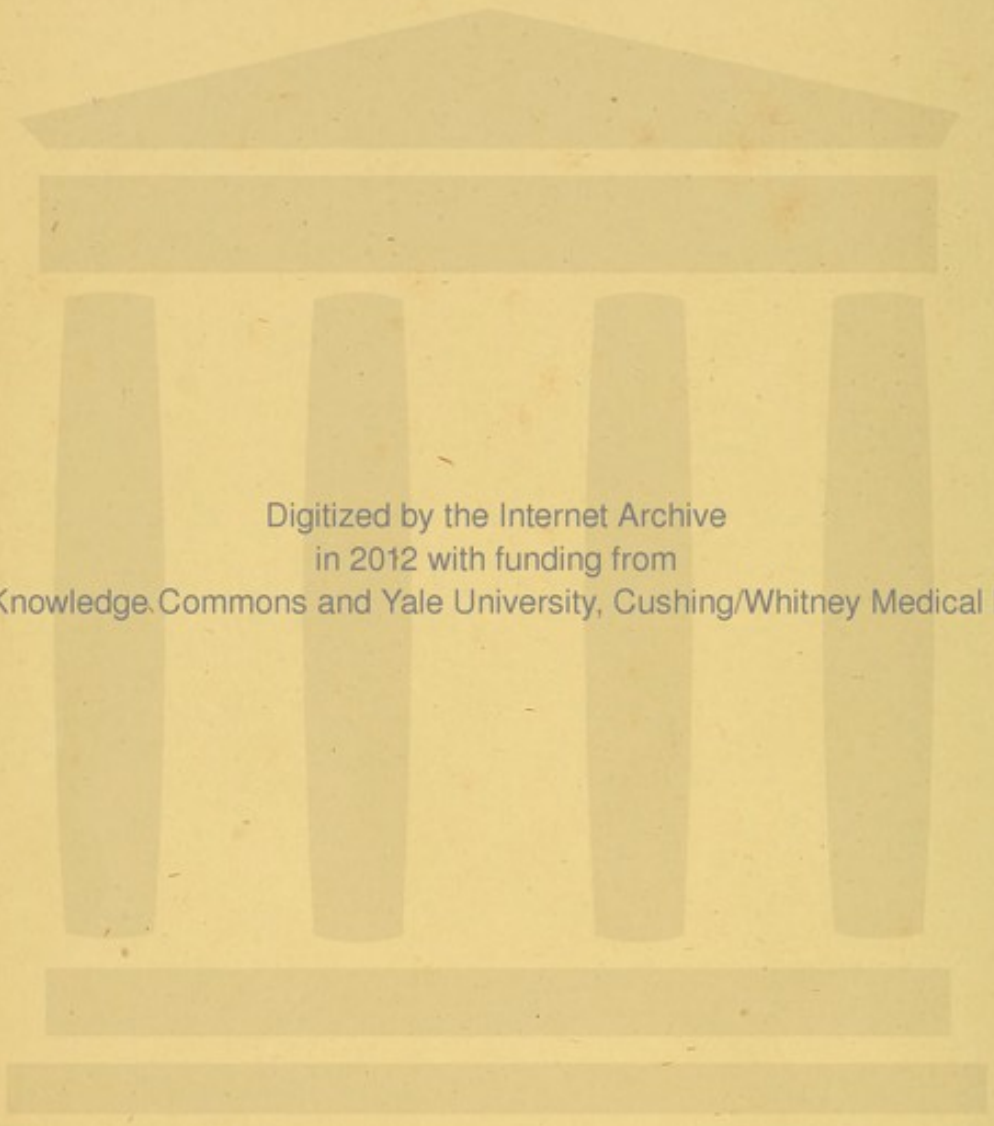

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THE

APPLICATION

OF THE

PRINCIPLES AND PRACTICE OF HOMŒOPATHY

TO

OBSTETRICS,

AND THE

DISORDERS PECULIAR TO WOMEN AND YOUNG CHILDREN,

BY

HENRY N. GUERNSEY, M. D.,

PROFESSOR OF OBSTETRICS AND DISEASES OF WOMEN AND CHILDREN

IN THE

HOMŒOPATHIC MEDICAL COLLEGE OF PENNSYLVANIA.

WITH NEARLY ONE HUNDRED ILLUSTRATIONS.

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PREFACE.

In preparing this work for the press, I need not remark upon the great interruption a large practice and the great labor of lecturing one hour or more every day in the week for six months out of the twelve upon some medical subject, and many other duties at the College besides, have occasioned. Very many physicians can testify to the all-engrossing of almost every moment of time in conducting a large practice. Add to this the labor as above indicated, and most physicians can understand that it is an easy matter for many imperfections to creep into a work of this size, prepared under such pressing circumstances. No one can be more conscious of these imperfections than myself. This being the pioneer of all works of this kind ever published, it will be an easy matter to offer criticisms and to improve on the issue of future editions.

The same reasons have compelled the long delay in the publication of the work, due entirely to the impossibility of more rapidly supplying the copy. Nor indeed could the work have made its appearance so promptly, but for the assistance rendered by my friend and colleague, J. H. P. Frost, M. D., in preparing the physiological parts; description of diseases, &c., and in carrying the whole through the press.

Both the author and publisher desire to acknowledge the liberality of Messrs. Lindsay & Blakiston, in furnishing a considerable part of the illustrations employed in this work.

The plan of treatment may seem to some rather novel, and, perhaps, on its first view, as objectionable, inasmuch as it may seem like prescribing for single symptoms; whereas such is not

the fact. It is only meant to state some strong characteristic symptom, which will often be found the governing symptom, and on referring to the Symptomen Codex, all the others will surely be there if this one is. There must be a head to every thing; so in symptomatology,—if the most interior or peculiar, or key-note is discernible, it will be found that all the other symptoms of the case will be also found under that remedy that gives existence to this peculiar one, if that remedy is well proven. It will be necessary, in order to prescribe efficiently, to discover in every case that which characterizes one remedy above another, in every combination of symptoms that exists. There is certainly that, in every case of illness, which pre-eminently characterizes that case or causes it to differ from every other. So in the remedy to be selected, there is or must be a combination of symptoms, a peculiar combination, characteristic or, more strikingly, key-note. Strike that and all the others are easily touched, attuned or sounded. There is only one key-note to any piece of music, however complicated, and that note governs all the others in the various parts, no matter how many variations, trills, accompaniments, &c.

Such a work as the present was needed, indeed urgently called for, and I have spared no pains to render it useful to students and to the junior members of the profession, for whom it was especially designed, and to whom it is respectfully dedicated by

THE AUTHOR.

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* Printed Thirtieth by mistake.

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A portion of the illustrations belonging to Chapter Thirty-first, omitted in printing the work, may be found on pages 744–7.

The remedies referred to at the close of Chapter Twenty-eighth, appear on page 748.

ERRATA.

Page 67, for "**jugulans**," read "**juglans.**"
" 89, eighth line from top, for "calcarious," read "*calcarea-like.*"
" 143, twenty-first line from top, for "part," read "*jar.*"
" 225, for "**Ranun. bulb.**," read "**Rhododendon.**"
" 283, for "**Cinnamon**," read "**Cina.**"
" 302, ninth line from top, for "perineum," read "*peritoneum.*"
" 372, twenty-first line from top, for "flourishing," read "*famishing.*"
" 374, fourth line from top, for "Betel," read "*Botal.*"
" 477, fourth line from bottom, for "pubis," read "*pelvis.*"
" 503, twelfth line from top, for "Dystocia," read "*Dysuria.*"

A

TREATISE ON MIDWIFERY.

CHAPTER FIRST.

THE BONES OF THE PELVIS.

THE science and the art of Obstetrics have relation to the phenomena of pregnancy and parturition, considered as purely physiological functions. This study naturally includes both the processes which precede pregnancy and represent its conditions, and those which,—succeeding parturition,—become its consequences. While at the same time, all inequalities in form and function; all difficulties and disorders attendant upon, connected with, or subsequent to these processes, and their proper treatment, must be thoroughly understood,—in order that the student may become an accomplished Accoucheur, and successful Physician.

Thus the anatomy and physiology of the pelvis and of the parts of which it is composed, of the organs which it contains, and of those which are functionally connected with them, demand the first attention. Next to this study of the natural and normal states, and in immediate connection with it, comes the consideration of the unnatural or abnormal. The healthy and the morbid conditions must be placed, as it were, side by side, in order that the latter may be the more clearly discriminated and understood;—and at the same time immediately associated with the appropriate means of treatment.

The PELVIS is composed of four bones; the sacrum, coccyx, right and left os innominatum. The sacrum and coccyx form the posterior part of the pelvis; the two ossa innominata the sides and front. These

bones unite to form a basin or cavity, which affords place of attachment to many of the muscles of the body, and general support to the contents of the abdomen. In the female pelvis are found the womb with some portion of its superior and inferior appendages; the urinary bladder, and the rectum. The pelvis forms the base of the trunk, articulating on the upper surface of its sacral portion with the last lumbar vertebra. Below and on each side it articulates with the femoral bones, by which it is itself supported. In the erect position it is placed obliquely with regard to the trunk of the body; the pelvic surface of the symphysis pubis looking upwards and backwards; the concavity of the sacrum looking downwards and forwards; the base of the sacrum, in the well-formed female, being nearly four inches above the upper border of the symphysis, and the apex of the coccyx a little more than half an inch above its lower border. In the adult it occupies the centre of the body.

A brief description of the several bones which compose the pelvis will prepare the way for a more particular account of its symphyses, size, diameter, cavity, circumference, axes and planes.

The SACRUM is the largest bone in the vertebral column; of which —with the coccyx,—it forms the terminal base. It presents for consideration a base, an apex, an anterior and a posterior surface, two lateral borders, and a central canal. Its length is from four inches to four and a half; and its breadth is about four inches. From being spongy in structure, its specific gravity is small; and it is known as the lightest bone, for its size, in the whole body. It is triangular in shape, wider at its base than at its apex, and broader on its anterior than on its posterior surface; and being inserted like a wedge, between the two ossa innominata, it forms the keystone of the double arch of the pelvis. Its *base* inclines upwards and forwards to articulate with the last lumbar vertebra, the anterior surface of the base projecting so as to form with this vertebra the *promontory* of the *sacrum*, or *sacro-vertebral angle*. Its *apex* is directed downwards and forwards, and presents a small oval, concave surface for articulation with the coccyx.

The *anterior surface* is smooth, and concave from above downwards. This *concavity*, or *hollow* of the sacrum, forms an important feature in the construction of the pelvis. It is marked by four transverse ridges, which show the line of union of the five separate pieces of which the sacrum was originally composed. At the end of these ridges are found the eight *anterior sacral foramina*,—four on each side,

—through which pass the anterior branches of the sacral nerves. Opposite to the extremities of these ridges the foramina are bevelled, so that on the outer side the nerves are protected from being injured by the descending head in parturition, by being thus sunken in the substance of the bone. While on the inner side, the raised, transverse ridges answer the same purpose of preventing any undue pressure upon the nerves transmitted as it were beneath them. Superiorly and externally to the foramina, are the wings and lateral masses, which complete the anterior surface of the sacrum.

The *posterior surface* is very rough, irregular, convex and much narrower than the anterior surface. Along the median line it is studded with eminences,—rudimentary spinous processes,—which afford greater surface and security to the muscles that originate from, and that are inserted into the sacrum. These processes and tubercles, form an irregular tubercular ridge, whose projections afford greater firmness of attachment to the numerous ligaments which unite this bone to the os innominatum of either side. While the general contour of the ridge itself renders the convexity of this posterior surface even greater than the corresponding concavity of the anterior surface. This convexity presents in both directions, longitudinally and laterally; so that the slope from the posterior surface inclines towards each lateral border, as well as towards the base above and the apex below. Just without the spinous processes, on each side, are the *laminæ*. Externally to these appears a series of indistinct *tubercles*, which correspond to the articulating processes of the lumbar vertebræ. Four *posterior sacral foramina* open externally to these tubercles, through which are transmitted the posterior branches of the sacral nerves. Outside these foramina appears a second series of indistinct tubercles, which constitute the rudimentary posterior *transverse processes* of the sacral vertebræ.

The *sacral canal* extends through the upper and central part of the bone,—in its lower part this canal is often uncovered by the failure of development of the fourth and fifth laminæ. This canal is triangular above, follows the curvature of the sacrum, and is both narrowed and flattened from before backwards in its descent towards the apex.

Each *lateral border* is divided into two distinct parts, a superior or iliac, and an inferior part. The superior, auricular or ear-shaped part is covered, anteriorly, by a cartilage for articulation with the ilium. Posteriorly it is marked by irregular expansions, to which the posterior sacral iliac ligaments are attached. The inferior part

of the lateral border is thin and curved, and gives attachment to the sacro-sciatic ligaments and to some portions of the glutæus maximus. The fifth sacral nerve passes through a small indentation at the lower edge of this border and at its angle of junction with the coccyx.

In the female, the *sacrum* is broader than in the male; less curved, especially in its upper part; and directed more obliquely backwards: thus at the same time increasing the projection of the promontory of the sacrum, and the capacity of the cavity of the pelvis.

The pyriformis and coccygeus muscles are attached to the sacrum on either side; the glutæus maximus and erector spinæ, behind.

The Coccyx corresponds to the sacrum in general appearance, shape and mode of construction. From the gradual diminution of the four rudimentary segments of bone of which it is composed, it presents the form of an inverted, triangular pyramid. The point of the coccyx is usually higher than the inferior margin of the symphysis pubis. Its *anterior surface* is concave and marked by three transverse grooves. The *posterior surface* is convex, marked by similar grooves, and presents on each side a row of tubercles. The superior and largest pair of these,—the cornua of the coccyx,—project upward to articulate with the cornua of the sacrum. The coccyx gives attachment on its narrow borders to the sacro-sciatic ligaments and to the coccygeus muscle; posteriorly the glutæus maximus; anteriorly to the levator ani; and to the sphincter ani, at its apex. The only articulation of the coccyx is with the sacrum above.

The Os Innominatum, or unnamable bone, is so called from the impossibility of giving it a truly descriptive and significant name. In the young it is divisible into three distinct bones: the *ilium*, the *ischium*, and the *pubis*; and in the maturer subject the same names are employed to designate the respective portions of this large, irregular, and anomalous bone.

The *ilium*, coxal or hip bone, occupies the side; the *ischium*, the inferior and posterior portion, and the *pubis* the anterior part of the pelvis. These three bones on either side coalesce, uniting in the acetabulum at the ilio-pectineal eminence and at the junction of the ascending and descending ischio-pubic rami, and thus form the os innominatum.

It will be more convenient first to describe by itself each of these constituent bones; afterwards to consider them as they unite to form one single bone, the os innominatum.

The ILIUM, the largest of the three, presents an external and an internal surface, an anterior and a posterior border and a crest.

The *external surface* of the ilium is bounded above by the crest; below by the acetabulum; and in front and behind by the anterior and posterior borders. It is alternately convex and concave, broad and smooth, forms the external iliac fossa, and gives attachment to the three glutæi muscles,—the minimus, median and maximus,—which make up the full and rounded contour of the hip.

The *internal surface* is bounded above by the ilio-pectineal line, and before and behind by the anterior and posterior borders. It is divided into two parts. The first or anterior part is a smooth, concave surface of considerable extent, which receives the iliacus internus, and is called the internal iliac fossa or venter of the ilium. The second or posterior part is immediately behind the iliac fossa, and is divided into a superior and an inferior portion. The superior part, rough, uneven and irregularly shaped, gives attachment to the sacro-iliac ligaments. The inferior or auricular portion is uneven and covered with cartilage, for articulation with the corresponding ear-shaped portion of the lateral border of the sacrum.

The *crest* or spine of the ilium, longer in the female than in the male, is thick, convex and arched. Its terminations in front and behind, form prominent eminences, which are respectively the anterior superior, and posterior superior spinous processes. The former, or anterior superior spinous process of the ilium, gives attachment to Poupart's ligament; to the tensor vagina femoris, and to the sartorius muscles. Into the latter, or posterior superior spinous process of the ilium, are inserted strong ligaments, which firmly unite this bone to the sacrum. Beneath these processes are the anterior and posterior inferior spinous processes of either side.

The *anterior border* of the ilium extends from the anterior superior spinous process of the ilium to the ilio-pectineal eminence. It presents two depressions, which are separated by the anterior inferior spinous process. Through the upper depression, between the superior and inferior spinous processes, is transmitted the external cutaneous nerve, and from it arise some fibres of the sartorius muscle. Through the lower depression, between the inferior spinous process and the ilio-pectineal eminence, pass the iliacus and psoas muscles.

The *posterior border* of the ilium, shorter than the anterior, presents two deep depressions, separated by a prominent point of bone, the posterior inferior spinous process. The inferior and much larger of these depressions is the great sacro-sciatic notch. The upper portion

of this border corresponds to that portion of the posterior surface of the ilium which gives attachment to the sacro-iliac ligaments; the lower portion corresponds to the auricular surface which articulates with the sacrum.

The ilium articulates with the sacrum, and unites in bony union with the ischium and pubes.

The ISCHIUM, the second in size and lowest in position of the bony components of the os innominatum, is divided into a base or body and a ramus or branch. The *base* of the ischium is the thickest part, and forms a larger portion of the acetabulum than does the ilium. From the posterior portion of the bone arises the *spinous process* of the ischium, which runs backwards and inclines inwards towards the cavity of the pelvis. To this spinous process are attached the internal sacro-sciatic ligaments; and from it arises the coccygeus, to be inserted into the coccyx. The outlet of the pelvic cavity is sometimes materially affected by the abnormal length and internal inclination of this process; which hence becomes an important element in determining the obstetric capacity of the pelvis itself. The *tuberosity* of the ischium forms the part on which the body rests in the sitting position. The *ramus* of the ischium extends from this tuberosity to the ramus of the pubes; its lower border forms part of the inferior outlet of the pelvis, and its inner surface forms a corresponding part of the lower wall of the pelvis.

The ischium is united with the ilium and pubes, in the acetabulum, and by ligaments is firmly bound to the sacrum.

The PUBIS, the smallest of the three divisions of the os innominatum, with its fellow of the other side, forms the pubic arch or anterior portion of the pelvis. It may be divided into a base or body, a horizontal and a descending ramus. The superior, or *horizontal* ramus extends from the body of the pubes to the symphysis pubis; the inferior, or *descending* ramus inclines outwards and downwards from the body, to unite with the ascending ramus of the ischium; while the *body* or base of the pubes, the central and more expanded portion of the bone, forms a small part of the acetabulum. In the *symphysis pubis* the pubic bones are not in actual contact, but they are separated by a cartilage of considerable thickness, developed upon the face of each bone, similar to that which occurs in the sacro-iliac symphysis. These cartilages are remarkably adapted to promote the perfect elasticity of the pelvic cavity, and so to provide the utmost

possible security for its embryonic contents. In some instances the state of this inter-pubic cartilage is such as to cause a false joint, and to admit so much lateral movement between the pubic bones as greatly to impede locomotion.

The *acetabulum* or cotyloid cavity of the os innominatum, is the circular, cup-shaped depression for the reception of the head of the femur. The ischium forms something more, and the ilium something less than two-fifths each of this depression, and the pubes the remainder. Thus the acetabulum forms the centre of union of the three bones which compose the os innominatum; and these three original bones, which, for distinction's sake, have thus been separately described, unite to form the os innominatum of either side, which latter must therefore be regarded as one bone.

The *obturator foramen*, or foramen ovale, as it is sometimes termed, triangular in the male, but oval in the female, is the large aperture situated between the ischium and the pubes. This foramen, formed on the same principle of the double arch which is seen on a larger scale in the construction of the whole pelvis, combines lightness with strength. The obturator ligament, or membrane, almost entirely covers this foramen, and thus forms a part of the wall of the pelvis. By the bulging out of this elastic membrane, more room is provided for the descending head; and this combination of osseous and membranous parts in the pelvic parietes serves, at the same time, to relieve the child's head and the soft parts of the mother, within the pelvic cavity, from undue compression.

The *os innominatum* is formed by the union of the three bones thus separately described; and this bone, considered now as a unit, presents for study an external and an internal face, an anterior, a posterior, a superior and an inferior border.

The *external face* of the os innominatum is occupied, in its upper and posterior portion, by the external iliac fossa. In its respective convex and concave surfaces, this fossa gives origin, insertion and attachment to the glutæus maximus, medius and minimus muscles. Anteriorly and superiorly appears the acetabulum or cotyloid cavity. Still more directly in front and beneath is found the obturator foramen, already described as being nearly subtended by the obturator ligament.

The *internal face* of the os innominatum is occupied, in its superior portion, by the internal iliac fossa. Beneath is found the triangular surface which corresponds to the acetabulum and body of the ischium. Anteriorly appear the inner surface of the obturator foramen and

membrane, and the internal faces of the ischio-pubic rami and symphysis pubis.

The *anterior border* is concave, oblique above and horizontal in front; marked by the anterior superior and anterior inferior spinous processes and ilio-pectineal eminence, and terminated by the spine and angle of the pubis.

The *posterior border* is irregular in shape, oblique from above downwards and from without inwards; marked by the posterior superior and posterior inferior spinous processes, great sciatic notch, spine of the ischium and lesser sciatic notch, and terminated by the tuberosity of the ischium.

The *superior border*, or *crest of the ilium*, is convex and sinuously curved, being bent inwards anteriorly and outwards posteriorly. It is terminated by the anterior superior spinous process in front, and by the posterior and superior spinous process behind.

The *inferior border*, shorter than either of the others, is marked above by the oval articulating surface which forms the symphysis pubis, below by the tuberosity of the ischium, and between the two we find the ischio-pubic rami.

The os innominatum is developed from three primary centres of ossification, successively, from the second to the fifth month of fœtal life; first in the lower part of the ilium, secondly in the body of the ischium, thirdly in the body of the pubis.

CHAPTER SECOND.

THE ARTICULATIONS OF THE PELVIS.

The four bones which compose the pelvis are united by five articulations: the junction of the coccyx with the sacrum; the sacro-vertebral junction; the symphysis pubis; and the sacro-iliac symphyses. Each of these articulations is a true arthrodia or movable joint; and each one is supplied with synovial membranes. During gestation the secretion from these membranes is much more abundant. After the climacteric period, both the synovial secretion and the membranes themselves dry up and disappear. From the mode of their construction, these joints admit of a slight sliding motion in every direction. Thus during gestation the force of all jars upon either or all these bones is expended upon these elastic,

cartilaginous surfaces and synovial membranes; and the contents of the pelvis are in this manner preserved from serious injury. This will appear more clearly from a briefly particular description of each pelvic articulation.

In the COCCYGEAL JUNCTION, or connection of the coccyx with the sacrum, there are found fibro-cartilages which cover each articulating surface. Between these cartilages is placed the synovial capsule. Thus the sacro-coccygeal articulation admits of free motion,—especially backwards,—by means of which, the inferior outlet of the pelvis may be enlarged at least one inch in its antero-posterior diameter. This movement of the coccyx, so important in obstetric practice, is facilitated by the minor articulations of the small bones, which compose the coccyx itself. In some rare instances these fibro-cartilages become completely ossified; as well at the junction of the coccyx with the sacrum, as at the points of union of the minor bones of the coccyx. In such cases the coccyx forms one continuous bone with the sacrum, greatly extending its curve, and constituting a formidable obstacle to the passage of the head through the inferior strait in parturition. But ordinarily the mobility of the coccyx as a whole, and of the parts which compose it, increases during pregnancy; and so affords an additional advantage in labor.

The *anterior* and *posterior sacro-coccygeal ligaments* support this articulation in front and behind. While the inferior sacro-sciatic ligaments prevent lateral movement, by extending down the extremity of the coccyx on each side.

In the SACRO-VERTEBRAL JUNCTION, or articulation of the sacrum with the last lumbar vertebra, is found the wedge-shaped fibro-cartilage common to the inter-vertebral articulations. Between the oblique processes of the sacrum and those of the vertebra, appears the synovial membrane of this joint. Here the movements, flexion, extension and rotation,—common to the true spinal articulations,—may all be accomplished, but to a limited extent only. The lumbar curve, which begins with the last dorsal vertebra, terminates at this sacro-vertebral junction or angle,—the pelvic curve commencing at the same angle and terminating at the extremity of the coccyx.

The *lumbo-sacral* and lumbo-iliac ligaments are those which more immediately connect the spine with the sacrum and pelvis. The obturator foramen is almost entirely covered and closed by the *obtu-*

rator membrane, which at once serves to complete the walls of the pelvis and give support to the parts.

The SYMPHYSIS PUBIS, or articulation of the pubic bones in front, is formed by means of two dense fibro-cartilaginous plates, which cover the oval and convex articulating surfaces of the ossa pubis. These cartilaginous plates are themselves connected by an intermediate, fibrous elastic tissue, especially where the opposing convex surfaces of the pubic bones recede from each other. While the articulating surface of each of the two cartilages, is composed of a little facet, smooth and furnished with a synovial membrane, which is more lubricated with synovia as the female approaches the period of labor. A considerable thickness of the inter-pubic ligament fills up the interval which exists between the other points of these articular surfaces. The articulation is arthrodial.

This articulation is strengthened by several ligaments which traverse it within and without, above and below. The superficial fibres of the *anterior pubic ligament* pass obliquely from one bone to the other, the deep fibres pass directly across the symphysis and blend with the interarticular fibro-cartilage beneath. The *posterior pubic ligament,* composed of some scattered fibres, unites the pubic bones posteriorly. The *superior pubic ligament* connects the pubis above. And the *sub-pubic ligament* connects them beneath, its inferior surface forming the upper boundary of the pubic arch ; and its superior surface blending with the interarticular cartilage above and with the descending rami of the pubes on either side.

The strength and variety of these ligaments, which combine to strap the pubic bones together in every direction, and in the firmest possible manner, afford sufficient proof of the error of those obstetric writers, who have supposed the symphysis pubis was intended to separate for the sake of enlarging the diameter of the pelvis in parturition. Except in cases of serious deformity, the head is capable of being moulded (elongated) in its descent, so as to accommodate itself to the size and shape of the pelvis. But neither in such cases of serious deformity, nor in any other, does disarticulation of the pelvic or sacro-iliac symphysis enable the pelvis to adapt itself to the size of the descending head.

The SACRO-ILIAC SYMPHYSIS, of either side, is formed by the union of the superior, ear-shaped portion of the lateral border of the sacrum with the inferior, auricular portion of the posterior border of the ilium. Each of these articulating surfaces is covered with a layer of carti-

lage; the sacral layer being much thicker than the iliac. And both the sacral and iliac cartilaginous surfaces are covered by a delicate synovial membrane, which, in the female,—especially in the pregnant state,—secretes a true synovial fluid. Thus, as in the symphysis pubis, so in the sacro-iliac symphysis, a limited sliding motion is provided for.

The sacro-iliac symphysis is strengthened by several important ligaments, which, without entirely preventing the sliding motion just mentioned, enable these joints to sustain in safety the whole weight of the body. The *anterior sacro-iliac ligament*, composed of numerous thin bands, connects the anterior surfaces of the ilium and sacrum. The *posterior sacro-iliac ligament* occupies the depression between the sacrum and ilium, behind the edges of the cartilaginous surfaces, and forms the most powerful bond of union between these two bones. This ligament consists of numerous short interlacing fasciculi, which pass in every direction from the sacrum to the ilium, and which from their fibrous and elastic nature are admirably fitted to maintain the necessary stability of this important articulation. In this general name of posterior sacro-iliac ligament, are included also those which by some writers are described as superior and inferior sacro-iliac ligaments. In addition to these, the *greater* and *lesser* sacro-sciatic ligaments change the great sciatic notch of either side into a foramen; and at the same time serve to bind the ilium still more firmly to the sacrum, and contribute to the construction of the walls of the pelvis.

The Pelvis as a Whole.

Having thus studied the separate bones which compose the pelvis, and examined the manner in which they are united and strengthened, and observed the nature of their articulations, we come to the consideration of the pelvis as a whole.

In general, the pelvis may be divided into an external and an internal surface, each of which needs to be studied by itself.

The External Surface of the pelvis presents four regions. The *anterior region* extends from the symphysis pubis, on the median line, to the edge of the cotyloid cavity on either side, and is principally covered by the obturator muscles. The *posterior region* is marked by the ridge formed by the spinous processes of the sacrum, the inferior opening of the vertebral canal, the union of the sacrum with the coccyx, and the posterior surface of the coccyx itself. Each

lateral region is formed superiorly by the external iliac fossa, mediately by the cotyloid cavity, and inferiorly by the external surface of the tuberosity of the ischium.

On its INTERNAL SURFACE, the pelvis is divided into the upper and larger, and the lower and smaller pelvis or excavation. The line of division extends on a level with the superior border of the symphysis pubis, along the linea pectinea and linea ilia to the promontory of the sacrum. Thus the *superior pelvis* is understood to include all the parts above, and the *inferior pelvis* all those below the ilio-pectineal line. The superior pelvis forms the base of the abdomen; and during the later months of pregnancy supports the gravid uterus. The inferior pelvis is that which is principally concerned in parturition; and which the accoucheur should therefore endeavor fully to understand in all its parts and relations. Both the superior and the inferior pelvic divisions are again divisible into four distinct regions.

In the *superior* or *abdominal pelvis*, the anterior region is formed in the living subject by the muscular parietes of the abdomen. The posterior presents the sacro-vertebral symphysis and promontory, and extends to the sacro-iliac symphysis on either side. Each lateral region is constituted by the internal iliac fossa, and covered by the iliacus internus and psoas muscles.

In the lower or smaller pelvis, the anterior region is composed of the posterior surface of the symphysis pubis; the posterior region consists of the anterior surface of the sacrum and coccyx. Each lateral region of this division of the pelvis, may be again divided into an anterior and a posterior portion. The anterior portion is composed of the bony structure of this part of the pelvis, and corresponds to the inner surface or back part of the cotyloid cavity, and to the interior surface of the body and tuberosity of the ischium. The posterior portion is represented by the greater and lesser sacro-sciatic ligaments, and by the inner surface of the greater and lesser sciatic notches, which, by these ligaments, are converted into foramina and pelvic walls.

THE INCLINED PLANES OF THE PELVIS.—Inside the pelvis are found four inclined planes,—one anterior and one posterior on each side. These inclined planes may be demonstrated by dividing the pelvis itself into two lateral halves by vertical section through the symphysis pubis and median line of the sacrum; and by again dividing each of these lateral portions into anterior and posterior quarters by

a transverse vertical section, on the ilio-pectineal line, a little in front of the sacro-iliac symphysis, and terminating in the spine of the ischium.

Each of the four quarters thus formed of the pelvis, will be found to represent an inclined plane. And each of these inclined planes will be found to look in the same general direction. Thus each of the anterior inclined planes,—that is the right and the left anterior,—will be seen to look from within, outwards; from above, downwards; and from behind, forwards. In like manner both the right and the left posterior inclined planes will look from without, inwards; from above, downwards; and from before, backwards. It was formerly supposed that these several inclined planes, by influencing the rotation of the head of the fœtus, through successive changes of direction, exerted a powerful influence on the mechanism of labor. But, in point of fact, the rotation occurs principally after the head has so far passed through the inferior strait, as to engage the soft parts and distend the perineum. And it may be now stated that these inclined planes serve in part to prevent the too rapid descent of the head, and in part to cause it to assume and maintain the most natural and favorable position in its course.

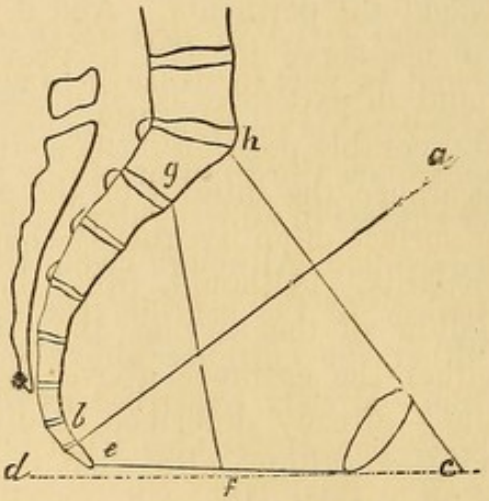
In its general appearance, the interior of the pelvis may be said to resemble the inner surface of an irregularly shaped and truncated cone, tapering downwards. Although from the strongly marked depression of the hollow of the sacrum, the cavity of the pelvis seems larger than either the entrance above or the outlet below. The ilio-pectineal line,—already described as dividing the greater from the lesser pelvis,—constitutes also what is called the margin of the *superior strait.* And the corresponding border of the apex or inferior outlet of the pelvis, constitutes what is known as the *inferior strait.* The engagement of the head in the former, or superior strait, and its subsequent emergence through the latter, or inferior strait, form the most important events in the process of parturition. Hence the axes and dimensions, and in fact all the parts and relations of these straits should be thoroughly understood. The superior strait corresponds to what is by some termed the brim, as the inferior strait corresponds to the outlet; while the intervening internal body of the pelvis is indifferently named its *cavity* or *excavation.* These three make up the entire obstetric canal of the pelvis.

THE SUPERIOR STRAIT.—The *Superior Strait,* or brim of the pelvis, presents the shape of a curvilinear triangle with rounded angles,—

having its base behind and its apex in front. The sacro-vertebral promontory, jutting in, as it were, gives a heart-shaped appearance to what might otherwise have been nearly oval. The psoas muscle on either side, by diminishing the transverse diameter, causes the superior strait to assume a more triangular form in the living subject than it presents in the bony skeleton. The boundaries of the superior strait are, the sacro-vertebral angle, the anterior border of the wings of the sacrum, the linea ilio-pectinea, the horizontal rami, and superior margin of the symphysis pubis.

The very great obstetric importance of this superior strait arises from the fact that it forms the first part of that bony canal through which the fœtal head must be transmitted, and through the somewhat contracted opening of which it must pass, almost before it acquires any of that elongated shape, which it so often presents on emerging subsequently from the outlet or inferior strait.

Fig. 1.



c h. The plane of the superior strait prolonged beyond the pubis. *c e*. The plane of the inferior strait prolonged beyond the pubis. *c d*. Shows the departure of this plane from the horizontal line. *a b*. The axis of the superior strait. *g f*. The axis of the inferior strait.

The *plane* of the superior strait, its axis and its dimensions form the most important points for consideration respecting it. The plane or surface of the superior strait, may readily be demonstrated, by cutting a piece of paper to fit it, making it extend antero-posteriorly from the sacral promontory to the pubic arch; and transversely from the ilio-pectineal line of one side to that of the other. And when the female is in the erect position, it will be found that this plane presents an inclination of from fifty-five to sixty degrees to the horizon.

The *axis* of this plane will of course be a line which shall fall at right angles upon its centre. Thus the axis of the superior strait must form

the same angle with the vertical line, that the plane of the strait forms with the horizontal line. And upon examination it is found that this axis extends from a point on the linea alba a little below the umbilicus to the articulation of the second bone of the os coccyx with the third. This portion of the coccyx is therefore opposite or parallel to the plane of the superior strait. The inclination of the plane of the superior strait, and of course the direction of its axis, must vary with the changing position of the female. The angle being diminished when the trunk is bent forward, as in stooping over,—and becoming least in the recumbent position. But it is greatly increased when, in the advanced stages of pregnancy, the female straightens up and even leans backward as it were, in order to maintain her equilibrium. So in parturition, as will be more particularly explained subsequently, the position and flexure of the trunk, when standing or lying down, will greatly affect the entrance of the head into and its passage through the superior strait.

In the dimensions of the superior strait, we note its different *diameters* and its *circumference*. The irregular shape of the figure of this strait renders its various diameters unequal. Different authors have enumerated quite a number; but the three principal diameters are all that are really of practical importance. These are, first, the *antero-posterior diameter*, which extends from the sacro-vertebral angle to the superior border of the symphysis pubis. This, which is also called the *sacro-pubic*, or *conjugate* diameter, measures four and a half inches. The second, the *transverse diameter*, or *long diameter*, extends across the pelvis at its widest part, and at right angles with the antero-posterior diameter. This, which is also called the *iliac* or lateral diameter,—since it extends from the middle of the rounded border of the iliac fossa of one side to that of the other,—measures five inches. The third is the *oblique* or diagonal *diameter*. This extends from the sacro-iliac symphysis to the ramus of the pubis, or more exactly speaking, to the ilio-pectineal eminence of the opposite side; and measures four inches and three-fourths. In consequence of the space occupied by the soft parts, these dimensions are considerably less in the living body. And we must allow at least one-quarter of an inch in the antero-posterior diameter; and one-half an inch in the transverse diameter.

The *circumference* of the superior strait,—bounded anteriorly by the inner margin of the horizontal rami of the pubis, laterally by the ilio-pectineal line, posteriorly by the promontory of the sacrum,—measures from *thirteen and a half* to *seventeen* inches.

THE INFERIOR STRAIT.—The *Inferior Strait* is smaller than the superior; and in the bony skeleton much more irregular in form. This latter circumstance arises from the projection of the coccyx behind, and of the tuberosities of the ischia on each side. These projections form three deep notches, one on each side of the coccyx, and one immediately beneath the symphysis pubis. Thus this irregular border or periphery of the inferior strait, is made up by the symphysis and descending rami of the pubis, by the tuberosities and ascending rami of the ischia, by the lower border of the posterior sacro-sciatic ligaments, and by the extremity of the coccyx which projects inward. In parturition, however, the coccyx is usually pushed back, rendering the actual obstetric outlet nearly oval. This oval figure of the outlet may be demonstrated, by placing the apex of the pelvis on a sheet of paper and tracing its outline with a pencil. And the figure thus obtained, compared with that of the brim of the pelvis, will show a gradual inclination of the walls of the pelvis downwards and inwards.

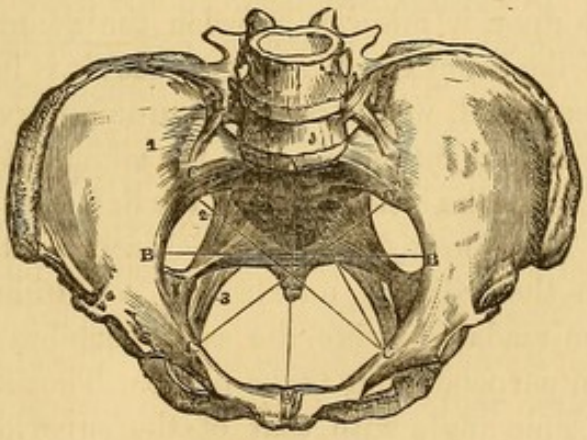
The two lateral projections, the tuberosities of the ischia, extend somewhat beneath the extremity of the coccyx, and, being unyielding, alone support the entire weight of the body in the sitting posture. Hence it happens that the transverse contractions of the pelvis are more common at the inferior strait, than the antero-posterior. The deep notch found anteriorly on the inferior strait, corresponds to the summit or inferior margin of the arch of the pubis. This notch forms an important feature in obstetric practice, and it is much broader in the female pelvis than in the male. At its base this arch is from three and a half to three and a quarter inches broad, but only from one and a quarter to one and a half inches wide at its apex; its height is from two to two and a half inches. As will be afterwards noticed, in describing the process of parturition, this notch has very important relations to the fœtal head, affording to it a more ready exit in the first position.

The still deeper notches, which appear posteriorly on each side of the coccyx, are subtended by the sciatic ligaments, whose elasticity is capable of materially adding to the pelvic dimensions at the moment of the final passage of the fœtal head. By the combination of double arches, both anteriorly and posteriorly, and from above downward, the greatest possible strength has been preserved to the pelvis, without too much increasing its weight; while at the same time the head is enabled all the sooner to emerge from its bony prison, by reason of these three important notches or arches in the periphery of the

inferior strait. While the anterior notch,—that of the pubic arch,—also affords inestimable advantages to the accoucheur, in the introduction of the hand, the forceps or other instruments, where, from irregularity or contraction of the pelvis, from abnormal size of the head, or from other reasons, manual or mechanical interference becomes indispensable.

The *plane of the inferior strait* may be demonstrated by applying a sheet of paper in the following manner. Upon an inverted pelvis, in which the sacro-coccygeal articulation is still flexible, and in which the coccyx is retracted as far as possible, we place a piece of paper narrow enough to pass between the tuberosities of the ischium and be closely fitted to the summit of the pubic arch. This paper, thus resting in front upon the inverted surface of the arch of the pubis, and posteriorly upon the retracted extremity of the coccyx, will accurately represent the proper plane of the inferior strait. Hence it will be at once obvious that this plane is by no means parallel with that of the superior strait. The angle of inclination of the latter being from fifty-five to sixty degrees, and that of the former but from ten to eleven degrees. And as the planes of the two straits are not parallel, so neither will their axes be in the same line.

Fig. 2.



A A. The antero-posterior, orsacro-pubic diameter. B B. The transverse diameter. C C. The two oblique diameters. A C. The sacro-cotyloid interval.

Thus, as is shown in Fig. 3, the plane of the inferior strait with the coccyx retracted as it is in the last stage of labor,—the only stage in which either the coccyx or in fact the inferior strait itself is particularly involved,—inclines backwards and downwards at a very small angle below the horizontal line. While, as shown in Fig. 1, the plane of the inferior strait in the ordinary condition of the pelvis,—with the coccyx not retracted,—inclines at a correspondingly small

angle above the horizontal line. And the prolongation of the planes of the superior and inferior straits, to their point of union beyond the pubis, shows that, instead of being parallel with each other in the human pelvis, they form an angle of not far from 45°; especially when the point of the coccyx is pushed back, as it is by the fœtal head in its passage through the inferior strait.

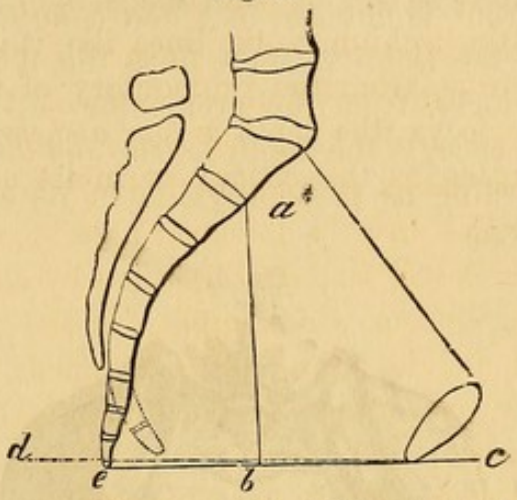
The great advantage which must arise from this apparently irregular arrangement of the pelvic planes and axes, will be evident from a moment's consideration of what must otherwise be the effect of gravity in the upright position, especially in the advanced stages of pregnancy. Even if the head and entire fœtus were not impacted in the cavity of the pelvis, premature delivery must necessarily result from the constant and directly downward tendency of the uterus and its contents. This is still further illustrated by comparison with the almost perfect parallelism which appears in the planes of the superior and inferior pelvic straits of quadrupeds. Here the gravid uterus is entirely supported by the abdominal parietes; and the planes of the superior and inferior,—or more accurately speaking, anterior and posterior,—straits, are nearly parallel; and their corresponding axes nearly identical with each other and parallel with the trunk itself.

The *axis of the inferior strait* is the line which, drawn perpendicular to its plane, falls upon it midway between the symphysis pubis and the extremity of the coccyx. When the coccyx is in its usual position, this line extended, will strike the promontory of the sacrum; but when the coccyx is retracted, as in the advanced stages of labor, this line will fall upon the articulation of the first with the second bone of the sacrum. The line *g f*, Fig. 1, which represents the axis of the inferior strait, in the ordinary, unretracted condition of the coccyx, should have been made to strike the sacro-vertebral angle; then it would have been perpendicular to the plane. The axis of the inferior strait forms the same angle with that of the superior strait, that the plane of the inferior strait forms with the corresponding plane of the superior strait.

The *diameters* most important to be observed in the inferior strait, correspond in number and in name to those of the superior strait. First, the *antero-posterior* or coccy-pubal diameter,—extending from the extremity of the coccyx to the summit or inferior surface of the pubic arch,—measures five inches with the coccyx pushed back in labor; but only four and a half inches when it is not thus retracted. For practical purposes, therefore, the antero-posterior diameter of the

inferior strait,—taken at any period of labor when the head has not so engaged in that strait as to push back the coccyx,—must be considered as *half an inch longer* than the measure shows. The only exception to this will be, in those cases in which from complete ossification of the coccygeal and sacro-coccygeal articulations, the coccyx forms one continuous curve and one solid bone with the sacrum.

Fig. 3.



c d. The horizontal line. *c e.* The plane of the inferior strait (during labor). *a b.* The axis of the inferior strait.

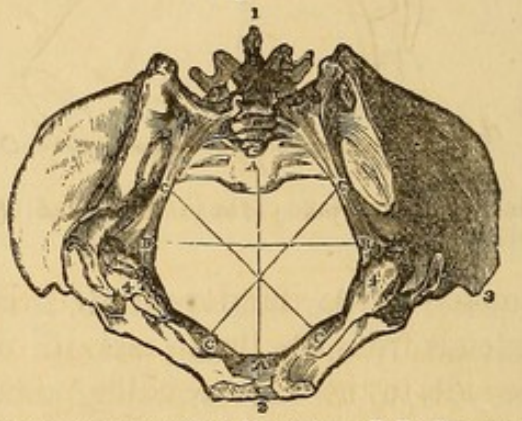
The second diameter of the inferior strait, is the *transverse* or bis-ischiatic. This extends from the inner margin of the tuberosity of the ischium on one side, to the corresponding point on the other side; and measures four inches.

The third diameter of the inferior strait, is the *oblique*. This extends from the point of junction of the rami of the pubis and ischium, to the middle of the great sacro-sciatic ligament on the opposite side; and measures *four inches*. As previously stated, from the distension of the ligamentous portions of the pelvic parietes, the capacity of the inferior strait may be somewhat enlarged in this direction. And some authorities estimate this oblique diameter as practically equal therefore to *four and a half inches*. This diameter again, may be either the right or the left oblique. But it is usually considered as one diameter; because, except in some not very common forms of pelvic distortion, the one will be exactly equal to the other. And where there is reason to suspect distortion, it will be proper therefore to measure the diameter on each side.

THE CAVITY OF THE PELVIS.—That part of the canal of the pelvis which occupies the space between the superior and the inferior straits, is known as the *cavity of the pelvis*. From its situation and

consequent relation to the uterus and ovum, it will be obvious that a thorough knowledge of this cavity, of its axes, planes and dimensions, is not only important in all ordinary cases of labor, but indispensably necessary to the successful management of all those of serious difficulty. This cavity is irregular in shape; contracted in its superior and inferior orifices; and greatly enlarged posteriorly by the concavity of the sacrum. The depth of the pelvis at the symphysis pubis in front, is but *one inch and a half;* at the side, from the tuberosity of the ischium to the linea ilia, it is *three inches and a half;* and posteriorly, from the promontory of the sacrum to the extremity of the coccyx, the depth is *four and three-fourths inches, or five inches,*—according as the coccyx is in its natural position, or retracted as in labor.

Fig. 4.



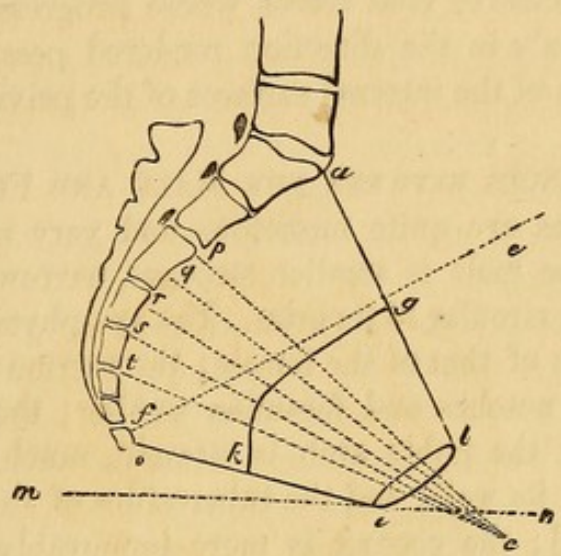
A A. The antero-posterior or coccy-pubal diameter. B B. The transverse or bis-ischiatic diameter. C C. The two oblique diameters.

The *diameters* of the pelvic cavity, or centre of the excavation, correspond in number and in name to those of the superior and inferior straits; and they are all of very nearly the same length of *four inches and three-fourths.* The antero-posterior diameter, extending from the sub-pubic ligament,—that is, from the summit or under surface of the pubic arch to the middle of the sacrum,—measures *four inches and three-quarters.* But the line drawn from the sub-pubic ligament to the promontory of the sacrum, will be found to measure but *four inches and a half.* The transverse and oblique diameters are each four inches and three-fourths in length. It should be borne in mind that the *long* diameter of the superior strait is the *transverse;* but that the *antero-posterior* is the long diameter of the inferior strait.

The *common plane,* and *axis of the pelvic cavity* ought to be well understood, as they represent the gradual change from the primary plane and axis of the superior strait above, to the final plane and axis of the inferior strait beneath.

Owing to the concavity of the sacrum, and to the slight convexity of the posterior surface of the pubic wall, the passage through the pelvic excavation represents a curve, which if continued would produce a circle. Consequently the plane which commences at the superior strait, is constantly changing as we pass from above downwards. And as the plane changes, so also must the axis of the plane, to correspond to it. Thus the general plane of the excavation will be represented only by a succession of differently inclined planes. So

Fig. 5.



a b. The plane of the superior strait. *i o*. The plane of the inferior strait. *c*. The point where these two planes would meet, if prolonged. *m n*. The horizontal line. *e f*. The axis of the superior strait. *g k*. The axis of the excavation. *p q r s t*. Various points taken on the sacrum to show the plane of the excavation at each point.

a corresponding series of axes must represent the general axis of the excavation. This general series of planes, and corresponding series of axes, is well illustrated in Fig. 5,—thus *a b* represent the plane of the superior strait; *i o*, the plane of the inferior strait; *c*, the point of union of these two planes, if prolonged; then *p q r s t*—*c*, will represent the successive planes which must result from the curvature of the sacrum. It being borne in mind that the axis must always be regarded as perpendicular to (that is at right angles with) its plane, the axis of the first plane, or that of the superior strait will therefore be seen to be at right angles with its plane. And since the sacrum at this upper part of the pelvis forms a straight line, so the plane of the superior strait will form a right angle with it,—and the axis of this plane will consequently be parallel with the sacrum. And so in fact in each successive instance; the plane of each successive point of the cavity, must be at right angles with the opposite point of the sacrum; and the axis of each successive plane must be at

right angles with the plane itself and of course parallel with the corresponding portion of the sacrum. These successive axes, thrown into a single line, will therefore form a curve exactly corresponding to the opposite curve of the sacrum. This general axis of the excavation, *g*, *k*, represents the line of direction which the fœtal head must necessarily pursue in its course through the canal of the pelvis. And as this line in a geometrical point of view, is the result of a union of successive lines,—so in a physiological point of view, the course followed by the fœtal head is the result of a combination of various and successive vital forces, whose progressive development can take place only in the direction rendered possible by the form and construction of the internal surfaces of the pelvic cavity.

The Differences between the Male and Female Pelvis.—These differences are quite numerous and very strongly marked. The pelvis of the male is smaller, stronger, narrower, deeper in its cavity, and more circular in its brim. The symphysis pubis is nearly double the depth of that of the female; the sacrum is straighter and the sacro-sciatic notches and foramina smaller; the obturator foramen more oval; the pubic arch is straight, much narrower, triangular in shape; its walls and the tuberosities of the ischia are less widely separated; the coccyx is more immovably attached to the sacrum; and in general the articulations are sooner anchylosed than in the female.

The pelvis of the female is much wider; the acetabula are further apart, although the knees approach each other even more than in the male, giving to the movement and gait of the female some distinguishing peculiarities. The superior strait is larger and more elliptical; the curve of the sacrum is deeper and more regular; the symphysis pubis is but half as deep as in the male; and the pubic arch is broader, more rounded and its lateral walls more widely divided. The entire pelvis is larger and more capacious, and so constructed, in its several arches and ligaments, as to combine the greatest possible lightness, elasticity and strength, with the most suitable form and dimensions for sustaining the gravid uterus above its brim, or enabling the full-grown fœtus to be transmitted through its canal.

In early childhood the pelvis seems disproportionably small, and even incapable of containing all the organs which occupy it in after-life. It is narrow and long; and the abdominal protuberance which is seen in the fœtus and in newly-born infants, and even still later in the case of rachitic children, is due to its thus forcing upward some

of the parts which should be contained within it. But, as the female child advances in life, the pelvis becomes gradually, although slowly, enlarged, till, at the period of puberty, it experiences, within a short time, an alteration so extensive and so strongly marked, as to change perceptibly the form and contour of the hips. At nine years of age, the antero-posterior diameter measures two inches and seven-eighths, and the transverse diameter, two and three-fourths; while at fourteen years of age, the antero-posterior diameter measures three inches and three-fourths, and the transverse, four and a half.

THE USES OF THE PELVIS.—The pelvis of the female, as in the male, affords a general support to the abdomen and its contents. In the pregnant female, it especially supports the gravid uterus, upon its anterior arch and iliac wings. Within the cavity of the pelvis, the uterus of the unimpregnated female, the ovaries and Fallopian tubes are safely enclosed; while the delicate and sensitive external organs of generation are securely protected beneath. From its relation to the lower portion of the spinal column, and from the manner in which it is placed upon its femoral supporters, the pelvis may be regarded as the structural base or foundation of the human body. While, from the study of the functions which it performs in connection with the organs which it contains, it will no less obviously be seen to be the true physiological centre of the entire human system. From improper management in childhood and youth, from too long and too frequent indulgence in unnatural positions, from habitual over-exertion of a particular kind, from accidental injuries, and especially from disease and softening of the bones, the pelvis may become contracted, strained and distorted, in every direction,—and so more or less incapable of performing its most important uses in the support of the body and in parturition. So also, from similar and corresponding causes, the organs which it contains may become more or less disordered and incapable of performing their vital functions. In the former case, mechanical difficulties and obstructions embarrass the accoucheur. The consideration of these difficulties, and of the appropriate means for overcoming them, we reserve as a sequel to the normal process of parturition. In the latter case the physician has to contend with various forms of functional disorder or structural disease. The consideration of these disorders, and of their appropriate remedies, we shall take up as we come, in course, to the examination of the organs of which they are affections.

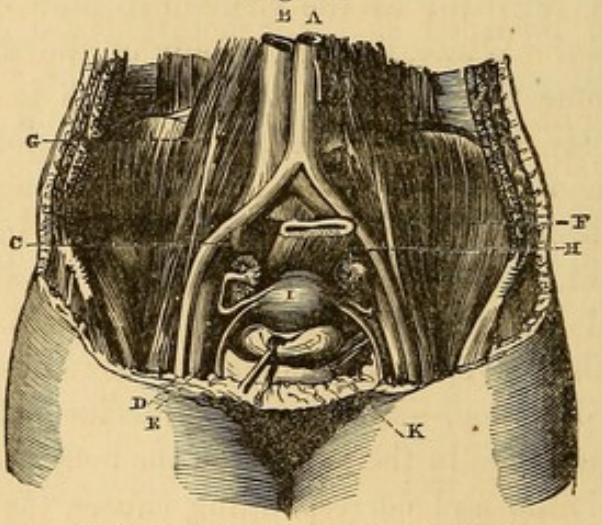
CHAPTER THIRD.

THE MUSCULAR TISSUES OF THE PELVIS.

THE study of the bony skeleton of the pelvis forms the only true basis for understanding this most important part of the body, as it appears in real life. And it is only now, as we come to the examination of the pelvis, clothed with muscular and other living tissues and supplied with organs, that its real study begins. Occupying the middle ground between the upper and the lower part of the frame, the pelvis affords attachment to two classes of muscles in addition to those peculiar to itself and employed in its own uses.

The first class is for completing, enclosing and perfecting the abdomen. The muscles of this class, by their great power of distension, afford every needful facility for the development and support of the fœtus in the pregnant state. These muscles, which form the anterior abdominal parietes, by yielding to the pressure exerted from

Fig. 6.



Pelvis, with soft parts seen from above.

A. A section of the aorta. B. The vena cava inferior. C. The internal iliac artery, arising together with D, the external iliac, from the primitive iliac trunk. E. External iliac vein. F. The iliacus internus, and G, the psoas magnus muscles. H. The rectum. I. The uterus with its appendages. K. The bladder, the fundus of which is depressed so as to bring the womb into view.

against the rigid posterior walls, cause the gravid uterus to project over the arch of the pubis, and thus hinder it from settling downward through the superior strait.

The muscles of the second class are those which, connecting the lower extremities, are concerned in locomotion. There are but four muscles on the inner surface of the pelvis. The principal of these

are the iliacus internus and psoas magnus; next in size and relative importance come the pyriformis and obturator muscles. The iliacus and psoas magnus, while being themselves protected by the iliac fascia, serve to line and cushion the iliac fossæ and bones of the upper pelvis, thus preventing the uterus from receiving injury in the latter months of gestation, from the shocks and concussions inseparable from active exercise. These two muscles, as they become conjoined in passing over the lateral parts of the superior strait to be inserted into the lesser trochanter, have the effect to change the base of the curvilinear triangle of the pelvis from the rear to the front, and to shorten the transverse diameter half an inch; these two being the only muscles in the pelvis that do shorten any of its diameters. The iliacus, however, from its thinness, neither too much encroaches upon the concavity of the iliac fossæ, nor indeed does it, so much as the psoas, diminish the size of the pelvic cavity. And the shortening of the transverse diameter may be in a great measure obviated by flexing the thighs upon the abdomen in labor, thus relaxing the psoas muscles and reducing the diminution of the pelvic cavity to the smallest possible amount.

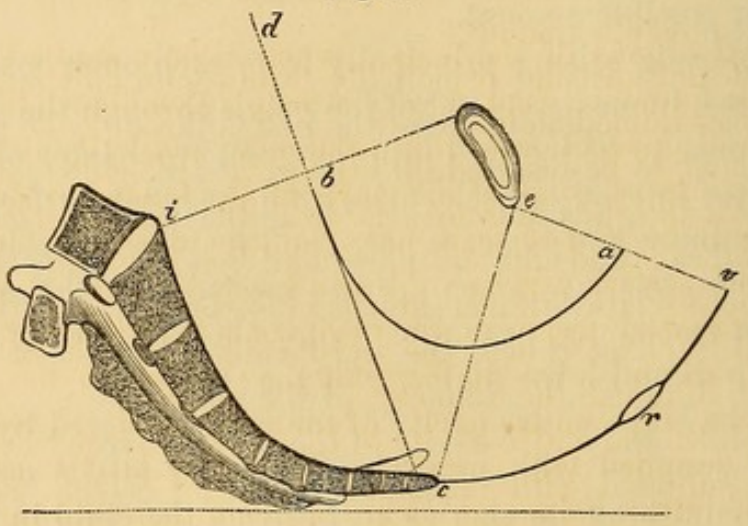
The pyriformis, arising principally from each outer margin of the sacrum, passes immediately out of the pelvis through the great sacro-sciatic foramen, to be inserted into the great trochanter of the femur. The obturator internus muscles arise from the inner surface of the obturator membrane and adjacent parts, and leaving the pelvis through the lesser sacro-sciatic foramen, are also inserted into the upper border of the great trochanter, near the pyriformis. Neither of these muscles serve to diminish the diameter of the pelvis.

Thus we have the entire cavity of the pelvis covered by fascia and sufficiently supplied with muscular tissue for all its uses, without so much diminishing its size as to obstruct the child in its descent. The obturator internus and pyriformis, covering the obturator and sciatic foramina, rather allow increase of room for the fœtal head than decrease the pelvic excavation. So the coccygeal muscles, very thin and connected with the sacro-sciatic ligaments, do not encroach laterally upon the cavity of the pelvis. In like manner the pyriformis muscles close the sacral foramina in the posterior of the pelvis, but do not diminish its size. The anterior-posterior diameter is slightly diminished by the attachment of the bladder to the posterior surface of the arch of the pubis. And the cellular tissue, which every where lines the pelvic cavity in fleshy females, is liable to become loaded with fat,—which would offer serious obstruction in parturition. The

rectum, in passing down over the anterior surface of the sacrum and to the left of its promontory, does not materially hinder the process of labor, unless loaded with indurated fecal matter. While the uterus, although occupying a middle ground between the bladder and rectum, does not shorten any diameter of the pelvis in labor,—for at such times it is usually entirely above the superior strait.

The *Perineum* forms the external concavity and internal cavity of the floor of the pelvis, and is composed of two distinct planes or layers of muscles. The upper layer is composed of the levator ani and coccygeal muscles, and forms the concave floor which sustains the viscera of the pelvic cavity. The lower plane consists of the sphincter ani, the transversus perinei, the ischia-cavernosus and the constrictor vaginæ muscles; and has its concavity looking downward. This combined muscular arrangement constitutes the floor of the pelvis, which is completed by the internal pubic vessels and nerves, a large amount of cellular tissue, the inter-muscular and pelvic aponeuroses and skin.

Fig. 7.



Position of the pelvis and the direction of its axis in the dorsal attitude assumed by the female during labor.

a b. Total axis of the excavation, being a continuation of *d b*, the axis of the superior strait. *c v.* Perineum as distended at the moment of the passage of the head. *r.* Anal orifice. *e v.* Terminal plane of the pelvis.

The perineum extends one inch and three-fourths from the point of the coccyx to the anus; thence one inch and one-fourth to its anterior terminus in the vulva,—making three inches in all in its ordinary condition. But at the instant of the passage of the child's head into the external world at full term, the whole floor of the pelvis becomes so distended downwards and forwards as to cause the perineum to measure five inches and three-fourths.

It will now be seen that the terminal outlet of the pelvic cavity in parturition, is not directly at the inferior strait,—but at a point sufficiently beyond, so as to allow the pelvic floor to become so distended as to render it possible for the child's head to pass at the same time underneath and beyond the symphysis pubis. Thus, in passing through the living pelvic cavity, the child must enter the superior strait and take its course, relatively to the mother, at first downwards and backwards, then downwards and forwards till it passes beneath and beyond the symphysis pubis,—exactly following the axis of the entire cavity, which is a regular curve.

CHAPTER FOURTH.

THE ORGANS OF GENERATION.

THE EXTERNAL ORGANS AND VAGINA.

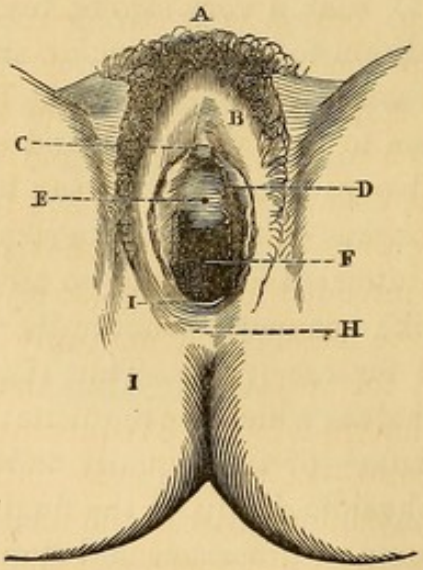
THE genital organs of the female, when closely studied and compared, will be found to bear a very strong resemblance to those of the male. And in addition to this particular similarity in the structure and functions of some of the parts of the female to those of the male, there will be seen to be a universal and essential correspondence of all the sexual organs of the one sex to those of the other. For as all the sexual organs of the male are structurally and physiologically adapted and intended for giving, so all the sexual organs of the female are, in like manner, structurally and physiologically adapted and designed for receiving. Thus they bear to each other the relation of the two halves which are requisite to constitute one complete physiological whole,—of two equally indispensable means for the accomplishment, physiologically, of the final end of reproduction. This distinction of structural difference and similarity, and of physiological correspondence, is the type of the adaptation of the man to the woman in the married state, the highest condition of human life. And this distinction should be steadily borne in mind, in all our study of the genital organs and reproductive system of the female.

These genital organs, which, as well in structure as in function, are much more complicated in the female than in the male, may be divided into *external parts*, or those without the pelvis; and *internal organs*, or those situated within the pelvis. The former are the mons

veneris, the perineum, and the vulva with its appendages. The latter are the vagina, the uterus, the Fallopian tubes, and the ovaries. And we will proceed to study their anatomy and physiology in the order in which they have just been named. And subsequently notice the principal disorders of the parts and organs described, and indicate the chief characteristic symptoms of the medicines to be employed in remedying these disorders.

THE MONS VENERIS.—The *Mons veneris* is situated at the lower margin of the abdomen, just on or above the centre of the symphysis pubis. Its diameter is about three inches; it is half an inch thick at its centre, and tapers off to a thin edge at its circumference. It is principally composed of dense cellular or adipose tissue, covered by thick elastic integument, and abundantly supplied with sebaceous follicles. The round ligament terminates in the cellular tissue. The hair which makes its appearance at puberty, as one of its characteristic signs, is said to diminish in quantity in many cases on the cessation of the menses. The growth of the hair varies remarkably in different

Fig. 8.



External Genital Parts.

A. Mons veneris. B. Labia majora. C. Clitoris. D. Labia minora. E. Orifice of urethra. F. Orifice of vagina. H. Posterior commissure of the vulva. I. Perineum. J. Anus.

individuals; and in some cases, where it is very white and scanty, it is supposed to indicate sterility. The excessive growth of the hair is sometimes accompanied by pruritus; and in those who are subject to the plica polonica, this disgusting disease attacks also the hair on

the mons veneris, which, at the same time, becomes agglutinated, and attains an enormous length.

The *perineum* has already been partially described in connection with the muscles of the pelvis. It is composed externally of the common integument, beneath which we find, successively, adipose and cellular tissue, fascia, some portions of the constrictor vaginæ, levator ani, transverse and sphincter muscles; and it contains also the superficial and transverse arteries, veins, nerves, and lymphatics. The perineum constitutes an important part of the floor of the pelvis; closing the outlet or inferior strait, so as to retain the pelvic viscera in their proper place. From the cellular nature of its structure, it admits of very great distension in labor, and its elasticity enables it speedily to resume its usual condition. When the last expulsive labor-pains are very violent, the perineum, if not properly supported, will sometimes undergo laceration.

THE VULVA AND ITS APPENDAGES.—The *Vulva* is the longitudinal opening between the projecting parts of the external organs of gene-

Fig. 9.

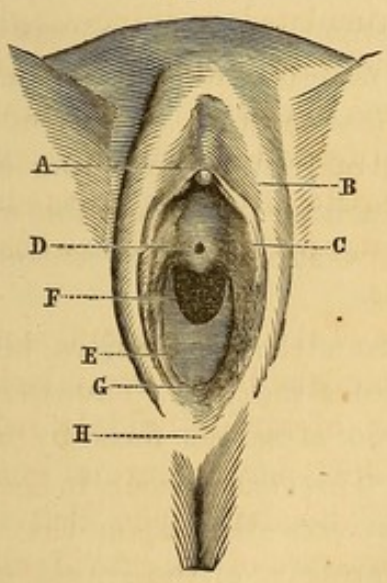


Fig. 10.

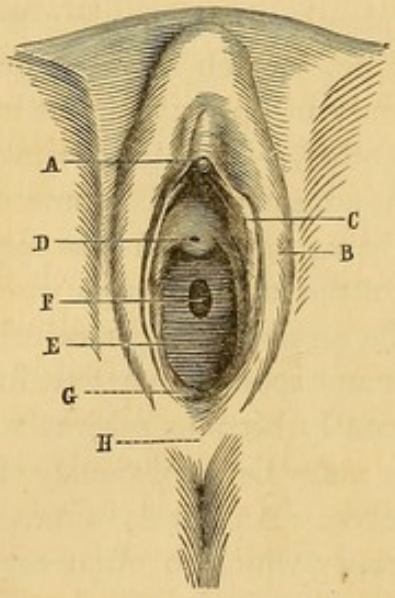


Fig. 9. *Hymen in the form of a Crescent.* A. Clitoris. B. Labia externa. C. Labia interna. D. Orifice of the urethra. E. Hymen. F. Orifice of the vagina. G. Posterior commissure of the vulva.

Fig. 10. *This figure exhibits the Hymen in the form of a Circle.* E. The hymen. F. The central opening somewhat enlarged.

ration, which, situated immediately beneath the mons veneris, is bounded laterally by the labia majora and terminated posteriorly by the perineum. It constitutes the external opening common to the vagina and to the urinary bladder. A more particular description of the vulva will be involved in that of its appendages. These are

the labia majora, the labia minora or nymphæ, the clitoris, hymen, carunculæ myrtiformes, fossa navicularis, fourchette, vestibule and urethra.

The *Labia majora* are the two folds externally of common integument, internally of mucous membrane, which, commencing on the anterior or superior commissure, immediately beneath the mons veneris, are continued downwards to the posterior commissure, called also the *fourchette.* Their texture consists of skin, usually soft and delicate, and furnished with sebaceous glands and hair follicles; adipose and areolar tissue; capillary arteries, mostly derived from the superficial pudic branches; corresponding veins; lymphatics which discharge into the inguinal glands; nerves from the lumbar plexus; muscular or fibrous tissue, which is a continuation of the superficial fascia of the perineum; and mucous membrane, well supplied with muciparous glands. The sebaceous glands secrete an oleaginous fluid, which serves to moisten the hair which appears more or less abundantly upon the labia, and at the same time serves also to protect the labia themselves from being injured by the motion of the adjacent parts. In like manner the mucous follicles provide abundantly their peculiar secretion,—stimulated and increased by walking,—which serves to guard these delicate surfaces,—which are not only in opposition, but in more or less constant movement upon each other,—from the irritating effects of friction, and from subsequent adhesions. The muscular fibres, arising from the pubis above, and being inserted in the perineum below, appear to act as constrictors of the labia through which they pass.

The *areolar tissue,* or cellular structure of the labia majora, is more loose and spongy than that in other parts of the body. Thus the labia frequently become subject to infiltration of serous fluid, by which they may be enormously tumefied. This may occur in general anasarca. And it is a not uncommon attendant upon that form of dropsy which so often occurs from pressure of the gravid uterus on the lymphatic vessels,—especially in those constitutionally predisposed to hydropic effusions,—or in cases where the pelvis is so unnaturally large as to allow the gravid uterus to sink down into its cavity, even in advanced stages of pregnancy.

The *Labia minora,* or *Nymphæ,* are two lateral folds of mucous membrane, interior and parallel to the labia majora, by which they are mostly covered. In appearance they are said to resemble the comb of a young cock, and they extend from the middle opening of the vagina to the clitoris. At this point they divide; the inferior

portion uniting with the clitoris; the superior portion rising above it and joining with the corresponding portion from the opposite side, forms a minute fold, called the prepuce of the clitoris. The labia minora contain between their mucous coats a spongy, vascular tissue and nerves. Their use appears to be to enfold and protect the clitoris, meatus urinarius and superior part of the vaginal orifice.

The *Clitoris* arises from the union beneath the pubic arch, of two cavernous bodies, which spring from the ischio-pubic rami; and its free extremity appears at the superior part of the vulva, a little beneath the anterior commissure of the labia majora. In its internal structure and erectile nature it resembles the corpora cavernosa of the male penis, to which organ it corresponds in sensational and passional function. At its anterior extremity, almost entirely covered and concealed by the prepuce, appears a minute gland which is analogous in texture and use to the glans penis. The clitoris is supplied with blood from the internal pubic arteries; and with nerves from the internal pudic nerves. Like the male penis, the clitoris has a suspensory ligament and an erector muscle. And as in the case of the penis, the urethra passes between the two cavernous branches; but the orifice of the urethra is situated beneath the glans clitoris,—instead of the urethra passing through it, as through the corresponding glans penis in the male.

The *Vestibule* is the small triangular depression, situated at the upper part of the vulva, bounded above by the clitoris, laterally by the labia minora and beneath by the meatus urinarius, to which, as well as to the vagina, it directly leads.

The *Urethra.* The *meatus urinarius,* or *orifice of the urethra,* is situated immediately below the vestibule and just above the orifice of the vagina. The determination by touch alone of the exact location of the orifice, is important as enabling the physician to introduce the catheter in the most delicate manner, where this operation is required. At the superior margin of the vagina is found a prominent enlargement or tubercle, which may readily serve as a guide in this case. The patient being placed upon her back, the point of the fore-finger of the left hand, with its palmar surface looking upward, should be placed just within the vagina; then slide the catheter along the palmar surface of the finger until it reaches this tubercle of the upper margin of the orifice of the vagina; when by depressing the handle of the instrument it may easily be made to pass over this elevation at which it had been arrested, and so glide into the urethra. In this manner, without exposing or uncovering the patient, the

catheter can usually be introduced; unless the external parts are very much swollen.

The urethra itself is larger than its orifice; and may be described as a membranous canal, about an inch and a half in length; slightly curved with its concavity looking upward; passing obliquely upwards and backwards beneath the symphysis pubis, to which it is attached by loose cellular tissue. More interiorly it passes between the crura of the clitoris and just beneath their junction. It is susceptible of very great dilatation and opens interiorly into the urinary bladder. It is composed of three tunics; a muscular coat continuous with that of the bladder, and composed of circular fibres; a thin layer of erectile tissue intermixed with numerous elastic fibres; and a mucous coat, which is continuous externally with the vulva and internally with that of the bladder. It is surrounded also by the muscular fibres of the compressor urethræ, which assist in controlling the flow of the urine. In the various displacements of the uterus, the urethra, by reason of its structural connection with the vagina, is liable to be changed from its natural direction. And this should be especially borne in mind, if called upon to perform catheterism to relieve retention of urine caused by such uterine displacements.

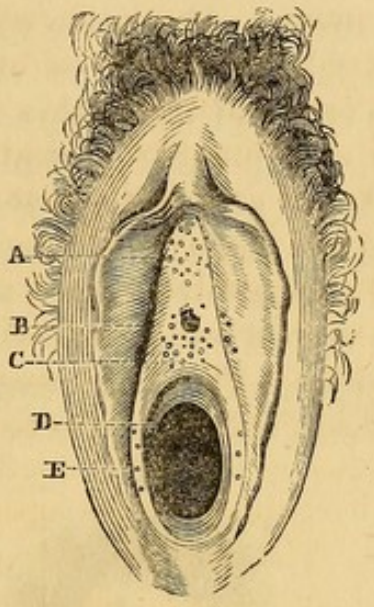
The *Hymen.* Immediately below the meatus urinarius is found the much larger and irregularly shaped opening which constitutes the *orifice of the vagina.* The extent of this opening varies greatly according to the sexual condition of the female. In those who are virgins and in some exceptional cases in persons who are not, the orifice of the vagina is very small, oval or crescent-shaped as represented in Figs. 9 and 10.

The *hymen* is the delicate membranous structure, which covers the greater portion of the orifice of the vagina,—and which is usually ruptured at the first successful attempt at sexual intercourse. The rupture of this structure ordinarily occasions a slight flow of blood, and sometimes leads to no inconsiderable hæmorrhage. The minute reddish tubercles found near the orifice of the vagina, and called *carunculæ myrtiformes,* are regarded as the remains of the ruptured hymen. Sometimes this membrane instead of being thin and easily broken, is dense and firm, requiring to be opened with an instrument, before the marriage rites can be consummated. In other instances the hymen is found entirely imperforate in childhood. And in these cases, unless attention has previously been directed to the difficulty, it is requisite to make an incision in order to allow the exit of the menstrual discharge. Cases of supposed actual tumor of the vagina,

have thus been found to consist in the accumulation of the menses; a process which may have gone on for months.

The FOLLICULAR AND GLANDULAR ORGANS of the external parts require more particular attention; with especial reference to the figures in which their situation is represented. They may be divided into two distinct classes; the first consisting of *follicles* of various kinds; the second including the true, conglomerate, *vulvo-vaginal glands*.

Fig. 11.



The *sebaceous follicles* are more numerous than the rest. They appear on the mons veneris, and above the clitoris, on the labia majora and labia minora,—and upon the adjacent integuments. They serve to secrete an unctuous substance, thinner than that from other sebaceous follicles, which shields the delicate organs from cold, keeps them moist and supple, and prevents them from being injured by the perspiration, urine, or vaginal or uterine secretions.

The *piliferous or hair follicles* nourish and support the hair, which appears more or less abundantly upon the mons veneris and labia majora. As already mentioned, these follicles may become the seat of the exceedingly distressing and annoying affection called pruritus.

The *muciparous* organs are situated upon different points of the external parts and orifices; and are divided into *isolated* or *agminated follicles*, and the *vulvo-vaginal glands*.

The *isolated or agminated follicles*, appear at several different points about the vagina, and are variously named according to their

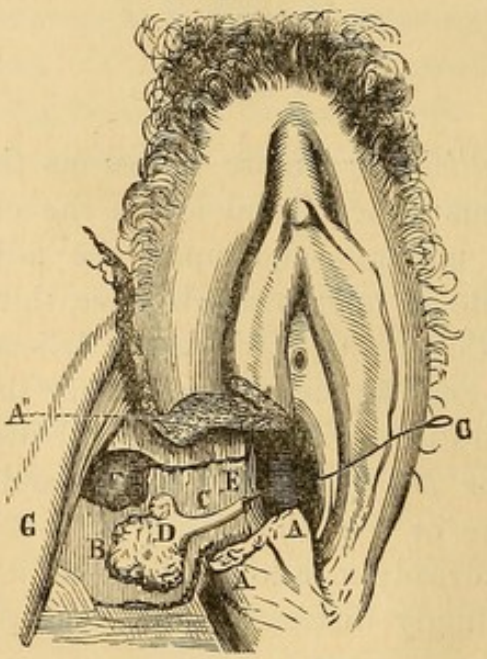
situation. The *vestibular* follicles, some six or eight in number, are found in the vestibule. (Fig. 11, A.) These are very minute; and their small and rounded openings are so oblique to the plane of the mucous membrane, as to give them the appearance of being covered by a thin valve.

The *urethral follicles* are situated in the cellulo-vascular tissue of the urethra. They are placed beneath the mucous membrane in a line parallel to the canal of the urethra; and discharge upon the inner margin of its orifice. (Fig. 11, B.) Their function is evidently to prevent the orifice of the urethra from becoming dry; and from being irritated by the streams of hot urine which pass over it.

The *lateral urethral follicles* appear on either side and at some little distance from the orifice of the urethra. They have a common opening at the mouth of a peculiar conical depression. They are not always to be found; and are small and shallow. (Fig. 11, C.)

The *lateral follicles of the orifice of the vagina*, (Fig. 11, D E), three or four in number and comparatively large, are found usually upon the lateral parts of the vaginal orifice immediately below the hymen, or carunculæ myrtiformes. They are irregular in their number, situation and arrangement; and are not to be found in all females.

Fig. 12.



Vulvo-vaginal Gland.

A A. Section of the labia majora and of the nymphæ, showing the excretory duct and its orifice. B. The gland. C. Excretory duct. C'. Stylet engaged in the orifice of the excretory duct. D. Its glandular extremity. E. Its vulvar extremity and orifice. F. Bulb of the vagina. G. Ascending ramus of the ischium.

The *vulvo-vaginal glands*, one on each side, are true conglomerate glands, having a bulbous body and an excretory duct. This gland

is situated at about the lower third of the orifice of the vagina, just inside its lateral margin. Its bulb (D) and excretory duct (C), in size and exact position, are excellently well represented in Fig. 12. This gland is very small, acquiring its full development only at puberty; is often unequal in size on the two sides; but sympathizes very much with the ovary, being larger on that side in which the ovary may be more voluminous. Its diameter, when largest, is from four to five-eighths of an inch. Its secretion is intended principally to lubricate the parts during sexual intercourse; and it is especially active at such times, and under the influence of lascivious emotions. During coition the muscles of the perineum and vulva are excited, and the secretion of this gland is discharged in jets, like those of the semen in the male. There is a coincidence of action between these vulvo-vaginal glands and the other muciparous follicles; and the secretion which so abundantly supplies the vulva and vagina, especially during sexual intercourse, is the joint production of both glands and follicles.

CHAPTER FIFTH.

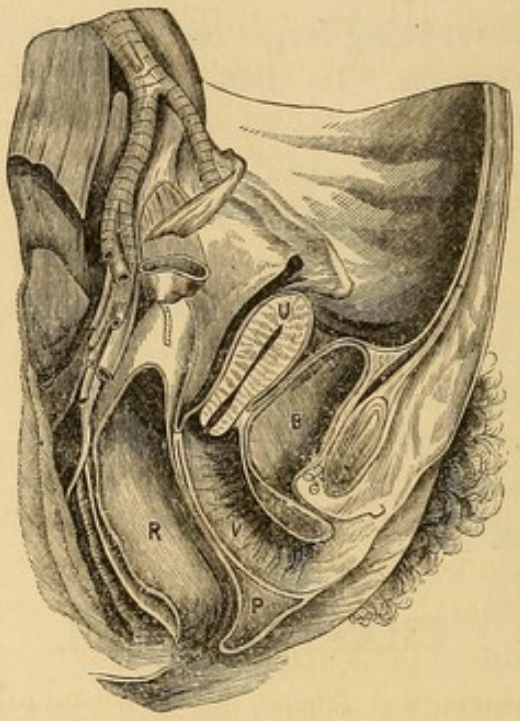
THE INTERNAL ORGANS OF GENERATION.

The Vagina.

The *Vagina* is the membranous canal which leads from the vulva to the mouth of the uterus. When distended it is cylindrical in shape; and it is curved in its natural position, with the concavity looking towards the symphysis pubis. Extending from the vulva, or outlet of the inferior strait, to the superior strait, the direction of its curvature,—which exactly corresponds to the curve of the penis,—is the same as that of the general axis of the pelvis. It is capable of dilatation for the introduction of the virile member, and still more for the passage of the fœtal head in parturition; but, when not separated by such means, its anterior and posterior walls remain in apposition.

Anteriorly the vagina is in relation with the bladder and urethra, with which it is connected by a condensed cellular tissue. Posteriorly it is in relation with the rectum, to which it is attached by a considerable thickness of looser cellular membrane,—or party-wall common to both passages,—termed the recto-vaginal septum. Thus, in displacements of the uterus, which necessarily affect the vagina, the rectum is seldom involved, while the bladder, being more firmly

bound to the vagina, is always disturbed by such changes in the position of the uterus. Hence the incessant calls to pass water, with painful micturition or more or less complete retention of urine, so often seen in cases of anteversion, or prolapsus uteri.



A Vertical Section of the Pelvis, showing the Organs in situ.

B. The bladder is seen in front, with its urethra passing out under the symphysis. Just behind it, the uterus U, and the vagina V, are observed to occupy the middle of the excavation; the rectum R, is still more posterior, being separated from the vagina by the recto-vaginal septum. P. The perineum.

By reference to the upper part of the figure, the peritoneum can be traced from the anterior abdominal walls to the fundus vesicæ, then down between the bladder and womb, forming a pouch, next over the fundus uteri, and then between the womb and rectum, forming another pouch, and finally to the posterior abdominal wall.

The length of the vagina differs in different persons, and in different states of the same person. It is much longer posteriorly than anteriorly; and may be stated to be from four to five inches long on its anterior wall, and from five to six inches long on its posterior wall. It is very elastic, and is capable of being distended longitudinally as well as of being laterally dilated. In some instances it appears very much shorter than the natural standard. This shortening of the vagina may be accidental, merely the result of partial prolapsus of the uterus, or it may be congenital and permanent. In the former case, the womb may be pressed upwards and restored to its natural position, when the shortening of the vagina will at the same time disappear. But in the latter case, the uterus cannot be thus pushed up by the finger; and this circumstance conclusively determines the nature of the difficulty. Congenital shortening of the

vagina may be an efficient cause of sterility; besides occasioning severe and constant inflammation of the cervix uteri, as the result of the frequent, forcible and unnatural contact in coition.

Like the cavity of the pelvis, the vagina is narrowest at its external orifice, most capacious midway in its course, and again contracted at its superior extremity. Its circumference is about three inches.

The parietes of the vagina are formed of layers of areolar, fibrous, spongy and muscular tissue and mucous membrane, arranged in the following order. First we find the cellular or areolar tissue, already spoken of as connecting the vagina with the rectum, urethra and bladder; then between two very strong fibrous laminæ we find a spongy, erectile tissue. Around the outer laminæ are distributed the muscular fibres, which are more numerous near the external orifice of the vagina, where they are arranged in concentric circles. In some females these muscular fibres are much more abundantly and powerfully developed than in others,—constituting a formation to which anatomists have given the name of sphincter vaginæ; but so strongly marked a development of these muscular fibres as to warrant this term is not general. At the moment of the highest degree of excitement in coition, their contraction depresses the bulb of the vagina and the clitoris and grasps the virile member.

The internal coat of the vagina is composed of mucous membrane, which is continuous with that which lines the inner surfaces of the external parts and with that of the cavity of the uterus. This mucous coat of the vagina is thrown into numerous transverse or oblique folds, called *rugæ*, which are more frequent at the lower part of the vagina. They are more apparent in virgins and in those who have never borne children, or who have passed the child-bearing period. These folds evidently constitute a provision for the dilatation of the vagina, to allow the passage of the child's head; and they increase the voluptuous sensations in coition.

In the interstices of the rugæ are found minute follicles, which, especially during copulation, secrete a peculiarly stimulating fluid. In addition to these follicles, the mucous surface of the vagina, especially at its lower portion, is provided with numerous muciparous glands, which pour out a profuse secretion, more abundant in coition and still more in parturition, which possess an acid reaction,—the mucous secretion of the uterus being ascertained to be alkaline.

The vagina is abundantly supplied with blood-vessels, absorbents and nerves. The arteries are derived from the hypogastric; the veins, which are very numerous and plexiform, discharge into the

hypogastric; the lymphatics discharge into the pelvic ganglia; and the nerves arise from the hypogastric plexus.

The superior extremity of the vagina enfolds the neck of the uterus, in a manner similar to the attachment of the Zouave pants to the legs,—forming an anterior and a posterior *cul-de-sac;* of which the latter is much the deeper. In cases of congenital shortening of the vagina, the posterior *cul-de-sac* is sometimes very much deepened by repeated extension in coition.

In its use, the vagina constitutes the female organ of copulation; affords an outlet for the escape of the menstrual secretion; and becomes the channel through which the child passes from the uterus, through the cavity of the pelvis, into the external world. After delivery it very speedily resumes its usual size; and in many instances its elasticity is so great that, even in such as have frequent and promiscuous sexual intercourse, it constantly maintains the size usually seen in virgins.

CHAPTER SIXTH.

THE UTERUS, FALLOPIAN TUBES AND OVARIES.

The uterus is the organ of gestation in which the fecundated ovum is received, nourished and supported till the proper period of its expulsion at parturition. *In its virgin state the uterus* constitutes the pivot around which play all the physical and nervous energies of the female organism; and its functional perfection exercises a powerfully controlling influence upon the physical health and social and moral happiness. The generative organs constitute the grand centre of the female economy. All the other organisms and functions of the woman are more or less in sympathy with these. And from the full, healthy and harmonious development of the sexual system come the ruddy cheek, the elastic step, the buoyant, womanly spirit, and all that constancy of love and affection which so pre-eminently characterize, beautify and ennoble the female sex. *And the impregnated uterus* becomes at once one of the largest and certainly the most important organ in the body of the female in her highest state of physical development,—it being then the true physiological centre of the most exalted vital activity,—the reproductive seat of life within life.

This distinction of the virgin from the impregnated uterus, not only underlies the whole character and constitution and function of the organ; but affects also the entire physiological, social, moral and even spiritual nature and condition of the female herself. Both the organ and the individual, in the one case are totally different in structure, function and being, from the organ and the individual in the other. The virgin or unimpregnated uterus has a structure and functions and disorders peculiar to itself. The impregnated uterus also has structure, functions, disorders, difficulties and dangers peculiar to its condition.

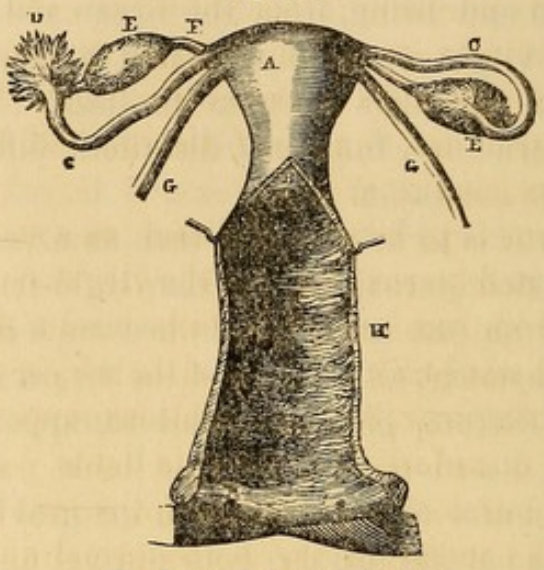
The virgin uterus is to be regarded then as a very different organ from the impregnated uterus; even as the virgin female is an entirely different person from one expecting to become a mother. We give then, in the first instance, an account of the *virgin uterus;* describing its shape, size, structure, position, relations, appendages, functions, and the principal disorders to which it is liable. And subsequently pursue a similar course with reference to the gravid or impregnated uterus; tracing its natural history, both normal and abnormal, from conception to parturition; detailing the various disturbances and dangers incident to the pregnant condition; and reciting the chief characteristic indications for the principal remedies required in their treatment.

THE VIRGIN OR UNIMPREGNATED UTERUS—Is a hollow, pear-shaped, conoid organ, with its base or larger part turned upwards and forwards, and its apex or smaller extremity looking downwards and backwards. The great importance of this organ and the consequent minuteness of description requisite for its thorough study, have caused it to be divided, nominally and externally at least, into five parts. Of these, the base or upper third is called the *fundus;* the middle portion or that part between the fundus and the cervix is called the *body;* the lower third is called the *cervix* or *neck;* the lower extremity of the cervix is called the *apex;* and the orifice or opening of the cervix is called the *os externum, os uteri,* or *mouth of the womb.*

The womb has also, externally, an anterior and a posterior face; the anterior being more flat and looking towards the bladder and symphysis pubis, while the posterior face is more extensively covered by the peritoneum, more convex, and looks towards the rectum and promontory of the sacrum. There are also three borders or margins; one superior border, which bounds the summit of the fundus; and one right and one left lateral border. To the two latter are attached

the broad and round ligaments of the corresponding sides. And finally, the cervix and body of the womb have also an internal surface, composed of mucous membranes and supplied with numerous muciparous follicles and glands.

Fig. 13.



The Internal Genital Organs.

A. The uterus, seen on its anterior face. B. The intra-vaginal portion of the neck of the uterus. C C. The Fallopian tubes. D. The pavilion or fimbriated extremity of the tube. E E. The ovaries. F. The ligament of the ovary. G G. The round ligaments. H. The vagina laid open.
On the right, the fimbriated extremity of the tube is seen applied to the ovary.

The fundus or base of the womb is convex, looking upwards and forwards, ordinarily inclining towards the arch of the pubis, its summit never rising above the margin of the superior strait; while the superior two-thirds of its anterior and the whole of its posterior surface is covered by the reflected folds of the peritoneum. Some authors distinguish three angles on the external surface of the uterus; two superior,—one on each lateral border, marking the insertion of the Fallopian tubes,—and one inferior, at the point of union of the cervix with the body of the uterus.

The cervix uteri extends about half an inch into the vagina; and at its *apex* or free extremity is found the *os uteri*,—sometimes called *os tincæ*, from its fancied resemblance to the mouth of the tench, a species of small fish. The apex itself at its margin is divided into anterior and posterior lips,—the former, on account of the inclination of this part to the sacrum, being apparently longer than the latter. The occasional and still greater, abnormal length of the anterior lip, by entirely foreclosing the os uteri, has sometimes been the efficient cause of sterility,—which can only be obviated by the female, in coition, assuming the prone position on the face and abdomen.

In its embryonic state, the uterus is not to be distinguished in shape and appearance from the vagina, into which it is inserted at the middle of the cervix, and with which it is apparently homologous and continuous. But during childhood the body or upper portion of the uterus gradually increases in size, till at the full period of puberty its shape is pyriform instead of being cylindrical.

The *cervix uteri* is about one inch in length, and constricted at its point of union with the body of the uterus. At this point, which is also called the inferior angle, takes place the inflexion which results from change of position of the fundus and body of the womb. In these cases of anteflexion, retroflexion and lateroflexion, the body of the uterus forms nearly a right angle with the neck. The usual position of the virgin uterus is with the fundus strongly inclined towards the symphysis pubis. This causes the cervix (see Figure of Section of Pelvis on page 36) to incline towards the superior portion of the coccyx, and the os uteri to look posteriorly towards the rectum, instead of looking directly downward in the axis of the inferior strait. The mouth of the womb in young females is often quite small, sometimes almost undiscoverable. But where it thus seems closed up, gentle pressure of the finger will detect a slight depression, which will indicate its exact situation.

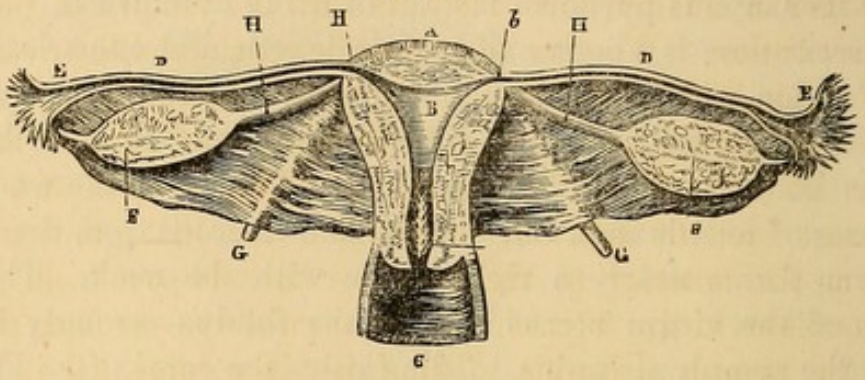
The vagina embraces the cervix at its upper third. Thus the larger portion of the cervix appears as a free extremity inserted into the vagina; the anterior face of this free extremity being a little shorter than its posterior face, on account of the oblique manner in which the vagina surrounds the cervix.

The canal of the cervix is about three-fourths of an inch long. In its course from the *os tincæ* or *os externum uteri*, it first widens, then grows narrower at its entrance into the cavity of the uterus,—this point of entrance being known as the *os internum uteri*. The mucous lining membrane of the canal of the cervix is arranged in radiating folds, or *rugæ*, on either side,—the united radiations of both sides having an appearance very similar to that of a cedar tree (Thuya occidentalis); hence the name *arbor vitæ*. (Fig. 14, O, and Fig. 16, A.) A similar appearance,—to which also the same name is applied,—is seen in the cerebellum, on cutting it longitudinally. The glands of the canal of the cervix will be described in connection with the mucous coat, which lines the inner surface of both the cervix and body of the womb.

From the inner surface of the cervix, we naturally come to the description of that of the body of the womb itself. This internal

surface of the womb into which that of the cervix leads, and with which it is continuous, is covered with mucous membrane, and abundantly supplied with muciparous follicles,—although these are far less numerous in the body than in the cervix. In the virgin

Fig. 14.

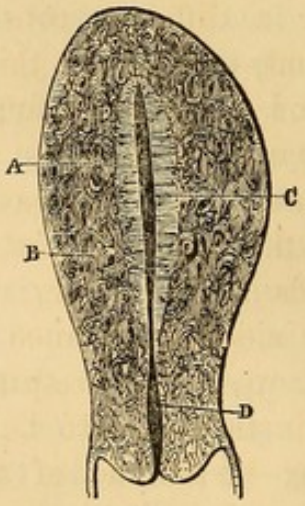


Cavity of the Uterus and the Fallopian Tubes.

A. Superior border or fundus of the womb. B. Cavity of the womb. C. Cavity of the neck of the uterus. D. The canal of the Fallopian tube cut open. E. The fimbriated extremity or pavilion, likewise laid open. F F. The ovaries, one-half of which has been removed so as to bring into view several of the Graafian vesicles. G. The cavity of the vagina. H H. The ligaments of the ovaries. G G. The round ligaments.

womb the walls are nearly in apposition; there being ordinarily but little cavity in the empty womb. At the same time the walls are much more vascular and so of a more rosy hue than the parietes of the canal of the cervix. Still the cavity of the womb, such as it is,

Fig. 15.



This profile view gives an exact idea of the dimensions of the cavity of the body and of the neck of the womb in a state of vacuity. A. Mucous membrane. B. Tissue proper. C. Cavity of the body. D. Cavity of the neck.

(Fig. 14, B,) is triangular in shape; its inferior angle corresponding to the *os internum*,—the two superior and lateral angles being situated at the orifices of the Fallopian tubes. In Fig. 15 appears a

profile view, which conveys a more correct idea of the manner in which the walls of the virgin uterus are approximated in their ordinary condition. At the times of the menstrual excitement, they are somewhat more distended.

The *external dimensions of the uterus* vary in different persons,—being larger or smaller, to correspond with the totality of their physical constitution. We give what may be considered the average admeasurements of the fully developed uterus at puberty. The entire length of the uterus, from the inferior margin of the cervix to the superior border of the fundus, is about two inches and a half; its greatest breadth is about one inch and a half; and its thickness from the anterior to the posterior face is one inch. As the uterus increases in size from childhood to puberty,—so from the cessation of the menses it begins to diminish in volume, till it becomes more or less atrophied in the second childhood of advanced age. And as in the impregnated condition, the womb becomes very greatly and permanently enlarged,—that is, during the continuance of the pregnancy,—so at the accession of each of the monthly periods, in many females, it becomes temporarily enlarged to twice its natural size. The weight of the virgin uterus may be set down as about eight drachms; but after child-bearing it remains two or three times as heavy.

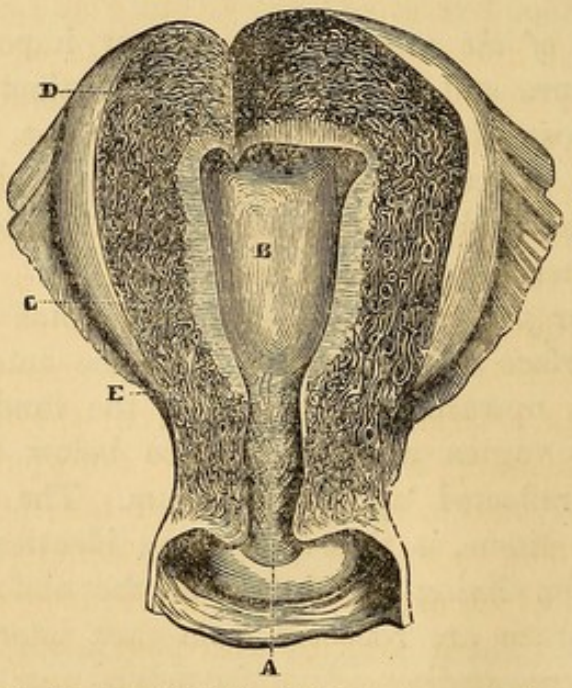
The *structure of the uterus* forms a very important element in studying its nature and functions. Three distinct tissues, coats, or tunics,—each possessing a different constitution, and performing totally different functions,—make up this complicated structure. These are the external or peritoneal coat; the middle or muscular coat; and the internal or mucous coat.

The *external* or *peritoneal coat.*—This membrane is reflected from the posterior surface of the bladder upon the anterior face of the uterus; extends upwards, and, covering the fundus, is continued down upon the vagina a short distance below the cervix; and is then finally reflected upon the rectum. The peritoneal membrane, or serous tissue, is thus seen to be identical and continuous with the common lining membrane of the abdomen. Processes from this membrane are reflected from each lateral border of the fundus to the corresponding side of the pelvis, near to the sacro-iliac symphysis. These processes form what are called the *broad ligaments* of the uterus; and contain the Fallopian tubes, the ovaries, and the round ligaments.

The *middle* or *muscular coat* forms the principal part of the sub-

stance of the uterus. This tissue is dense, firm, and grayish in color. It is thickest upon the middle of the body and fundus; thinnest at the orifices of the Fallopian tubes. It consists of bundles of involuntary muscular fibres, disposed in three layers, intermingled with areolar tissue, blood-vessels, lymphatics and nerves. The external layer appears principally upon the anterior and posterior surface; its fibres, converging at each superior angle of the uterus, are continued upon the Fallopian tubes, the round ligament and ligament of the ovary,—some few running backwards from the cervix uteri to connect with the recto-uterine ligaments. The middle layer of this coat is composed of longitudinal, oblique and transverse muscular fibres. The internal layer consists of circular fibres arranged in the form of hollow cones, whose apices surround the orifices of the Fallopian tubes,—their bases meeting and intermingling at the middle of the body of the uterus. The fibres of this layer are disposed transversely, or circularly, in the cervix uteri. The womb is a muscular organ of very great power; and a thorough knowledge of the nature and arrangement of its muscular fibres in the cervix, and especially in the fundus, and in their relation to the broad and other ligaments, is essential to a correct understanding of its wonderful action in parturition.

Fig. 16.



This figure represents the arrangement of the mucous membrane, and of the tissue proper of the uterus, as also their relative dimensions. A. Cavity of the neck and arbor vitæ. B. Cavity of the body. C. Mucous membrane. D. Intervening membrane. E. Represents the marked thinning off of the mucous membrane towards the neck.

The *mucous coat* of the uterus is so closely adherent to the subjacent tissue, that from the difficulty of separating and demonstrating

it, its existence has been denied by many authors. But by the aid of the microscope this mucous coat has not only been clearly distinguished, but shown also to consist of epithelium, basement membrane, fibrous tissue, blood-vessels and nerves, like other mucous membranes. This internal mucous coat of the uterus is continuous with that of the vagina beneath, and also with the peritoneum above, through the fimbriated extremity of the Fallopian tubes. It abounds in follicles, whose secretion lubricates the interior surface of the uterus. And the abnormal, catarrhal and leucorrhœal secretions, and other morbid products, to be subsequently considered as disorders of the cervix and even of the fundus, conclusively show the mucous character of this innermost tissue of the uterus. Numerous follicles, glands and papillæ appear in the mucous lining membrane of the cervix; the secretions from which serve to maintain the mouth of the virgin uterus in a healthy condition, and to seal it when impregnated. Much the larger portion of the mucous secretion from the womb, is in reality the product of the innumerable glands of the cervix. This secretion in its normal state is whitish, very viscid, almost transparent, and gives an alkaline reaction. It adheres to the crypts and rugæ of the cervix, and occupies its canal.

The *circulatory system of the uterus* forms a most important part of its study. The blood-vessels of the virgin womb are numerous and largely developed in comparison with the size of the organ. This has reference not only to the nutrition of the womb in its ordinary condition, and to its congested state at the periods of menstrual excitement, but is provisional also for the necessities of that impregnated condition for which it is designed. The *arteries,* which supply the womb, form two distinct systems, according to the sources from which they are derived, and to the parts to which they are finally distributed. The first, or superior system, is composed of the *spermatics,* or ovarian arteries, which arise from the aorta or emulgent arteries, and, descending along the sides of the womb in a serpentine course, are distributed to its upper part, to the Fallopian tubes, and to the ovaries. The second, or inferior system, is composed of the *uterine arteries,*—which are derived from the internal iliac or hypogastric arteries. These arteries also pass along the sides of the womb, to be finally distributed to the cervix and upper part of the vagina. These arteries pursue a remarkably tortuous course in the substance of the uterus; thus provision is made for their great elongation without danger of rupture in the advanced stages of pregnancy.

The numerous branches of these two systems freely anastomose with each other.

The *veins of the virgin uterus* are of large size, possess no valves, correspond in name with the arteries, and follow their course. The right spermatic vein terminates in the inferior vena cava, the left in the renal vein; the uterine veins empty into the internal iliacs. They are capable of very great increase in pregnancy, and are then known as *uterine sinuses.*

The *lymphatic vessels* of the uterus, invested by delicate coverings of peritoneum, are distributed upon all the external surfaces of that organ. They are very numerous and, in the virgin uterus, very small. Some of these ascend, in a serpentine course, from the cervix to the body and fundus of the uterus. Others pass less tortuously, in various directions, over both these surfaces, communicating with branches ascending from the vagina and with those from the Fallopian tubes and ovaries. The internal as well as the external surfaces of the uterus, Fallopian tubes and ovaries, are abundantly supplied with these absorbent vessels. Those of the former, from the interior structure of these organs, communicate with the lumbar ganglia; those of the latter, from the external surfaces of these genital organs, communicate with the pelvic or inguinal ganglia. This latter circumstance is important to be borne in mind, since this anatomical and physiological connection is frequently the index to pathological appearances. In addition to the general division of the lymphatics of these organs, to correspond to their external and their internal surfaces,—the mode in which they are originally distributed, to follow the course of the spermatic and iliac arteries, arranges them all in two distinct systems of lymphatic circulation. With the exception of the proper menstrual secretion, there is no discharge from the interior of the female organs of generation, in their normal condition; the lymphatics sufficing to reabsorb the natural secretions of their internal surfaces, so that no accumulation occurs.

The nerves of the uterus and its connecting structures of the generative system, are derived, either directly or indirectly, from all three of the great nervous centres of the body; and by their union and concentration serve to render the sexual system of the female the great physiological centre of her entire organism. The nerves which are distributed to the uterus are, in part, derived from the great sympathetic, and partly from the spinal nervous system. But these latter, as branches of the third and fourth sacral nerves, given off from the cerebro-spinal axis, are, indirectly at least, derived also from the

cerebral nervous centre, as well as from the spinal; although they are not under the immediate control of the will.

The nerves which are distributed to the uterus from the sympathetic system, are derived from the aortic, and from the hypogastric plexus. The former,—variously named, as the renal, the spermatic, or ovarian plexuses, according to their more immediate relations,—are all derived from the great solar or epigastric plexus; and are intimately connected with all the other pelvic, abdominal and thoracic nervous centres. Hence the powerful sympathy which exists between the womb itself and all the other great organs of the female. Hence, too, the intense pain felt at the pit of the stomach in cases of uterine neuralgia; and the nausea and vomiting which are so often associated with peculiar conditions of the impregnated womb.

The nerves which are distributed to the uterus from the hypogastric plexus, come directly from the pelvic portion of the sympathetic; and have associated with themselves the filaments from the third and fourth sacral nerves, which connect the womb with the general muscular apparatus of the body. The former class of nerves having especial relation to the two great functions of nutrition and reproduction, as in the growth of the womb itself, and of the ovum which it may contain in the impregnated state;—the latter having relation to those muscular powers of the womb by which it is enabled to exert itself so wonderfully to expel the product of conception at full term, and to combine with its own efforts the muscular powers of all other parts of the body.

Unlike other muscular structures, the nervous filaments penetrate into the substance of the womb; and during the period of utero-gestation all the uterine nerves are very greatly enlarged.

The virgin uterus is situated in the centre of the pelvis, just above the vagina, between the bladder in front and the rectum behind. In connection with the vagina, it describes a curve similar to that of the general axis of the pelvis. Thus it appears supported or suspended in the midst of the pelvis; and in this position it is sustained by ligaments, which are processes given off from its own substance, or from the enveloping peritoneal membrane. These are arranged in four pairs, and are known as the anterior, the posterior, the round and the broad ligaments. In addition to these, which serve rather to steady the womb in its position, the peritoneum itself appears to afford the principal direct support to the uterus.

The *anterior ligaments* (*vesico-uterine*) are two semilunar or falci-

form processes of the peritoneal tunic of the uterus, which connect the cervix with the posterior surface of the bladder.

The *posterior ligaments* (*recto-uterine*) are two similar elongations of the same membrane, by which the sides of the uterus are connected with the rectum.

The *round ligaments*, continuous with the proper tissue of the womb, are produced from the anterior and superior part of its body. They are four or five inches long, situated between the layers of the broad ligament, and attached to the superior angles of the uterus, one on each side, a little in front of the Fallopian tube. (Fig. 14, G.) From this point the ligament proceeds outward and forward to pass through the inguinal canal towards the symphysis pubis, where its expanded fibres are distributed to the subcutaneous cellular tissue of the groin, mons veneris and dartoid pouch of the labia. The tubular process in this ligament, called the *canal of Nuck*, is analogous to the peritoneal pouch which accompanies the descent of the testes in the male.

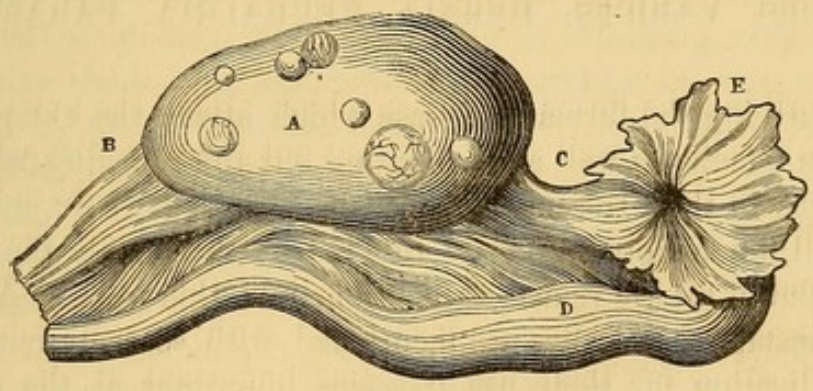
The *broad*, or *lateral ligaments* are formed by the union and prolongation of the peritoneum from the anterior and posterior faces of the uterus; and they extend laterally from the sides of the uterus to those of the pelvis. By this partition wall, or septum, the cavity of the pelvis is divided into an anterior portion, containing the bladder, urethra and vagina, and a posterior portion, containing the rectum. By reference to Fig. 14, it will be apparent that this double membrane envelopes, on either side, superiorly the Fallopian tube, mediately the ovary, and inferiorly and anteriorly the round ligament, already described.

The Fallopian Tubes.—The first of the ovarian appendages of the uterus consist of the Fallopian tubes, one on each side; through which the ovary is transmitted to the womb. These exceedingly minute canals lead out from the cavity of the uterus, at its superior, lateral angle, and terminate at about four inches in distance, in free, fringed borders, or *fimbriated extremities*. Their interior surface is continuous with the mucous lining membrane of the womb; and their external covering is composed of a prolongation of its peritoneal coat. Between this mucous lining membrane and the peritoneal tunic, is interposed a middle membrane, probably of cellular tissue, which is capable of producing the peristaltic action of these tubes, by means of which the ova are transmitted to the uterus. This peristaltic action is always from the ovary, towards the uterus.

The internal orifice of the Fallopian tube, called the *ostium internum*, or *uterinum*, is so small as scarcely to admit the introduction of a fine bristle. From this orifice, the tube widens, till it is finally developed into a trumpet-shaped extremity, *the pavilion*. At the base of the pavilion a contracted circle, the *ostium abdominale*, forms the termination of the tube; and from this circle radiate the fringes which compose the pavilion, or fimbriated extremity itself. The ovules discharged at the menstrual periods, pass through the Fallopian tubes to the uterus. The seminal aura of the male, is conveyed to the ovaries through the *ovarian* ligaments and fecundation results. The reflex irritation of the ovum breaking through the ovary, causes the fimbriated extremity to apply itself to the ovary. The ovule thus impregnated is transmitted to the womb, in a manner not different from that in which the unimpregnated ova are conveyed.

THE OVARIES.—The ovaries are the analogues in the female of the testes in the male. They are two in number, situated, one on each side of the uterus, in the posterior part of the broad ligaments, behind and below the Fallopian tubes. They are sustained in their proper position by these broad ligaments, to which they are attached

Fig. 18.



Ovary of the Young Female after Puberty.

A. Body of the Ovary. B. Utero-ovarian ligament. C. Tubo-ovarian ligament. D. Fallopian tube. E. Fimbriated extremity of the tube.

by their anterior margins; and by their own *ovarian ligaments*, Fig. 14, H H. which connect them with the uterus. In shape, the ovaries are oval, elongated and flattened from above downwards. Each ovary is about an inch and a half in length; three-quarters of an inch in width, and about a third of an inch thick. But they vary in size in different conditions of the system; increasing in volume at puberty,—

especially at the monthly periods,—and in most instances become more or less atrophied after the final cessation of the menses.

Beneath the peritoneal coat which invests the ovary externally, appears the *tunica albuginea*, the proper fibrous covering of the organ. This fibrous coat, which is dense and firm in structure, encloses the fibrous, spongy, vascular tissue, or stroma, peculiar to the ovary. In this stroma or *matrix*, are found embedded in various stages of development, the Graafian vesicles, ovarian vesicles, or ovisacs, containing the ova or ovules. In the adult female, fifteen or twenty of these vesicles may be distinguished already formed ; and a much larger number of very minute vesicular germs in course of development.

CHAPTER SEVENTH.

DISORDERS OF THE EXTERNAL GENITALS.

NYMPHOMANIA. INFLAMMATIONS. CUTANEOUS AFFECTIONS. TUMORS. VARICES. HERNIA. NEURALGIA. PARASITES.

In describing the forms of disease which attack the external genitals of the female, as well as in pointing out the remedies which may be required in their treatment, it will be seen that we do not attempt to give all the symptoms. And this is true also of all the forms of disease, and of all the remedies mentioned in this work. And since in some instances remedies are mentioned with scarcely more than a single indication for their use, it seems important at the outset to guard against the serious error of supposing that we recommend a medicine from a single symptom,—a practice especially deprecated by Hahnemann. And it might be sufficient to state here, that in all cases where remedies are introduced,—whether with one symptomatic indication, or with many,—they are so introduced *as remedies which should be studied* in connection with the class of disorders under consideration. Not as remedies which should be given one after another, till the patient is relieved by death or otherwise.

But some other considerations and explanations need to be introduced here. In the different forms of structural or organic disease,

—some of which have no direct counterpart, as yet, in the pathogenesis of our remedies,—we are compelled to look for the great characteristic, constitutional symptoms, the most prominent and peculiar features of the case, even apart, if necessary, from functional derangements, and from structural disorganization. Such symptoms, which are purely constitutional, just the reverse of local,—*since they may appear in connection* with any form of disease,—become the *peculiar characteristics*, the *key-notes* of their respective cases. Such symptoms must be prominently contained in whatever remedy is suited to the case. And we believe that each case, especially each chronic case, has its head symptom, which leads all the rest,—its key-note, from which all the others take their cue. And we believe also that the remedy which contains this head-symptom with equal prominence,—that is in which it constitutes a key-note,—will invariably be found to cover and contain all the other symptoms; and that this clue will thus afford us the means of extending the curative action and sphere of the medicine, far beyond what it had reached, or could be expected to reach by direct pathogenesis.

These distinguishing characteristics, these key-notes, which form the individual and constitutional symptoms of the patient, are *sensational* symptoms, rather than functional derangements or structural disorganizations. And the method we pursue in relying upon these, in the absence of other indications, and of attaching very great importance to them, even where other symptoms are not wanting, is sustained by two substantial reasons. First, in many cases we can do no better, since as already stated, few if any of our remedies either have or can ever be expected to have, direct pathogenetic symptoms to correspond to the innumerable ultimate forms of structural disease which we are often called upon to treat. Second, this method has been found reliable by much experience. The purely *constitutional symptoms*,—such as those of periodicity and the conditions of aggravation and amelioration,—strictly sensational symptoms, *being found to constitute infallible indications in the choice of the remedy*, where all other guides are wanting.

Of course under such circumstances it would be alike useless and impossible to repeat with the particular remedies, under the different forms of disease in which they may be useful, a long detail of pathogenetic symptoms. Where the characteristic symptoms are present and recognized, they will suggest the corresponding remedies for more particular examination.

So on the other hand we cannot attempt to give all the symptoms

which may occur under the particular forms of disease described. The symptoms which may and even do arise under some of these forms of disease, such as hysteria, hysteralgia, would fill volumes. For nearly every part of the female system will be found to sympathize with the more purely local sufferings connected with uterine difficulties; every possible kind of distress, every imaginable morbid sensation, and even the simulated appearance of every form of disease, may arise in connection with nervous disorders of the uterus.

Nor indeed is there any such necessity for thus fully describing his patient's case in advance to the Homœopathic physician, even if such a thing were possible. If he but have in his own mind the image of the great constitutional symptoms of the medicines, and some good knowledge of the principal functional and structural derangements which belong to them, his cases will suggest their own remedies. And this individual mode of prescribing is absolutely essential to success. For even the selfsame form of disease may very differently affect different persons; so Lycopodium may be required in one person, for a difficulty similar in many respects to that which is cured by Lachesis in another.

The reaction in the system against some injurious influence, which we call disease,—may be local, or constitutional, or both. If we attend principally to the local symptoms, diarrhœa for instance, in what is termed cholera,—we are immediately led into the *contraria contrariis* method of treatment, and this is Allopathy. But if we attend also to the constitutional symptoms, such as the nature of the (burning) pains,—or the coldness of the perspiration,—we in reality leave off fighting a particular form of disease, but set ourselves at work to *cure our patient.*

Nor yet let us be misunderstood as recommending a method of generalizing, by advising to pay particular attention to the constitutional symptoms, such for instance as aggravation at three o'clock in the morning. That is indeed a very general indication, and a very common symptom in a particular remedy. But in the individual case of our patient, *it is the very particular form of her system's vital and constitutional re-action against a special morbific influence.* The local symptoms are the more common, and are those which are alike common to many individuals and to many medicines; but the constitutional symptoms, as they are *more remote,* are also more especially the characteristic and individual symptoms, since they are confessedly the indications of the profound reaction of the individual system itself. These constitutional symptoms, while thus reflecting the

profoundest reaction of the system against the morbid influence,—and so establishing their claims to be considered as of the very first importance,—will also be found to carry with them, as it were, all the more important local symptoms. Thus the remedy which is found to answer best to such a form of *periodic aggravation* as has just been mentioned,—at three in the morning,—will also be found to cover the other symptoms sufficiently. And if we do not find in our pathogenesis all such symptoms, it is because the pathogenesis itself is necessarily incomplete. This is well illustrated by a case which came under my observation many years ago. A young physician had charge of a case of miscarriage, in which the subsequent hemorrhage proved very intractable. The miscarriage was at three months, in a tolerably healthy young woman, and was brought on by running to reach a ferry-boat. Every remedy known to the young physician, was tried in vain. At last he resorted to the *tampon*, in the latter part of the evening, in hope to save his patient's life; and remained during the night to watch its effect. This means proved effectual for some hours, and he began to hope the danger was passed. But *at three in the morning* the hemorrhage returned, with such violence as almost to expel the *tampon*. The remarkable character of the aggravation led him to give *Nux vom.*, which was followed by immediate and permanent relief.

The labia, vulva and other organs belonging to the external genitals of the female, are liable to several forms of disease, either from morbid influences to which they are directly exposed, or from the extension to them of disorders from the internal parts. We give a brief notice of each of the principal of these forms of disease, with reference to their causes, most important symptoms, and natural termination.

NYMPHOMANIA.

This formidable disease may be properly reckoned as one of the disorders of the external parts, since its principal seat is in the vulva, nymphæ and clitoris,—although these organs may only be thus affected in consequence of some morbid condition of those more interior. Nymphomania consists in an uncontrollable passion for sexual intercourse, which overcomes all the restraints of modesty, propriety and decency, and amounts to an actual insanity or monomania on this single subject of sexual intercourse. Taking its rise

in functional disorders of the sexual system, or in more general morbid constitutional influences, which are thus ultimated upon the external generative organs, this disease changes the entire moral character from the most attractive modesty to the most shameless and repulsive profligacy; and it may lead to paroxysms whose violence rapidly exhausts the vital energies, and which terminate only in death.

Nymphomania is to be distinguished from erotomania. The former is a purely sensual passion, alike physical in its origin, in its local influence, in its development and in its much-desired forms of gratification. The latter, although still to be considered sensual in a strictly moral point of view; from a physical point of view would seem rather spiritual,—as neither requiring sensual means of gratification nor dependent upon physical ability. Erotomania is a psychical state, which may find its highest if not its only gratification in the reveries and dreams of amorous imagination and fancy, by day or by night. Nymphomania is a physical disease whose progress may be traced through a period of internal incubation, of external, reluctant and partially restrained development, to a final condition of open, unrestrained manifestation; characterized by a most intense, all-controlling sexual desire, and by an equal unconsciousness of shame and of decency.

Without directly mentioning nymphomania, Hahnemann seems to have had it in his mind, when he says: "It is not until the whole of the organism is infected that psora discloses its huge internal chronic miasm, by a cutaneous eruption (sometimes consisting only in a few pimples) that is wholly peculiar to it, accompanied by insupportable tickling, voluptuous itching, and a specific odor."

This disease has repeatedly appeared in strongly marked cases where there was one constant characteristic of the temperament or constitution; and that was "an unusual susceptibility of the skin to tettery affections." In these cases the disorder is so profoundly connected with the entire system, that it induces paroxysms of convulsions, which indicate that the entire cerebro-spinal nervous centre is involved. The actual monomania, with entire obliteration of all feeling of modesty or sense of shame, and unconsciousness of all the duties and proprieties arising from the domestic relation, indicates also an equally complete subjection of the purely cerebral functions and moral feelings to the same morbid influence. While the spasmodic closure of the œsophagus, and impossibility of deglutition and consequent destruction of organic life, show also that the same disease

has possessed itself of the organic nervous centre—and so completely invested "the whole of the organism." The "insupportable tickling and voluptuous itching" can be no more violently manifested than in the pruritus so frequently seen in cases of nymphomania; and the same may be said also of "the specific odor," which, like that of goats, often emanates from the genitals or from the entire person in such cases.

True nymphomania may be considered, therefore, as a most remarkable illustration of the psoric diathesis,—as a most astonishing proof of the truth of the psoric principle. For if we observe this malady to arise from the more immediate influence of ascarides or onanism, these latter are but intermediate steps in the chain of causation,—being themselves the results of the same psoric influence in the system. The same may be said of the enlarged, hypertrophic condition of the clitoris so often seen in connection with this disease. The nymphomania is more apt to make its appearance at either one or the other of those two epochs of the female life, in which the constitution is stirred up as it were in its profoundest depths,—that is, at the accession of puberty, or on the cessation of the menses,—but more particularly at the former of these two periods. And in addition to the influences already mentioned as constitutional or provoking causes,—and which will thus exert an important influence in determining the choice of the remedy,—we may mention: suppression or great disturbance of the menstrual function, and organic diseases of the uterus.

But in both of these, as in the other causative influences, the psoric diathesis is still predominant. For it is from the presence of such deep-seated, morbid influence, hereditarily implanted in the organic nervous system,—the source and support of all organic or vegetative life,—that the menses fail to make their appearance in due proportion and at the proper time. So the outset of any organic disease must be attributed to the same ultimate cause.

But in prescribing for this truly distressing complaint, the various attendant symptoms, as well as the peculiar constitutional indications must be carefully considered;—it will not be necessary to enumerate here all the varied symptoms, and morbid moral, mental and physical conditions which may accompany a case of nymphomania. As in hysteria,—and in fact what is this disease itself but a most violently aggravated hysterical affection, or morbid excitement of the entire sexual system of the female,—so in nymphomania, an endless succession and variety of symptoms may present. There may be leucorrhœa of more or less peculiar kind; pruritus of the external organs;

intense lasciviousness, both spiritual and physical; inflammation and excitation of the sexual parts; fever, with fetid breath; nocturnal restlessness; sleep, with dreams which renew the sexual excitement; paroxysms, with spasmodic closure of the œsophagus; general and exhaustive convulsions; diarrhœa, etc. And these attacks and symptoms of the disease may appear in consequence of onanism, or be attended with irresistible disposition to it; they may accompany menstruation, or appear in its absence; and finally, may be relieved or brought on by pregnancy. We have devoted considerable space to this not very frequent form of disease, because the homœopathic remedies,—as in the somewhat analogous case of delirium tremens,—have been found capable of producing the most salutary results and thus of saving from destruction and of restoring to society some of its most valuable and important members. And the indications given for the remedies may be useful also, in the milder and more common forms of amorousness and erotomania, for the relief of which the physician is often consulted.

Agaricus. Itching and irritation of the genital organs, with strong desire for an embrace. Great selfishness.

Arsen. a. Sexual desire, with an involuntary discharge of mucus as a particular symptom. Restlessness. Thirst for cold water,—a very little satisfies her. Unhappy, fatiguing dreams; nothing comes out right in her dreams.

Calc. carb. Pale, leucophlegmatic. Much headache. Vertigo on running up stairs. Swelling over the pit of the stomach, like a saucer turned bottom up. Menses too often and too profuse.

Cannabis s. Great excitation of the sexual instinct, the female being sterile.

Cantharis. Pruritus of the vagina, with strong sexual desire. She *must urinate* very frequently, with cutting burning pain.

Carbo veget. She is troubled much with varicose veins in the vulva. Itching at the same time of both the vulva and the anus. Much belching of wind, which affords relief for a short time only.

China. Sensation as if the abdomen were too full after eating, with desire to eructate,—which however affords no relief. Troublesome itching and spasmodic contraction in the inner parts. Nymphomania of lying-in women.

Cocculus. Particularly in chlorotic females. Shivering over the mammæ. Lower extremities very weak.

Coffea. Voluptuous itching in the genital organs. She is in a state of ecstacy. Sleeplessness.

Conium. Shriveling of the mammæ, with increasing sexual desire. She is much troubled with vertigo, particularly when lying down and when turning over in bed. The urine flows and stops, and flows again, at each emission.

Digitalis. Lascivious state of the fancy day and night. Remarkably slow pulse. Stools of a very light color.

Dulcamara. Heat and itching in the genitals, with desire for an embrace. All her symptoms are aggravated by a cool change in the weather. Her sexual desires are also increased by this change.

Graphites. Inclination to obesity. Enlarged ovaries, which become more tender and more enlarged every time she takes cold or gets her feet damp. Menses delay. Itching blotches here and there over the surface of the body, from which oozes out a colorless, glutinous fluid.

Gratiola. Gnawing about the umbilicus, as if of worms. Tingling in the hypogastrium and around the umbilicus. Gnawing at the pit of the stomach after eating, as if of hunger. Irresistible drowsiness and involuntary closing of the eyes as the other symptoms abate.

Hyosciamus. Excited sexual desire without excitement of the fancy. Lascivious furor without modesty. She inclines to uncover and expose herself. Convulsive trembling. Immoderate loud laughter.

Ignatia. Strongly inclined to solitude; and to be very secretive; and to be passive. Sadness and sighing, with an empty feeling in the pit of the stomach.

Jodium. Dwindling and falling away of the mammæ; they hang down heavily and lose their fatness. Heaviness of the mammæ, as if they would fall off. All her symptoms are relieved by eating.

Lachesis. Tickling and jerking, extending from the thighs to the genital organs, with sexual excitement. Her symptoms are usually worse after sleeping. She feels extremely sad, unhappy and distressed in mind on waking in the morning.

Lycopodium. Much borborygmus in the abdomen, or gurgling in the left hypochondrium. Discharge of wind from the vagina. Sense of dryness in the vagina. Red sand in the urine. Delay, and severe pain the back, before the emission of the urine. Sense of fulness up to the throat on eating a small portion.

Mercurius. The symptoms are more constitutional than local. Hence this remedy must be given rather from its general character-

istic indications. The symptoms are usually aggravated at night and are still worse when in bed.

Moschus. Violent sexual desire, with intolerable titillation in the genital organs.

Nat. carb. Motion as from a fœtus in the uterus. She has a variety of sufferings, all of which are aggravated during a thunder-storm.

Nat. mur. Falling off of the hair from the mons veneris and from the labia majora. Much itching of the vulva. She awakens every morning with a bad headache. Great aversion to bread, of which she was once very fond. Longing for salt things.

Nux vom. Burning in the vulva, with desire for an embrace. She wakens at three or four in the morning with sexual desire; does not sleep much afterwards. Constipation of large and difficult feces.

Opium. Very sleepy, but cannot go to sleep. Constipation; the evacuations are composed of round, hard black balls. The sexual excitement and other troubles all disappear from a few doses of Opium.

Phosphorus. In a pregnant female, at the seventh month, nymphomania appeared with spasms; the symptoms were, weak, empty feeling in the abdomen,—cutting pains in the abdomen; a narrow, dry, long and difficult stool, like a dog's stool. One dose of Phosph. 19 m. completely cured the nymphomania,—she went her full time, and was happily delivered.

Platina. Excessive sexual desire, particularly in virgin females. Voluptuous tingling in the vulva and abdomen. Stool difficult, because it adheres to the rectum and anus like soft clay. Hysterical cough from stifling beneath the upper fourth of the sternum.

Plumbum. Sensation of drawing from the abdomen to the spine. Constipation; stool like sheep's manure.

Pulsatilla. In females with blue eyes, very affectionate, easily excited to tears; and of a very yielding disposition. She cannot sleep in the early part of the night; sleeps late in the morning. No thirst. All her symptoms are worse towards evening; they are relieved in the open air; and worse on returning to a close and warm room.

Sabina. An almost insatiable desire for an embrace. A sensation of drawing or dragging from the sacrum to the pubis. Music is intolerable to her.

Silicea. She feels nausea during an embrace. Spinal affections and constipation,—with increased sexual desire as a consequence.

Staphysagria. Extreme sensitiveness to mental and physical impressions. She feels mentally and very acutely every little circumstance. The teeth turn black into their very substance.

Stramonium. Excessive loquacity during the menses. This was always the case. Stramonium removes also abnormal sexual excitement. During the menses the smell of semen is very apparent. Her face is bloated with blood. A great many strange fancies come into her mind.

Sulphur. A weak feeling in the genital organs. Sore feeling in the vagina during an embrace. Sterility. Also in cases which present the general characteristic indications for Sulphur; which see under head of *Hysteria*.

Thuya. Fig-warts, condylomata, or other excrescences of a similar nature, on or about the genital organs. Her symptoms are worse after three P. M., and at night, preventing her from falling asleep.

Veratrum. Nymphomania, particularly of lying-in females. Mania with lewdness and lascivious speeches. Thirst, with craving for the coldest drinks. Menses preceded or accompanied by vomiting and diarrhœa, or by diarrhœa alone.

Zinc. Sexual desire several times at night. Irresistible desire for onanism. She always feels best during the menstrual flow. Boring pain in the left ovary, requiring pressure for partial relief, excepting when the menses are flowing,—then there is complete relief.

Inflammations of the External Genitals.

Vulvitis. Acute Inflammation.—All the external parts are liable to attacks of acute inflammation. This inflammation may be developed principally in the labia; may be confined to these or some other particular parts, as the nymphæ, clitoris, &c.; or it may extend more or less generally over all the connecting tissues. This acute inflammation may arise from sudden and severe exposure to cold air; it may be the result of accidents or mechanical injuries; of violence, as in sexual intercourse; or it may result from the extension, downwards and outwards, of disorders primarily developed in the internal genitals; or from irritation caused by morbid secretions from these interpubic organs.

From the very delicate, sensitive and vascular nature of the tissues composing these external organs, they are remarkably disposed to

such forms of disease, although very much protected by their situation; and the same vascularity and delicacy of their structure renders this acute inflammation very apt to terminate in abscess or suppuration. The abscess, or more general suppurative process, may, in all cases, be cured by the appropriate remedies.

Acute inflammation of the external genitals, from whatever cause it arises, runs a very rapid course; may be attended by remarkable excitement of the sexual passion,—especially where the clitoris is involved,—the swelling, heat and redness in the parts may be very great, and the pain severe in proportion.

The most favorable termination of such inflammation is, of course, in resolution or subsidence of the local fever. Next to this, may be regarded an abscess in one or the other of the labia. But where the disorder is the result of violence, such as contusions, the parts may presently assume a dark color; or if the violence have been very severe, or where the constitution of the patient, the plethoric and vascular nature and generally full development of the parts,—and perhaps other attendant and depressing circumstances,—combine to produce such a result, *gangrene* may make its appearance.

It should be remembered that in the greater prominence given to some symptoms by the inflammatory action, we may obtain a clue to the true homœopathic remedy for the whole case,—at least for the remedy most completely indicated at that time; and which, being given, must be waited upon till its action is entirely exhausted, before another prescription is made. The proper remedy for each particular case of acute inflammation, and also for the consequences of it, may be found among the following; and should be selected in accordance with the indications here given.

Arnica. For inflammation from mechanical injuries which are contusions merely.

Ambra grisea. Pain as of soreness and violent itching of the vulva, with swelling.

Belladonna. The parts have a hot, dry sensation; there is much throbbing; they get worse at three in the afternoon.

Calc. carb. Inflammation, redness and swelling of the vulva, with purulent discharge. Stinging, burning tubercles on the margin of the labia. Much moisture between the labia and the thighs, with biting pain.

Calendula. For those inflammations which result from cutting or tearing the parts.

Cantharis. Very frequent desire to urinate with cutting burning pain, on passing a few drops of urine, or with complete strangury. Burning in the vulva; with frequent desire to urinate, and burning cutting in the urethra.

Carbo veget. Simultaneous itching of the vulva and anus. Heat and redness of the vulva. Much soreness in the vulva in the evening. Aphthæ of the vulva. Sore places about the vulva, itching without pain.

Conium m. In all cases of indurations from injuries. Large pimple on the mons veneris, painful to the touch. Cutting pain between the labia on micturition. Severe stitches in the vulva. Violent itching of the vulva.

Creosote. Corrosive itching within the vulva. Violent itching with biting between the labia and the thighs, with soreness and burning after urinating.

Ferrum. In weakly females with fiery-red face.

Graphites. Itching smarting, painful vesicles on the labia. Painful soreness between the vulva and thighs, the part being covered with pimples, vesicles and ulcers.

Kali carb. Tearing in the left labia, extending through the abdomen to the chest. Pinching pain in the labia. Stitches through the vulva. Soreness, gnawing, burning and itching in the vulva.

Lycopodium. Darting in the labia on lying down, often extending around each labia.

Mercurius. Sensation of rawness. Long-lasting itching of the labia. Terrible itching which is made worse by the presence of urine remaining on the parts, after urinating;—it has to be washed off. Worse at night. Perspiration affords no relief. She may even be worse during perspiration. Salivation. Soreness of the gums, teeth, &c.

Nat. mur. Pimples on the mons veneris. Itching of the vulva and falling off of the hair.

Nitric acid. Violent itching of the entire vulva towards evening, dry burning heat of the vulva.

Nux vom. Inflammation of the labia with frequent calls to go to stool, or to pass urine; often with little or no discharge of either.

Phosphorus. Dull tearing pain in the labia during and after a walk in the open air.

Sepia. Violent stitches, sometimes extending as far as the umbilicus. Severe itching of the vulva. Swelling, and humid itching eruption on the inner labia. Fetid urine; depositing a clay-colored sediment

which adheres to the chamber with great tenacity. Troublesome itching of the vulva, with pimples all around. Painless vesicles in the outer parts of the vulva. Also compare the indications given for Sepia in other diseases peculiar to the external generative organs of the female,—such as varices, burning of the vulva, &c.

Sulphur. Where the predominant symptoms of the inflammation are those well known characteristics of this remedy,—flashes of heat; hot soles of the feet; weak, faint spells; heat on the top of the head, &c.

Sulphuric acid. Great exhaustion. Tremulous sensation in the whole body without trembling.

Thuya. Swelling of both labia. All the itching, burning, and pains, are excited and aggravated either during or after a walk, or from touching the parts. Cramp pain in the vulva and perineum, on rising from a seat.

Erysipelas, Erysipelatous or Phlegmonous Inflammation may result in certain constitutions from causes which, in other persons, would produce only the simple form of inflammation above described. In phlegmonous inflammation, the deeper tissues appear involved; or where suppuration sets in,—as it may very suddenly,—instead of being confined to a single abscess, it may assume the diffused form common to erysipelas. This variety of inflammation is in reality a general erysipelatous affection, which is constitutional to the female herself,—but which some provoking cause has sufficed to develop locally in these parts.

Both the skin and the subcutaneous cellular tissue are involved; and in whatever particular organ of the external genitals the disease first makes its appearance, it presently includes them all, and even extends to the inguinal glands. The parts immediately affected, become hot, swollen and red; with severe throbbing pain,—especially as the suppurative process extends through the tissues. All the neighboring organs sympathize more or less; and the pain is so great that it is almost impossible for the patient to remain quiet, and yet the distress is severely aggravated by movement. In the more rapid forms of this variety of inflammation, the suppurative process may be established in from twenty-four to forty-eight hours, and it is usually ushered in and attended by chills, which, if not very strongly marked, still afford a reliable indication of the progress of the disease.

The following remedies should be carefully studied in these cases.

Apis. Characterized by stinging pains; and absence of thirst.

Belladonna. Great redness of the parts; redness extending in radii. Heat and throbbing.

Croton t. Vesicles,—very small,—itching terribly. The itching is partially relieved by slightly tickling the vesicles. These minute vesicles may extend far around the inflamed parts.

Graphites. A vesicular eruption which is very painful, with itching.

Hepar s. c. Tendency to the formation of abscesses.

Lachesis. Tickling and jerking in the affected parts. Worse after sleeping.

Mercurius. The parts are much swollen; with raw, sore feeling; and the sufferings are much worse at night.

Pulsatilla. The erysipelatous affection changes from one part to another; and inclines to spread far around on the buttocks and thighs.

Rhus tox. The mons veneris is most affected; the inflammation extending downwards; intense itching and burning; large vesicles, which are not particularly troublesome.

Catarrhal or Chronic Inflammation, which by some authors is termed the subacute form of inflammation, may attack the mucous lining membrane of the external organs of generation. This form of disease is more apt to appear in children; and may be attributed in most instances to exposure to cold and wet,—and perhaps to want of cleanliness. The inflammation itself is of a mild form; although from the well known disposition of disease in the mucous tissues to spread, it may extend to the vagina. And thus a catarrhal discharge may be established in the vagina as well as from the vulva. The treatment for this affection will not be different from that for catarrhal leucorrhœa of the vagina.

Cutaneous Affections of the External Genitals.

Many and distressing forms of skin diseases develop themselves on the external organs of generation in the female. These are either the local manifestations of constitutional psora, which the extreme tenderness of the parts and the acrimonious discharges and other irritating influences to which they are subject, cause to make their appearance in this vicinity,—or they are the external manifestations of some severe, perhaps obscure irritation, which infests the internal organs. The former come under the general head of *eczema*. And, like some forms of leucorrhœa, may immediately result from too free indulgence in stimulating and highly-seasoned food. The latter

are commonly known as *prurigo* or *pruritus;* and may consist in a most intolerable itching, with little or no exanthematous appearance except what is developed by the scratching itself. In addition to the intense itching, there is usually present an equally intolerable burning, stinging and prickling. It is impossible to resist rubbing the affected parts, although all the sensations are rather aggravated than relieved by such friction. The prurigo is always the result of some deep-seated affection, usually in the internal, generative organs. And in many instances it is one of the first indications of the invasion of cancer of the womb. Thus a careful attention to this severe irritation, and its cure by remedies suited to its special symptoms and to those which are attendant and constitutional, may be the means of arresting and preventing the most painful, distressing and, in its advanced stages, incurable malady which can attack the female organism. Pruritus is also said to be the precursor, as it may likewise prove the efficient cause, of nymphomania.

From the constitutional nature of the *eczema* or other actual eruptions which appear on the external genitals, it must be evident that all attempts to remove them by external applications must be injurious just in proportion as they are successful. While as regards the *pruritus,* in so far as that may be due to irritation caused by actual disease in the interior genitals, it must be apparent that all attempts to remedy it, which do not embrace the cure of its provoking cause, must be futile. And in fact so it is found, in the allopathic treatment directed against the prurigo itself,—that it is exceedingly intractable, if not absolutely incurable by such means; while in the homœopathic treatment, guided by these external forms and by the attendant constitutional symptoms, we may often prevent or remove important disorders, of whose threatened onset or actual presence we were not positively aware.

These two forms are the most frequent and the most severe of the eruptions which attack the labia, vulva and adjacent external organs. But besides these, may be more particularly mentioned:—

1. *Erythema,* which consists merely in diffused redness,—more superficial than that of erysipelas, but still connected with constitutional disturbance, either directly, or indirectly as the consequence of some peculiarly acrid and irritating secretions, such as leucorrhœa.

2. *Herpes,* in which the "vesicles leave behind them superficial excoriations, which soon become covered with crusts," and underneath which fresh vesicles appear.

3. *Lichen,* "characterized by papulæ occupying an erythematous

base; they cause an intolerable itching which increases towards evening or at night, and which, after scratching, is followed by excoriations that secrete a bloody serum, and then become covered with crusts." Lichen differs from prurigo, principally in its papillæ being somewhat smaller and in the voluptuous itching being less intense.

Erysipelas is considered as a distinct eruption; but we regard it rather as an acute and exceedingly aggravated attack of some constitutional psora,—(Herpes, salt rheum,)—and have included what needed to be said of it under the head of phlegmonous inflammation.

Ambra grisea. Pain as from soreness, and *violent itching.* The affected parts are sometimes swollen and very sore.

Apis m. Eruptions stinging like bee-stings.

Bryonia a. Hard, black pustule on a swollen portion of the labia.

Calc. carb. Itching and stitches either in the internal or external vulva, or both at the same time. Also in cases which present the usual constitutional symptoms of this remedy.

Cantharis. Burning and violent itching; particularly if there be the *cantharis dysuria;* frequent micturition with burning and cutting.

Carbo veget. Itching at the vulva and anus at the same time. Red and sore places about the vulva, with itching and leucorrhœa.

Coffea. Excessive sensitiveness about the vulva with voluptuous itching. Would like to scratch or rub the part, but it is too sensitive.

Conium m. Violent itching of the vulva, followed by pressing down of the uterus. Violent itching, the urine flowing and stopping alternately, at every emission. Violent itching after the menses.

Creosote. Corrosive itching of the vulva, with soreness and burning after scratching.

Dulcamara. Herpetic eruptions on the vulva, aggravated by every cold change of the weather,—or by exposure in cold, damp situations.

Ferrum. Much itching of the vulva, in delicate, weakly females with very red face.

Graphites. Itching vesicles and pimples on the labia,—which smart and are painful. Painless pimples on the inside of the labia. Itching, smarting, painful vesicle on the vulva. Itching pimples on the vulva. Itching on the vulva, always before the menses.

Kali carb. Soreness, gnawing, itching and burning of the vulva.

Lycopodium. Great sense of dryness of the parts and much itching.

Mercurius. Long-lasting itching of the vulva shortly before the menses. Itching of the vulva aggravated by a single drop even of

urine,—it has to be washed off. Pimples or tubercles on the labia, which are more troublesome at night.

Nat. mur. Itching of the vulva, particularly if there be much falling off of the hair. Itching of the vulva with pimples on the mons veneris.

Nitric acid. Violent itching of the vulva, always worse towards evening. Itching of the vulva when walking, with soreness. Swelling and burning itching of one side of the vagina and of the labia minora.

Nux vom. Corrosive itching eruption on the vulva.

Petroleum. Itching in the meatus urinarius during micturition, preceded by an urgent desire to urinate.

Platina. Voluptuous tingling in the vulva and abdomen, with oppression, anxiety and palpitation of the heart.

Sepia. Swelling and humid itching eruption on the inner labia. Very much itching of the vulva. Weight in the anus.

Silicea. Itching of the vulva; particularly if there be acrid leucorrhœa. Constipation, stool slipping back when partly evacuated.

Staphysagria. Stinging itching of the vulva.

Sulphur. Troublesome itching of the vulva, with pimples all around. Violent itching of the clitoris.

Tart. em. Pustules from a variety of causes, mostly the result of translations from other parts.

Thuya. Itching of the vulva when walking.

Zinc. Itching of the vulva during the menses.

For Abscesses, see Inflammation and Ulceration of the Vagina.

Chancres, Syphilitic Ulcers.—We give no special description of this form of disease, preferring to refer to other works on the subject; but insert the principal remedies, with the particular indications known for a part of them. The constitutional and attendant symptoms will prove the best guides in prescribing for such cases,—which, however, are always very amenable to Homœopathic medicines.

Cinnabar. Red, swollen chancres.

Corral. rub. Very painful chancres.

Hepar s. c. Nitric acid. Mercurialized chancres.

Jacaranda. Hunterian chancres. Cures a great many cases.

Kali bich. Syphilitic ulcers, deep spreading, with hard edges, on the genitals; in the throat; uvula; septum of the nose.

Mercurius.

Merc. iod. Painless chancres.

Nux jugulans. Bleeding ulcers, with hard edges, forming a scab on them.

Thuya. Chancres, with pains as if splinters were sticking in them.

Compare also **Phosphorus, Silicea, Sulphur.**

Condylomata—Sycosis.

Compare **Cinnabar; Nitric acid; Chromic acid.**

Euphrasia. Stitches and itching, especially when walking.

Phosph. acid. Heat and burning in the condylomata.

Sabina. Sore, burning pain in the condylomata.

Thuya. Moist; suppurating; itching; stinging; bleeding; painful condylomata.

For Excoriations study the remedies mentioned under Prurigo and Leucorrhœa.

For Herpes, Eczema, and Lichen, study the remedies mentioned under Eruptions; or any others that may be indicated by peculiar symptoms.

For the remedies suitable for Suppuration, or Gangrene of the Vulva, see these titles under Vaginitis.

Hernia, see Vaginal Hernia.

Œdema of the Vulva, see the remedies designated under Inflammation.

Tumors of the Vulva.

Encysted and Serous Tumors.—These tumors are painless and not very common. They are circumscribed, semi-transparent, and from being scarcely perceptible, may grow to the size of a fist. They contain a glairy, colorless, or thick yellowish fluid; or, in some instances, an unhealthy sanies or dark-colored purulent matter. Unless from the inconvenience which may result from their larger growth, they are not of so much importance of themselves, as from the fact that they indicate some more serious disorder in the interior organs of generation.

From hernia, encysted tumors may be distinguished by being incapable of reduction; by their not being changed in size by the different states of the bowel; and by their affording no gurgling or

rumbling sound. When they break spontaneously they show an indisposition to heal, but may continue to discharge an irritating matter.

Encysted tumors of the external genitals of the female, seldom require surgical interference from a Homœopathic practitioner. Their reabsorption or removal, and at the same time the radical cure of the morbid condition from which they originate, being usually quite practical with Homœopathic remedies.

In *Cysts* of the vulva, *Encysted* and Serous Tumors, the following remedies should be especially studied.

Baryta carb. Is especially suitable for dwarfish women. Tearing in the vulva, or in the affected parts,—so violent at intervals that she would like to scream.

Calc. carb. In leucophlegmatic constitutions. Menses too often and too abundant. A constant aching of the parts, made worse by pressure. A sense of cold air passing over the part.

Graphites. There are itching pimples on the labia. Itching blotches on different places of the body. Constipation; stools large, lumpy, difficult,—with soreness in the anus.

Hepar s. c. In cases where suppuration has taken place.

Kali carb. Stitching pains pass through the cyst, or through the parts near the cyst.

Nitric acid. In cases where a syphilitic taint is present. Itching of the part when walking or otherwise irritating it, when it feels very sore. A prickling pain prevails.

Sabina. The cyst becomes swollen, red, and painful to the touch, or there is tearing pain during rest.

Silicea. The suppuration is increased by motion. The part is very sensitive to the touch. In cases where the general characteristics of Silicea are present. All her symptoms are worse at the new moon.

Sulphur. In cases which present the general characteristics of this remedy. A very sore feeling, and disposition of the affected parts to excoriate. Both the flow of urine and the discharge of feces are painful to the parts over which they pass.

HYPERTROPHY OF THE LABIA. See Vulvitis.

ERECTILE TUMORS, or enlargement and hypertrophy of the vascular tissues of the external genitals form complications requiring general and constitutional treatment. Every exciting influence should

be removed from such cases, as far as possible; then perfect rest; and the remedies must be selected with especial reference to all the symptoms of the patient,—and to the whole history of her case. For these delicate, sensitive and exceedingly irritable and exposed parts, may be made the outlet for all the constitutional dyscrasia of the system. Thus difficulties of this kind, and other structural diseases of the external genitals of the female, sometimes appear at once small, insignificant and absolutely incurable by all ordinary treatment. To the Homœopathic practitioner, the reason is obvious; the method plain and, in many instances, the means at hand. He will give the remedy appropriate to the psoric miasm, which personally or hereditarily infests his patient, and all these minor but vexatious and sometimes painfully distressing local affections will vanish at once,—instead of developing with advancing years into malignant and incurable forms of disease.

Arsenicum. The constitutional symptoms of this remedy will point out its use, if the local symptoms do not. The tumor may be painful,—with burning or lancinating pains,—or it may be painless.

Carbo animal. The tumor has a tendency to become indurated, with a burning sensation. Also in cases which present the constitutional characteristics of this remedy.

Carbo veget. The tumor has a bluish look; is very hard, with shooting pricking pain.

Creosote. The tumor has a corrosive itching and burning. Spasmodic pains extending from above downwards.

Lycopodium. Tearing stitches in the affected parts. Sensation of dryness. Inclined to grow worse at four P. M., and to be better at eight P. M. Borborygmus in the left hypochondrium.

Nitric acid. Much itching of the tumor, with sticking pain.

Phosphorus. Stinging and burning of the tumor. Worse during or after a walk. Suitable especially for tall and slender persons.

Platina. Painful sensitiveness, with inward coldness of the vulva.

Silicea. Violent burning and soreness of the part, with an eruption on the inner side of the thigh.

Sulphur. Troublesome itching of the part, with pimples all around. General symptoms of sulphur.

Thuya. The sufferings are increased during motion and immediately afterwards. The pain during motion is at times so severe that she is compelled to lie down.

Hæmorrhage from these erectile tumors may require—

Arnica. If the bleeding be the result of coition. And the remedy that will cure the hemorrhage may also cure the tumor itself if allowed to act a long time.

Carbo veget. If the blood be of a venous appearance, or very pale.

Coccus cacti. Pain in the vulva, so severe on going to bed that she is obliged to sit up in bed and to go to sleep in that position. The tumor of the vulva increases, gets hard and is sensitive to the touch. Throbbing and burning in the tumor of the vulva and excoriated feeling on walking.

Creosote. If the bleeding be continuous, with marked intermissions; at times becoming pale and almost entirely ceasing, and then recommencing afresh.

Lachesis. The hemorrhage seems to be vicarious; the pain increases in intensity until relieved by the flow of blood, then as the hemorrhage subsides the pain returns.

Phosphorus. The blood flows profusely for a while, and then ceases for a long time.

Pulsatilla. The blood is very changeable in its appearance. It is more apt to flow in the day time when walking. It is intermittent.

Sulphur. Flushes of heat; weak, fainting spells; cold feet; heat on the top of the head; very hungry from eleven till twelve in the forenoon,—cannot wait for her dinner.

For Inflammation of the Erectile Tumors, study the remedies under Vulvitis.

For Ulceration of these various Tumors, study the remedies mentioned under Ulceration of the Vagina.

For Polypi, Ulcers and Cancer of the Vulva, see these titles under Diseases of the Vagina and Womb.

Bloody, or Oozing Tumors.—These are most apt to occur in persons who have passed the middle period of life,—and who may have received constitutional and even local injuries from too frequent childbirth, or from similar causes. These tumors are not so well defined and circumscribed in size as are the encysted tumors; they seem rather enlargements of some dependent portion of the labia or vulva. And they may arise even in virgin females, from accidental violence to the parts. From their size and situation they may occasion no small suffering, and be made to exude a watery or even bloody discharge,—which is much increased by walking. For the

treatment of these, as well as of other tumors of the external genitals, study the remedies and indications given above, and also those under Vaginal and Uterine Tumors, in a subsequent chapter.

Varicose Veins.

Varices. Dilatation of the veins, with thickening of their coats, is termed varix, varices or varicose veins. This enlargement is believed to occur first in the submuscular, then in the subcutaneous or superficial veins. And this statement of its rise and progress, explains the insufficiency of the ordinary surgical method of treating this disorder, and shows the reason of the frequent relapses which follow its apparent cure by compression.

Varicose veins often appear in pregnancy, in the latter months of utero-gestation; and are commonly supposed to be caused by the pressure of the gravid uterus upon the iliac vessels and inferior cava. But this local pressure can be but a single one of the exciting causes; since varices are seen in some who are not pregnant, and they do not make their appearance in the larger proportion of those who are. If the pressure were the main cause, all or nearly all pregnant women should have more or less of this varicose condition before they are confined,—which is far from being the case.

The constitutional condition of the system in general and perhaps of the organs of venous circulation in particular, which gives rise to varices, under the influence of exciting causes, is no doubt similar to that which produces hæmorrhoids. In each affection, constipation seems to exert no small provoking influence,—although it may be that the same deep-seated disorder of the constitution may at the same time cause the varicose and the constipated condition. The varicose and the hæmorrhoidal enlargements are alike liable to rupture and to occasion serious hemorrhage. And both these disorders are equally amenable to Homœopathic medication. The appropriate remedies, taken in season, will entirely cure the varicose condition; or, if resorted to only after the enlargement has already become very extensive in the later months of utero-gestation, will at least prevent its further increase. And as on the one hand Homœopathic treatment perseveringly employed will entirely remove the constitutional predisposition to varix; so on the other hand the highest allopathic authority states, that "this condition of the veins gradually increases in amount and severity with every succeeding gestation."*

* Churchill, Diseases of Women, Chap. VI.

The various and severe pains and all the attendant symptoms and conditions of varices below the knee, in the thighs, in the labia, vagina and even in the os uteri itself,—the appearance of the enlarged veins themselves, their color, inflammation or rupture, and the concomitant and constitutional symptoms and seasons and occasions of aggravation, will enable the attentive physician to prescribe in such cases, with the certainty of greatly ameliorating the general health, and so of improving the prospect in parturition, as well as of removing the varicose diathesis itself.

The vascular nature of much of the substance of the external genitals predisposes them to varices. Such enlargements of the external veins should be treated as similar affections are in other parts of the body. Here, as well as elsewhere, all the attendant and constitutional symptoms should be carefully observed and taken into account in prescribing.

Apis m. Stinging pains prevail, with or without constipation.

Arnica. If the varices are very sore, with a bruised feeling.

Arsenicum. If they burn like *fire*.

Carbo veget. If they cause dysuria.

Causticum. If they are much worse when walking.

Ferrum. In weakly persons with fiery-red face.

Graphites. If they itch very much; and have little pimples on their surfaces. Itching blotches on different parts of the body.

Lycopodium. This remedy is most frequently required. Red sand in the urine. Borborygmus and constipation are indications.

Nux vom. In persons who live on wines and highly seasoned food, and keep late hours. Constipation.

Sulphur. Coldness of the feet. Heat on the top of the head. Hungry and faint from eleven o'clock till noon. Weak faint spells. Flushes of heat.

Zinc. Varicose veins and fidgety feet.

Hernia of the External Genitals.

Hernia of the Vulva, or Perineal Hernia, and Cystocele, are rare forms of displacement, considered here because, although more common in pregnancy, they may occur in the unimpregnated female. Perineal hernia of the vulva consists in the descent of a loop of intestine; in *cystocele* a portion of the bladder is involved. In either case the tumor occupies the lower and most posterior portion of the labia majora of one side. And in this position it may be detected between the edge of the anus and the tuberosity of the ischium.

By placing the patient in the horizontal position the hernia may easily be reduced; and the gurgling sound which accompanies the reduction, as well as the reduction itself, sufficiently indicates the nature of the difficulty. Perineal hernia is to be distinguished from an encysted tumor by this facility of reduction; the latter of course being incapable of reduction. While *cystocele* is usually indicated with equal clearness by the irritation of the bladder, and consequent desire to pass water, which will result from pressure on the tumor in such cases. And the size of the tumor itself may be seen to change as the bladder becomes more full, or is relieved of its contents by the use of the catheter. This operation may be necessary therefore in order to facilitate the complete reduction of this form of hernia. For the treatment, study the remedies mentioned under Prolapse of the Vagina and Uterus.

Neuralgia of the Vulva.

Neuralgia in the external genitals, usually appears in connection with a similar affection in the vagina. Under this latter head we shall speak more particularly of the causes and treatment of this painful disorder.

Ascarides of the Vulva.

The Parasites which infest the external genitals of the female are of two kinds,—*ascarides* and *lice*. The former may escape from the rectum, and lodging in the folds of the vulva, cause there an intense pruritus, or even nymphomania. And even where it is impossible to detect their actual presence in the external genitals, so strong is the sympathy between the mucous membrane of the rectum and vulva, that the irritation in the latter is equally intense with that in the former organ; and no less distressing than that which results from the presence of the vermin in the vulva itself. The latter mostly infest the roots of the hair upon the mons veneris and labia majora.

Calc. carb. In leucophlegmatic constitutions. Terrible itching of the parts towards evening, or after going to bed.

Ferrum. Much itching; and a red, fiery face.

Ignatia. A great deal of itching. Much sighing; and empty, faint feeling at the pit of the stomach.

Nux vom. In those whose complaints are attributable to or aggravated by highly seasoned food, wines and liquors. Constipation with

frequent urging. Frequent micturition, with scalding and brick-dust sediment. Worse after three A. M.

Silicea. More or less itching and fever all night. Emaciation and gradual failing of health.

Sulphur. Much itching and crawling. Flashes of heat; coldness of the feet; very short naps all night; feels very weak in the morning. Weak and empty from eleven till twelve; she cannot wait for her dinner,—a very unusual circumstance for her.

Lice may be removed from the vulva and adjacent parts, by destroying them with essence of bergamot; or with fine snuff made into a paste with pure glycerine.

CHAPTER EIGHTH.

DISORDERS OF THE VAGINA.

DISPLACEMENTS. SPASMS AND CRAMPS. NEURALGIA.

Prolapsus of the Vagina. *Prolapsus of the Vagina* is an affection resulting in general from a relaxed or weakened state of the vaginal parietes. It may easily be mistaken for prolapsus of the womb; but a careful attention to the history of the case and to the conditions present, will conclusively determine the matter. The vagina may be wholly or partially prolapsed. Thus there are three forms of vaginal prolapsus, which require to be considered and distinguished. First, *complete prolapse or inversion of the vaginal canal;* second, *prolapse of the anterior wall of the vagina;* and third, *prolapse of the posterior wall of the vagina.* In connection with a brief notice of each of these three forms of vaginal displacement, we mention the most active producing causes; and mode of distinguishing each from the others.

I. *Complete prolapse,* or *total inversion of the vagina,* is, perhaps, the least common of these three forms, as it is also the worst, especially where the parietes are actually protruded. This form may appear in connection with parturition; as the result of weakness or looseness in the walls of the vagina; of too great size or too rapid descent of the fœtal head; of mechanical interference, especially turning:—or it may come on gradually, from the combined influence of various similar causes, especially in women who have borne many children.

It is important to understand clearly the nature of the change which takes place in this displacement,—and which is properly called inversion, although the term may fail to convey the full idea. Suppose a long stocking to be suspended with the anterior part of the foot upwards; now let a heavy weight be laid upon its apex (the toe of the stocking)—and allowed to sink down through the foot and leg of the stocking; this will cause an actual inversion; and by the time the inverted point of the apex has made its appearance at the open extremity of the leg, one half of the stocking will have become inverted. In such a manner the vagina may be prolapsed and inverted where the entire circle of its canal is involved; although the circle of inversion may not begin at the apex of the vagina. The puckered orifice, composed of the folds of the mucous coat of the vagina, which appears in the centre of the projecting tumor, should be distinguished from the regularly formed os uteri,—which is narrower in structure and marked by a fissure which separates the anterior from the posterior lip. In these cases of complete inversion of the vagina, the finger pressed upon either side of the tumor will be arrested at the bottom of the *cul-de sac*, formed by the doubling of the wall of the vagina upon itself. In any event, the finger introduced into the orifice of the prolapsed vagina, may be made to reach the os uteri, above, and thus remove all possible ground of doubt, as to the exact nature of the case. This form of prolapse of the vagina is usually connected with some degree of corresponding displacement of the uterus. There is also an increased discharge of mucus, which is the result of the displacement itself and of its producing cause.

II. The *prolapse of the anterior portion of the vagina*, is usually connected with a similar displacement of the bladder. The same influences which weaken and relax the anterior portion of the vaginal parietes are exerted in a similar manner upon the attachments of the urinary bladder; and the undue accumulation of urine in the bladder, resulting from its too long-continued retention, suffices to cause the parts to yield still more to the constant and increasing pressure.

This form of displacement is evidenced by the sensation of weight in the vagina, followed by an actual fulness and intumescence or swelling in the front of the vagina just within the vulva. At the same time, there is a painful dragging sensation in the lower part of the abdomen, frequent and painful micturition,—in addition to the difficulty of passing water; it may sometimes be impossible to do so until the parts are in some measure replaced. On attempting to in-

troduce the finger into the vagina immediately beneath the pubis, it reaches the bottom of a *cul-de-sac;* while, if the finger be introduced behind the protuberance, the os and cervix uteri can be found nearly in their natural position. These symptoms can hardly fail to determine the nature of the difficulty. The tumor formed by the anterior or vesical prolapse of the vagina, presents a round, elastic, fluctuating appearance at the orifice of the vagina; and may usually be much diminished in size by drawing off the urine with the catheter, where there is any considerable dysuria. And as the water again accumulates in the bladder, the vaginal tumor becomes at the same time larger and more painful. This last-mentioned circumstance alone, where it appears, will of course conclusively determine the nature of the difficulty.

The prolapse of the anterior parietes of the vagina, attended as it usually is by that of the bladder, may be distinguished from prolapsus uteri, by the fluctuating nature of the tumor, and by its broader shape at its apex,—that of the uterus being hard, firm and pointed. The passage of the finger into the vagina, behind to the tumor, will distinguish it from prolapsus of the posterior wall of the vagina.

This prolapse of the anterior portion of the vaginal walls, whether caused or merely accompanied by prolapse of the bladder, is sometimes called *cystocele* or *hernia of the bladder.*

III. *Prolapse of the posterior wall of the vagina.* In this form of vaginal displacement the rectum is usually involved, as the bladder is in the anterior form just described. In some rare instances both these forms of prolapse of the vagina appear in the same person and at the same time.

The sensations attending displacement of the posterior parietes of the vagina are similar to those which arise from that of the anterior wall; except that they are rather referable to the rectum and call to stool, than to the bladder and desire to pass water. And the tumor diminishes after the evacuation of the bowel.

The finger passed up *anteriorly* to the tumor will reach the os uteri,—and this circumstance will distinguish this difficulty from that involving the anterior wall of the vagina. While the tumor itself although compressible, has not the fluctuating sensation discernible in that caused by the descent of the urinary bladder. The relative position of the apex of this tumor, as well as its variable size and more yielding character, enable us to distinguish it from prolapse of the womb. And in addition, by introducing the finger in front of

the tumor, the os uteri and cervix may be found in their natural position. In this as in the other forms of the vaginal prolapsus, the unusual exposure of the delicate mucous surfaces and their irritation from friction against the adjacent parts, cause leucorrhœa and more or less inflammation of the organs.

Arnica m. When it is the result of violent shock or concussion.

Mercurius. When the sufferings, such as pain, itching, smarting, &c., are worse at night, all night.

Sepia. When burning with sharp-shooting pain is experienced in the affected parts. The sensations are worse while sitting quietly, particularly in the forenoon and evening. Sense of weight in the anus. She has to cross her thighs, as if to prevent the escape of the inner parts.

Stannum. Much inconvenience is felt during a hard stool. Great lassitude when walking. Great anguish and melancholy during the week previous to the menses; the distress of mind ceases as soon as the menses begin to flow. Contusive pain in the region of the malar bone during the menses.

Refer to PROLAPSE OF THE UTERUS, for other remedies.

STRANGULATION of the prolapsed portion of the vagina, whether it involve either the bladder or the rectum within the stricture, is a complication worse than the original difficulty. As in cases of strangulated hernia,—which are similar, prolapsed and strictured conditions of a portion of the intestine,—the obstruction of the bowel or of the bladder, may very suddenly give rise to most distressing and alarming symptoms. These are best relieved by remedies selected in accordance with the constitutional symptoms,—which, by removing as it were the spasmodic constriction of the parts, allay the inflammation, and enable the return of the circulation to take place in season to prevent mortification.

Aconite. In highly inflammatory constitutions, with hot, dry skin, and intense thirst and restlessness. Much mental distress. She thinks she cannot get well; that she will die.

Apis mel. The parts have a stinging, like that of bee-stings, as their most prominent sensation.

Arsenic. The parts have a black look, and burn like fire. She has thirst for cold water; but drinks little at a time and often. Great anguish—and restlessness.

Belladonna. A constant sense of weight and pressure, as if the parts were falling out. The parts have a scarlet-red appearance.

Lachesis. The parts are of a deep purple color. The patient wakens often, in much distress.

Nux vomica. The patient wishes to urinate and defecate very often; but small quantities, if any, being discharged from the bladder or bowels.

Opium. The patient is very sleepy. She lies in a soporous condition.

Sulphur. Frequent flushes of heat, and weak, fainty spells. Heat in the soles of the feet.

Sulphuric acid. The parts have a greenish look. They smell badly and the patient is *very weak.*

Veratrum album. An exhausting diarrhœa attends the other troubles. There is cold perspiration on the forehead.

Spasms, Cramps and Constrictions of the Vagina.

The muscular structure of the vagina may become subject to spasm in consequence of irritation arising in the vagina itself, or in consequence of the extension to the vaginal walls of similar affections in the neighboring organs. And it may be the result of local, vaginal irritation, in persons of a general nervous temperament, or of an irritable or hysterical constitution. Or it may be occasioned by displacements, or organic diseases of the adjacent structures.

Thus, in persons predisposed to such affections by a nervous irritability of constitution, spasms of the vagina may arise from the local irritation of coitus, from riding on horseback, or from walking. In hysterical women, these spasms may as readily be induced by violent mental emotions or disturbed moral feelings; and by the periodic excitement of the menstrual nisus. And they are very frequently found among the spasmodic affections common to the hysterical state. A careful study of all the symptoms, causative influences and attendant conditions, will be necessary in order to prescribe for this troublesome affection; a thorough cure of which may well imply an entire restoration of the general health. For the real seat of vaginal, as well as of uterine spasms, and of all their intermediate causes, such as displacements, ulcerations, irritability and dysmenorrhœa, may often be found in nervous, functional or organic disease of the ovaries. Hence without an intelligent consideration *of all the symptoms and conditions* which make up the *tout ensemble* of our patient's case, we shall find ourselves entirely unable to relieve her of those which are most distressing, or for which she more particularly

seeks relief at our hands. And until the general irritability of the system is remedied by appropriate medication, it will be indispensable for the patient carefully to avoid all those local influences, such as coitus, riding, walking, etc., which may tend to bring on the spasms. For while these spasmodic disturbances are the result of nervous debility, either constitutional and general, or local, or both, —they tend also by still further weakening the parts, to perpetuate themselves. Besides habit and the frequent recurrence of such cramps or spasmodic affections no less powerfully combine to perpetuate them in the system, by making them a second, morbid nature, as fungous growths override and overpower the original normal structure.

These strictures of the vagina may be cured without artificial dilatation, by the aid of the homœopathically indicated remedy.

Belladonna. In plethoric individuals, disposed to phlegmonous inflammations. The symptoms often come on suddenly and disappear with equal suddenness. A sense of heat and dryness is felt in the parts.

Cocculus. Aggravation at every menstrual period; particularly when the periods are attended by such weakness that she can hardly talk.

Ignatia a. She is troubled with a weak, empty, gone feeling at the pit of the stomach, which is not relieved by eating. She is inclined to brood over her troubles. Full of grief.

Mercurius. The parts have a strong tendency to excoriate; to swell and become inflamed. A raw sensation is felt in the parts.

Nux vomica. In females who indulge in high living; wines, etc. Habitual constipation of large and difficult stools; or small stools with frequent urging.

Platina. In very nervous, spasmodic temperaments. And where there is much tenderness of the vulva.

Pulsatilla will often be indicated in persons of a very tearful, mild, yielding disposition.

Neuralgia of the Vagina.

This exceedingly painful affection of the vagina bears exactly the same relation to this organ that irritability, or rather hysteralgia, does to the uterus. As in irritable uterus, so in neuralgia of the vagina, the parts are exceedingly sensitive to the touch.

Neuralgia of the vagina may arise from any causes, such as excessive coition or other influences of that kind, which may weaken the

nerves of the parts and so excite in them an irritable and hyper-sensitive condition; or it may result from suppression of external exanthemata, or of vaginal discharges; or from injections of cold water for a particular purpose after coition. In whatever manner this affection is directly caused, it is of course necessary for the patient to avoid such influences, as the first step towards the cure. So also in those cases which may result indirectly from other morbid conditions of the internal organs of generation;—all such primary diseases must be strictly attended to; and this not exclusively or necessarily with reference to the local symptoms alone. All the morbid conditions, all the constitutional affections and attendant circumstances must be carefully taken into consideration in prescribing for this disorder. The neuralgia of the vagina may make its appearance, like many other similar affections in other parts of the system, whenever the patient becomes fatigued; its pains may be of a peculiar character, lancinating, or burning,—worse from motion or touch, or exposure to cold; or relieved by severe pressure or friction, as in those cases which appear connected with pruritus.

For those persons who are subject to this excessive irritability and hyper-sensitiveness of the nervous system, it is important to inquire if something connected with their diet, habit of living, or other external circumstances, may not be instrumental in maintaining this painful condition. The use of coffee will often be found to cause the excessive sensitiveness to pain, the neuralgic condition of the nerves, in which certain peripheral surfaces (very apt to be the external genitals in females) may become as sensitive to pain and as intolerable to the least touch, as are the parts affected in cases of gout. Tea, on the other hand, especially if taken too strong, will more often occasion the excessive irritability of the nervous system in general; and so lead the way, as in the case of coffee, for local exciting influences to develop such an affection as neuralgia of the vagina. In short, whatever influences tend to weaken and depress the nervous system, may occasion irritability of the peripheral extremities of the motor fibres, and a still more distressing neuralgic condition of the corresponding sensory filaments; such influences therefore should be as carefully avoided as possible, in order to obtain a perfect cure by the use of the appropriate medicines.

Merely the local symptoms belonging to each remedy are mentioned here; but as scarcely any two of them are alike, the indication will, in most cases, be sufficient; in others all the symptoms of the case may have to be compared.

Alumina. Stitches in the left side of the vulva, extending as far as the chest. Beating, throbbing pain in the vagina.

Arsenicum. Lancinations from the abdomen into the vagina.

Belladonna. Stitches in the vagina, with sensation of great heat and dryness. Pains that come on suddenly, continue violently, and disappear as suddenly as they came.

Berberis. Intensely painful vagina, burning and soreness as if excoriated. Sudden lancinating pain in the vagina, causing her to start, with soreness of the wall of the vagina to the touch.

Bromine. Loud emissions of flatus from the vagina. Pain in the vagina as if sore.

Calc. carb. Aching in the vagina. Leucophlegmatic temperament.

Cantharides. Violent itching in the vagina. Dysuria; sharp cutting, a few drops at a time and almost constant desire to urinate.

Chamomilla. Burning in the vagina as if excoriated. Very impatient; can hardly answer one civilly.

Colocynthis. Swelling of the labia, with dragging pain and heat in the vagina.

Conium. Stitches in the vagina and pressing from above downwards. The urine intermits during its flow.

Creosote. Stitches in the vagina, coming from the abdomen, causing her to start. Voluptuous itching deep in the vagina.

Graphites. Smarting in the vagina.

Kali carb. Pinching pains in the vagina during an embrace. Sore pain in the vagina during an embrace.

Lycopodium. Violent burning in the vagina during and after an embrace. Sensation of chronic dryness in the vagina. Itching, burning, and gnawing of the vagina.

Mercurius. Inflammatory swelling of the internal surface of the vagina.

Muriatic acid. Pricking pain in the vagina.

Natrum mur. Dryness of the vagina, and painful embrace.

Nitric acid. Stitches in the vagina from without inwards, when walking in the open air.

Nux vom. Internal swelling of the vagina, with burning pain, making contact intolerable.

Rhus tox. Sticking pain in the vagina, not increased by contact. Pain in the vagina as if sore, shortly after an embrace. Sore pain in the vagina, hindering an embrace.

Sabina. Severe stitches in the vagina, deep, from before backwards.

Sepia. One of the most frequently indicated remedies for painful coition. Jerking pain in the vagina from below upwards in the morning on waking. Contractive pain in the vagina. Almost continual stitches in the vagina.

Silicea. Labor-like pain in the vagina, which is very tender to the touch.

Sulphur. Burning pain in the vagina; she was scarcely able to sit still. Sore feeling in the vagina during an embrace.

Thuya. Burning and smarting in the vagina when walking and sitting. She is so sensitive in the vagina that she cannot possibly bear an embrace.

CHAPTER NINTH.

DISORDERS OF THE VAGINA.

ACUTE AND CHRONIC INFLAMMATION. LEUCORRHŒA. INDURATIONS. FISTULAS.

Acute and Chronic Inflammation of the Vagina.

The vagina is subject to many influences which produce inflammation, especially of its mucous tissue. This inflammation, at first acute, unless promptly treated by the administration of the appropriate Homœopathic remedies, almost always assumes the chronic form. While many cases of chronic vaginitis develop themselves so gradually and insidiously from the very first,—that they can scarcely be stated to have originated in acute inflammation. Married females, particularly those who have children, are most frequently the subjects of acute vaginitis; while the unmarried, either in their earlier or in their later years, are more liable to suffer from the chronic variety.

Leucorrhœa being the almost invariable attendant upon both these forms of vaginitis, and, as it were, almost entirely constituting the disease itself, we shall under this head consider the symptoms, the causes, and the treatment of general inflammation of the vagina.

But, before proceeding to this part of our subject, it is proper to refer to a few rarer and more particular forms of disease, which may attack the parietes of the vagina, and which are usually nothing more than the development in them of disorders similar to those which infest the external and adjacent parts.

Thus *erysipelatous* and *erythematous* inflammation may occasion in the vagina intensely red, painful, elevated and more or less extensive patches. True *vesicular* inflammation may result from the extension of the eczema from the vulva to the vagina; and thus herpes phlyctenoides may be developed in the interior of the vagina and upon the cervix uteri. In like manner *pustulous vaginitis* may result from the appearance of pustules in the vagina of persons affected with impetiginous eruptions, especially when pregnant. *Papulous vaginitis* may be considered present when the vagina and neck of the womb are covered with papulæ or follicles more or less developed, assuming the shape of small spots of the size of a pin's head, or resembling fleshy granulations; these may form real vegetations, more common at the decline of menstruation, and are termed prurigo. Finally, *glandular vaginitis* may be diagnosed when the follicles alone seem affected; when the mucous membrane shows no traces of change; and when the secretion appears more copious, and of a yellowish-white or grayish color. "It is generally dependent on an inflammatory condition of the blood at this period; and the intense irritation which it excites, so often occupies the mind of the patient, that it amounts to nymphomania. Its situation is more frequent upon the external parts; but it also exists within the labia, and in the neighborhood of the urethral orifice. This pruriginous affection is often symptomatic of serious disease of the uterus, or its appendages; in which case its removal can only take place in concert with relief to the graver malady."

These specific forms of disease in the vagina seem to be but local developments of constitutional or psoric dyscrasia; and require for their cure such remedies for the most part as are applicable to similar forms of disease in other parts of the body. Although it should not be forgotten here, that those antipsorics should be preferred, which, in addition to possessing such specific cutaneous indications, are known to possess also especial relations to the female organs of generation.

For the treatment of ACUTE INFLAMMATION of the Vagina, refer to Vulvitis, and to Inflammation of the Uterus.

LEUCORRHŒA.

Leucorrhœa, Fluor Albus, or *the Whites,* are the names commonly given to a discharge from the vagina. The disease itself consists in an acute or chronic inflammation of the mucous lining mem-

brane of the vagina, the uterus, or of both. This inflammation affects the numerous muciparous glands and follicles already described as occupying these tissues. And the leucorrhœal discharge itself is the consequence of such inflammation. According to the nature, the degree and the intensity of this inflammation, this discharge will differ from the natural mucous secretion of the parts, either in increased quantity only, or in color, consistence and actual character.

Description.—In color, the discharge may be simply what its name implies—a white mucus; or it may be yellowish or greenish, or present a mixture of both these colors. Its consistence may be that of pure mucus; it may be much thicker, of a creamy nature; it may be viscid, tenacious and stringy; or very thin and watery. In its actual character, it may be catarrhal, as if simply an excessive flow of the natural secretion of the vagina; it may be either mucus or pus; or muco-purulent, presenting all the different forms of variation from simple, healthy mucus merely increased in quantity, up to the undeniable pus from ulcerated mucous surface. Thus it may also be mild in its influence upon the sensitive external parts; or it may be more or less acrid and irritating; cause pruritus; and even corrode and blister the external surface with which it remains in contact. In this form, the leucorrhœa is known to become contagious, and to develop a similar inflammation and consequent discharge in the parts of the male from sexual intercourse. From this cause innocent women have been accused of infidelity to their husbands. The discharge may be and usually is inodorous, or it may be fetid and exceedingly offensive; especially where it is caused by the presence of worms.

In quantity, this discharge may vary from the smallest amount that can escape the absorbents within the vagina and appear externally, perhaps for a few days only at a time,—up to a flow so constant and copious as to render cloths indispensable, and seriously weaken the patient.

Symptoms.—At the first appearance of leucorrhœa there are usually the indications of acute inflammation,—pain, heat and redness of the parts involved,—which may subside as the discharge becomes more fully developed. With this discharge, whether acute or chronic, there will usually be more or less pain in the groins and hypogastrium, and in the sacral region and small of the back. The urethra will often become implicated, causing painful micturition, or even

dysuria,—especially in the more severe acute forms, and in the most aggravated (ulcerated or malignant) chronic cases.

The morbid symptoms which appear in connection with chronic leucorrhœa are innumerable, and present every possible variety in their intensity and in the parts of the system in which they are developed. Very many of these attendant symptoms of chronic leucorrhœa, should be regarded as the consequences of the primary disorder and of the original causes of that disorder,—which combine to break down in succession the principal organic functions of the system. Thus the menstrual irregularity,—which so constantly attends the more severe forms of leucorrhœa, and especially those cases in which the discharge arises from the cervix and even from the body of the womb,—is seen to be the natural and direct result of the leucorrhœa and of the causes which produced this discharge. Or if such menstrual irregularity be not the immediate and direct result of leucorrhœa, it can hardly fail to become a final consequence of the general debility of the entire system, which severe forms of this discharge must sooner or later produce. In like manner the appetite fails and the digestive powers become enfeebled. And inveterate constipation follows from such weakness of the digestive apparatus, and from the general nervous debility,—and still further complicates the case. The circulation is feeble; the respiration impeded, and the temperature of the whole body reduced, as indicated by constant and general chilliness. The nervous system is impaired; the animal spirits depressed, and the natural buoyancy and cheerfulness of temperament and disposition replaced by irritability, fretfulness and settled melancholy.

All these and other long trains of symptoms, whose name is legion, are the results of the combined influence of the producing causes of the leucorrhœal discharge, and of the debilitating effect of the discharge itself. And this important distinction should always be borne in mind; for if we think the leucorrhœa alone causes all these innumerable and various sufferings, we should naturally be disposed to seek principally to remove the discharge,—expecting the consequences would then readily disappear. But such expectations would be disappointed; even if we could succeed in curing the leucorrhœa by attending to that alone,—which is not the case, as will more plainly appear when we come to study the causes and treatment of this discharge.

The Causes of Leucorrhœa.—These may be divided into two classes: Constitutional Predisposition and Incidental Influences.

The *constitutional predisposition* to leucorrhœa is but another name for psoric diathesis or scrofulous taint in general. This is much more strongly manifested when it has become hereditary, not only as a general predisposing influence, but also by previous local development of this form of scrofulosis in the mother. Thus a young woman of decided scrofulous constitution may well be considered to possess a constitutional predisposition to leucorrhœa. But this predisposition will easily be understood to be very much intensified if her mother,—and still more her grandmother also,—had leucorrhœa before her. This hereditary predisposition to scrofula in general and to leucorrhœa in particular, will require a greater or less amount of incidental influences to develop it, according as it is thus more or less strongly marked in the constitution itself. And in proportion as the leucorrhœa is the result of such constitutional predisposition, it will prove more inveterate and more difficult to cure.

The psoric taint in the system tends to develop and ultimate itself either on the external surface of the skin, or in the superficial and other glandular structures; according as its original nature is analogous to pure psora, or to scrofula. But in either case, after puberty, and in many strongly marked cases before puberty,—this psoric miasm reverts from the cutaneous or glandular system to the mucous surface. And in such as have this constitutional predisposition still more remarkably and specifically developed (as if from such local hereditary influence as has just been mentioned) the psoric and scrofulous taint attacks the mucous surfaces of the female genitals in the first instance. Such are the cases of young girls, and even very young children, in whom the leucorrhœa seems to have developed itself almost spontaneously,—that is without the co-operation of any particular incidental influences that can be discovered.

Among the *incidental influences* which may produce leucorrhœa, may be enumerated almost every thing which is capable of injuriously affecting the female organism. This remark however applies rather to the chronic than to the acute form of the disease.

The causes which principally excite acute vaginitis and consequently acute leucorrhœa, may all be embraced under a few general heads. Exposure to cold, from which many women suffer more than they are aware, or are willing to acknowledge, may occasion a true vaginal catarrh, or acute inflammation followed by a copious catarrhal discharge. Violence, of any kind, may produce an inflammation, the

discharge from which will exhibit more of a muco-purulent appearance. A very similar effect may result from excessive sexual indulgence. As already stated, inflammations from the vulva and even from the adjacent tissues may extend themselves into the vagina. These however are less apt to be followed by leucorrhœa.

Among the unpleasant sequelæ of parturition, and especially of miscarriage, acute inflammation of the vaginal membranes and accompanying leucorrhœa are the most frequently observed. This may result from the violence which these delicate tissues have experienced; and also from the impatience of the female herself, in attempting to get about too soon.

Sudden and violent attacks of vaginitis and leucorrhœa have been observed to arise from causes which may be designated as *metastases*. Such are those which follow sudden suppressions,—as of perspiration; of the hæmorrhoidal discharge; of diarrhœa; of the lacteal secretion; of chronic suppurations; of cephalic or bronchial catarrh; of spontaneous vomitings; and retrocessions of arthritic, gouty inflammations, and of recent or long established cutaneous eruptions. The gonorrhœal virus excites perhaps the most violent acute inflammation and copious discharge of all. But the discussion of this class of disorders is foreign to our present purpose.

The influence of cold damp weather, or exposure to cold and damp from the location of the residence, in a marshy district,—from the nature of the house itself (stone, with walls constantly moist on their inner surface),—and from water standing in the cellar,—especially when long continued, is a powerful promotive of leucorrhœa. And in many cases resulting from such influences, the physician will find all his prescriptions vain, as long as he fails to explore or remove the cause. For in very many constitutions the susceptibility to such injurious influences is one of the principal features of their case; and such persons must cease taking the poison before the antidote can have the desired effect. But aside from the absolute necessity of guarding against the depraving influence of long-continued exposure to dampness,—especially from wet cellars, or large open cisterns immediately under the family sitting-rooms,—where the leucorrhœa is the direct result of such exposure, the true Homœopathic remedy may easily be overlooked so long as the cause of the complaint remains unknown.

An entirely opposite but not less numerous class of causes of this disease may be found in the high living, stimulating spices, condiments and drinks in which many females indulge. As on the one

hand, in cases of exposure to wet and cold, a low form of mucous inflammation may produce a still more constant and debilitating discharge from the vagina,—so on the other hand, in those persons who over-stimulate, nature seeks an outlet through the profuse vaginal secretion,—attended of course by a higher range of inflammatory action,—for the surplus of unhealthy food and drink. The stomach is overworked to digest these gratifications of an unhealthy appetite,—and no small share of the product has to be worked off, as it were again digested, by the glandular apparatus of the mucous membrane; and thus in effect the candle of life is being at the same time consumed with equal rapidity at both ends.

TREATMENT.—For the remedies to be studied in LEUCORRHŒA OF THE VAGINA, consult Uterine Catarrh,—where may be found the constitutional and special indications for all the medicines for leucorrhœa whether arising from the mucous membrane of the vagina alone; from that of the uterus; or from both, as is usually the case in the severer and long-continued forms of the inflammation of which the discharge is merely the consequence.

INDURATIONS OF THE VAGINA.

Inflammation of the cellular tissue of the labia, vagina, or other parts of the generative apparatus, may lead to *induration*, with or without hypertrophy. These indurations occasion adhesions; and often result in contractions of the vagina, which may interfere with coition. Induration of the vaginal walls sometimes appears in consequence of the extension of the same morbid condition from the os and cervix uteri. The simple thickening of the mucous membrane, which comes on gradually and almost imperceptibly, in some cases may constitute the entire induration. In others it arises in connection with phlegmonous inflammation and infiltration of the deeper tissues. In others still, a syphilitic or schirrous taint in the system may be the cause. But in these latter instances, the indurated surface is very rough to the finger, sometimes ulcerated. "Almost always the patients complain of pain at the outset, of smarting, itching and increase of heat; and in proportion as the affection develops itself, the vagina becomes contracted and sometimes almost obliterated."

These indurations may be removed entirely, by radically curing the disorder from which they result,—and without having recourse

to the dilatations sometimes employed in Old School treatment. Observe carefully *all* the conditions, circumstances and symptoms of the patient; then the true *similimum* of the entire case may be found under one of the following remedies.

Belladonna. Sense of heaviness and of fulness, and bearing down in the parts. Sense of heat, and dryness in the affected parts. Sensation of pressing out of the internal parts. Throbbing sensation.

Calc. carb. Temperament leucophlegmatic. Calcareous complexion. Her feet feel as if she had on cold, damp stockings. Bloody tumors.

China. The slightest contact causes darting-tearing pain,—or tearing with pressure. The system has been debilitated by losses of fluids, especially of blood.

Clematis erecta. Suitable to torpid, cachectic conditions. Swelling and induration of the glandular system. Syphilitic taint.

Conium m. The induration is very hard. The urine intermits,—stops and flows again.—Particularly suitable for women with tight, rigid fibres, and easily excited, as well as to those in the opposite condition.

Lycopodium. Borborygmus, especially in the left hypochondrium. Much pain before passing water. Great delay in the flow of the urine. Red sand in the urine.

Magnesia mur. Where there are present hysterical symptoms, and spasmodic paroxysms. Constipation, with large, hard stools,—which crumble as they pass the verge of the anus.

Mercurius. Will be required where we find the well-known indications of the mercurial diathesis;—more or less salivation; scorbutic gums; moist skin; soreness of the throat; soreness of the inguinal glands. The indurated tumor may have a raw, sore feeling. All the symptoms are worse at night. Perspiration, which does not relieve.

Petroleum. Tenderness in the swollen parts. The labia majora perspire and itch very much. Unhealthy skin, even small wounds ulcerate and spread.

Pulsatilla. Mild temperament. The patient is moved to tears in giving her symptoms.

Sepia. Small, stitching, burning pains in the parts; great sensitiveness of the parts; fetid urine, etc.

Sepia. Putrid urine. Sediment, from the urine, adhering to the vessel, like reddish clay burnt on.

Sulphur. Flashes of heat; coldness of the extremities, especially of the feet.—Burning in the soles of the feet at night. Spells of

weakness and faintness. The general, characteristic sulphur symptoms. These, like the other great indications for polychrest remedies, will recur again and again, in many forms of disease. Sulphur will always do good where it is indicated; and it is very often indicated in chronic inflammations and other disorders, which may be considered as the ultimate developments of internal psoric miasms.

Vaginal Fistulas.

Inflammation, abscesses, accidental wounds, or the use of instruments, may occasion fistulous openings through the walls of the vagina into some one or more of the adjacent organs. Thus there may be an opening from the vagina into the urethra,—*urethro-vaginal fistula;* from the vagina directly into the bladder,—*vesico-vaginal fistula;* from the vagina into the rectum, *recto-vaginal fistula;* from the vagina into some other portion of the intestines,—*intestino-vaginal fistula;* or finally from the vagina into the peritoneal cavity,—*peritoneo-vaginal fistula.*

Recto-vaginal fistula is most frequently the result of violence from the use of instruments in labor; or it may arise in connection with rupture of the perineum. This unfortunate condition will be at once recognized if the patient complain of the involuntary escape of half liquid, fecal matter, of intestinal gas, or of both, through the vagina.

In addition to those cases which may arise from mechanical violence, urethro-vaginal and vesico-vaginal fistulas are more frequently the result of the extension of cancerous or other inflammation to the walls of the bladder, followed by ulceration and perforation. The same result may sometimes succeed the strangulation of the parts by the long-continued pressure of the head of the fœtus, in labor, against the inner border of the arch of the pubis. The involuntary and constant flowing of the urine through the lower part of the vulva, and the consequent urinous odor which is diffused from the person, but too manifestly indicate the existence of one of the most serious and distressing misfortunes that can befall the female.

These distressing lesions are neither very rare, nor are they easily or always susceptible of cure by surgical means. The failure here of the Allopathic practice arises in part from considering these ulcers too exclusively as local affections; when in fact they are often, in their persistence, as much dependent upon a constitutional support as are ulcers in any other portion of the body; and this is none the less true of cases which originate in mechanical injuries. Fortunately these fistulas are more amenable to Homœopathic medication,

which is capable of reaching the constitutional psora lying at their foundation,—and at the same time of including within its influence all the morbid and symptomatic conditions of the system. Thus it happens that some so-called hopeless cases of vaginal fistula have been completely and permanently cured. But to secure this end, perfect rest will in many cases be indispensably necessary. And the proper medicines should be carefully administered, before resorting to surgical means,—which however skillfully employed are often insufficient and leave the patient in a worse condition than before. The guides in the selection of the remedy, must be found principally in the *constitutional* and *accompanying symptoms*, and in their conditions of aggravation and amelioration. These may seem but far-off and indirect guides; but in many instances they have been proved amply sufficient.*

As already stated, these lesions are more readily cured by proper Homœopathic medication, than by surgical means; and in some cases given up as hopelessly incurable by Allopathic surgeons the most satisfactory results have been obtained from such remedies. But in these, as in many other forms of structural disease, the constitutional symptoms will afford almost the only guide to the selection of the remedy.

Asarum. The patient has a great want of vital heat. She feels cold continually.

Belladonna. Will often be required in the case of females of delicate skin, and red complexion. Aggravation of the symptoms at three o'clock in the afternoon.

Calc. carb. Will be found especially indicated in leucophlegmatic temperaments. Feet constantly cold and damp, as though she had on cold, damp stockings. The least cold air chills her through and through. She cannot sleep after three o'clock in the morning.

Carbo veg. Burning in the fistulous ulcer, with much belching of wind, which affords relief for a short time only.

Conium. The urine when being discharged, flows and stops, and then flows again.

Ledum. Absence of vital warmth. Still she is made very much worse when warm in bed, or from getting warm by the fire, or over the register.

Lycopodium. The ulcer bleeds frequently. *Much borborygmus*, particularly in the left hypochondrium. Red crystals, or red sand

* Those desirous of fully studying the Surgical treatment of these Fistulas, are referred to the very able work of *Scanzoni on the Diseases of Females.*

in the urine. Always feels worse from four till eight o'clock in the evening.

Nitric acid. The urine has an intolerably strong smell, like that of horses. May be suitable in cases where Allopathic doses of mercury have been given.

Pulsatilla. Tearful disposition. Scanty urine and no thirst. She has always a *very bad taste in the mouth,* early in the morning. Craves fresh, cool air. No sleep till after twelve at night, and then sleeps late in the morning.

Sepia. The urine is so putrid that it cannot be suffered to remain in the room. The urine deposits a reddish clay-colored sediment, which adheres to the bottom and sides of the vessel, as if it had been burnt on, like burnt clay.

Silicea. General scrofulous diathesis. Much tenderness of the ulcer, or of the parts adjacent to it.

Sulphur. Constant heat in the crown of the head. Flushes of heat, passing off with moisture and debility. Burning in the soles of the feet at night. Short naps of sleep all night; and dead heavy sleep. Sense of hunger and faintness, daily from eleven o'clock till noon.

When the symptoms improve under the influence of remedies given in accordance with any of the above-mentioned indications, we have only to wait patiently, and in a few weeks the fistulous ulcers will be seen to heal.

Thuya, Causticum, Antimonium c., Mercurius, &c., should be carefully studied, where their characteristic symptoms are present.

And for some of the most distressing concomitant symptoms, compare:

Aurum. Where there is much pain in the bones, day and night. A sensation of internal emptiness and weakness of the whole body.

Lachesis. Where there is much pain of an aching character in the shin-bones only. The patient feels unhappy and distressed after sleeping.

Petroleum. If diarrhœa is apt to occur very frequently, and through the day only.

GANGRENE OF THE VAGINA.—Gangrene of the vagina may be the result of pressure and contusion produced during difficult partu-

rition; and it may occur in the shape of gangrenous eschar and gangrenous or putrid fusion of the mucous and submucous layers. The same form of destruction of the tissues of the vagina, is liable to occur in consequence of strangulated hernia or prolapse of some portion of the vaginal walls.

As in other forms of mortification, the Homœopathic remedies are capable of exerting a most astonishing influence in aiding Nature to slough off the decaying tissue,—to arrest the gangrenous process, and to repair the loss of substance with new growth. The following remedies should be carefully studied; and one or the other of them will be found, without any doubt, sufficient to effect the requisite change.

Arsenicum. The parts burn like fire. When the characteristic Arsenic thirst is present. Fetid smell.

Apis mel. Stinging pains about the parts; but no thirst.

Belladonna. Throbbing about the parts,—and sense of weight.

Calc. carb. Leucophlegmatic. The cold air strikes through her. Her feet feel as if she had on cold, damp stockings.

China, and **Secale** may be indicated; and should be studied in such cases.

Creosote. An offensive smelling ichor discharges from the part.

Lachesis. Much distress after sleeping.

Sulphuric acid. Much debility with sensation of tremor all over the body.

These indicating symptoms disappearing under the influence of the corresponding remedy,—there is reason to expect complete restoration. The course of the improvement should be most carefully watched; we wait patiently till the improvement has entirely ceased, before we repeat the dose, or resort to another remedy. And then make a new prescription, according to the totality of the symptoms and leading indications present.

CHAPTER TENTH.

DISORDERS OF THE VAGINA.

MORBID GROWTHS: TUMORS; POLYPI; CYSTS; GRANULATIONS.

MORBID GROWTHS OF THE VAGINA. The morbid growths, which occur in the vagina, are not very frequent; and they almost always coexist with similar growths in the uterus, as they spring from an internal dyscrasia which pervades the entire system indeed,—but which finds its greatest facility of development on the mucous membrane of the genitals:—a dyscrasia which is always of a very suspicious character, and which in many instances appears nearly allied to the cancerous.

These so-called morbid growths, are in reality but *hypertrophies* or *overgrowths* as to their structure. And therefore they are truly *homologous* growths. But they are animated by a perverted physiological or vital principle. Thus a purely scrofulous tumor may be looked upon as merely an enlarged gland, which is inspired by what we may term the scrofulous diathesis. So a fibrous tumor, whether hard or soft, pendulous or adherent, is but the abnormal or unlimited development of fibrous or fibro-cellular tissue with its accompanying secretion,—but inspired by a morbid principle which may be constitutional, and possibly related to that which appears in cancer. In like manner the serous cysts appear to be but hypertrophic glands or follicles even,—which in their magnified condition still retain their former power of secreting serous fluid:—and whose hypertrophic condition is due to the fact that some morbid principle,—it may be the influence of some neighboring tissue affected with cancer,—has vitiated, perverted its normal vitality. And even the so-called granular vegetations, will thus appear to be but hypertrophic developments of still more minute anatomical structures, influenced by some specific poison, as the sycosic. These formations may be briefly described under the heads of fibro-cellular tumors, including soft polypi; fibrous tumors, including hard polypi; serous cysts, encysted tumors; and granular vegetations.

I. "The softer kinds of polypi (or of adherent tumors), growing from (or upon) the mucous membranes, consist of rudimentary or

more nearly perfect, fibro-cellular, or connective tissue,—which is made succulent by serous or synovia-like infiltration in its meshes."* These tumors bear some resemblance to the serous cysts,—to be subsequently described,—and also to the soft or colloid cancerous growths, ("gelatinous sarcoma,") with which they have sometimes been confounded. But they do not appear to originate in the same minute glandular structure with these cysts; nor yet do they present the same positively malignant characteristics with the colloid cancer.

These fibro-cellular tumors take their name from that of the submucous tissue from which they spring;—and of which they are principally composed. And they retain their name of tumor exclusively, as long as they remain closely adherent to or embedded in the neighboring parts. But when they become outgrowths, pendulous, suspended by narrow pedicles, they are termed polypi. These morbid growths, of which the suspended or polypoid variety is much the more numerous, may appear upon any part covered by mucous membrane. "The peculiar yellow color of the basis-substance of these tumors makes them look at first like fat; it is due however not to fat, but to a serous, or synovia-like, or very viscid fluid, which is infiltrated through the substance of the tumor. Among the most frequent seats of these tumors in the female are the labia and vagina."†

II. The fibrous tumors are more exclusively pendulous, or polypi. These are not unfrequent in the uterus, sometimes perhaps in the vagina; and sometimes even in the pelvis external to the vagina. In this latter situation they may consist of cysts, fleshy or fibrous tumors, which grow underneath the mucous membrane of the vagina; in the cellular membrane behind the vagina; or they may be more immediately attached to some part of the osseous frame-work of the pelvis, whether the product of diseased periosteum or not.‡ These inter-pelvic tumors may not attract attention, until from their size they impede the free action of the rectum or the bladder; or render parturition difficult by occupying an important portion of the pelvic cavity. In some instances these tumors are of the nature of fungous or cancerous growths.

But ordinarily the tumors of fibrous form, which appear in the

* Paget, Path. Anat.; Art. "Fibro-cellular Tumors."

† For a full exposition and some examples of these tumors, consult Paget.

‡ Churchill.

vagina, and still more especially in the uterus, are attended with serious inflammation in the adjacent tissues. And the inflammatory disease which arises in connection with uterine fibrous tumors, or polypi, must be the great cause of the local and general painful symptoms and hemorrhages which arise in such cases. Thus in the Allopathic practice it has been discovered, by the hard experience of the ill-success which has so often attended the removal of these tumors of the vagina and uterus, whether pendulous or still adherent, that the tumor is not the disease; but rather merely the result of it. And high authority cautions against removing these tumors, before first curing the disease which causes them—if they can. "In cases in which the polypoid tumor (which is the easiest of extirpation) can be removed, the patient is only half cured, if extensive inflammatory mischief is allowed to remain."—*Bennett.*

Polypoid Tumors.

Polypi, Vaginal and Uterine.—Under the head of fibro-cellular tumors of the vagina, were described those formations, usually vascular, which are principally adherent to the vaginal mucous membrane; but which sometimes become pendulous outgrowths, such as are termed soft polypi. These pendulous growths, or *polypi*, are perhaps more frequently found within the vagina, than those which continue adherent,—although in most cases *they arise from the uterus.* And in many instances in which they thus originate in and still draw their support from the uterus, they are found occupying the vagina; having been expelled from the interior of the uterus, to which, however, they still remain attached by their fibrous pedicle or stem.

In the present section, will be described polypi in general, with reference to their structure; mode of origin; causes; attendant and consequent symptoms, and proper treatment.

Polypi have been divided into three varieties, corresponding to their general differences of structure; these are the glandular; the vesicular, and the fibrous. *Glandular* polypi consist in enlargements of the glandulæ nabothæ in the canal of the cervix. They sometimes occur in clusters, about the size of currants, and are suspended by very fine pedicles. The *cellular*, mucous, fibro-cellular, gelatinous or vesicular polypi, are the least frequent; grow with the greatest rapidity; and may attain the most considerable size: these have already been sufficiently described under the head of fibro-cellular tumors or soft

polypi. The *fibrous* polypi constitute the most common variety, and may occur at the same time in the uterus and in the nasal fossa.

These morbid growths received the name polypus, or many-footed, partly from their fancied resemblance to the polypus marinus (a sea animal); and in part from their being found in some cases to take their rise from more than one stem or foot. They are generally round, oval or pyriform; but may assume other shapes in consequence of the pressure of the surrounding parts. The polypi are covered by the mucous membranes of the uterus or vagina, from which they arise; they may vary from the size of a filbert to that of a child's head; they are mostly insensible to the touch, but bleed from the least contact, as well as spontaneously. They are attached to their base by a pedicle of variable size, sometimes being connected by a slender stalk, like that of a leaf, at others by a fleshy attachment of considerable thickness. The glandular polypi are soft in texture, and may contain a small quantity of mucilaginous fluid. The cellular variety is soft, and in great measure composed of cells which contain a yellowish liquid. The fibrous polypi are more dense in structure,—sometimes hollow; and either empty or containing blood, gelatinous or fatty matter, and hair. And whatever may be their structural consistence, hard or soft, vascular, mucous or fibrous,—whatever their variety in size,—and whatever the circumstances attending their development, all polypi have these two general characteristics: *they take their origin from cavities or outlets of the body which are lined by mucous membrane; and they are attached by a pedicle or stem.*

The polypi are made up of different constituents, vascular structure, fibrous tissue and mucous membrane; and these different tissues are but the prolongations of the mucous and sub-mucous organs from which they spring. Or they may be considered as hypertrophies of some of the minute glands or mucous follicles; attended by a corresponding hypertrophy of all the neighboring organic tissues, whether mucous, cellular or fibro-cellular. And according to the different proportions of these constituents and of the fluid infiltrations, the polypus itself becomes hard or soft, fibrous or vesicular;—as is the case in the formation of hard or soft cancer. As regards their exact seat in the genitals, polypi occasionally arise from the vaginal walls; less often from the mucous membrane of the *fundus;* but more frequently from the interior of the *cervix* uteri and even from the *os tincæ.*

In addition to these three most general varieties of polypus, some authors enumerate also certain other morbid growths as polypoid,—

though we think with hardly sufficient reason.* The first mentioned of these are the *cauliflower excrescences.* These arise only on some part of the os uteri; may attain an enormous size, so as to fill the entire pelvis; occasion a profuse, watery and sometimes offensive bloody discharge, and collapse when emptied of their contents. A remarkable symptom has been observed in connection with the cauliflower excrescence; this is *a loss of sight without any apparent alteration in the structure of the eye.* These morbid growths may be considered to be either of a syphilitic or of a cancerous nature; but they do not resemble polypi, since their root or base is as broad as any other part of their growth.†

Another form of morbid growth, which has, improperly, as it appears, been termed polypoid, is the *fungous.* The term fungous growth, seems to be more properly applicable to those vegetations, principally *verucca* and *condylomata,* which frequent the external rather than the internal genitals; and to that form of cancerous disease known by the name of *fungus hæmatodes.*‡

The *causes* of polypi are not very definitely ascertained. They take their origin from a certain dyscrasia of the system which is always of a suspicious nature; although less positively malignant than that which is developed in the form of cancer. As already stated in treating of the fibro-cellular tumors,—which if pendulous are properly termed soft polypi,—these growths sometimes appear in connection with actual cancerous disease.

Polypous tumors may appear in single or in married females,—mostly of the middle age; they do not necessarily prevent conception, but usually appear to destroy its product by abortion.

The *symptoms* which make their appearance in connection with polypi are very important. These growths are not themselves particularly sensitive or painful. But a very severe form of inflammation is almost always attendant upon their presence. This may arise from the same general influences which develop the polypi themselves; or in consequence of the irritation which the morbid growths occasion in the lips of the os uteri and other parts with which they come in contact. Ulceration of these irritated and inflamed surfaces is not uncommon.

The other most remarkable and constant symptom of polypus is the hemorrhage, which is hardly ever wanting. Hemorrhages which arise in connection with polypi are irregular as to their time and quan-

* Leadam, p. 272. † Davis' Obstet., II., p. 736. ‡ Davis, I., p. 73.

tity; but constantly recurring, and by no means proportioned to the extent of the tumor. A small polypus may occasion as great a loss of blood, as one much larger; and it is stated that the very large polypi are less troublesome in this respect than those which are smaller.

The reason of this liability to greater loss of blood where the polypi are small than where they are large, will be found in the fact, now perhaps for the first time stated, that the hemorrhage itself is not from the polypi at all,—but from the inflamed, congested mucous surfaces of the adjacent parts. The small polypi, especially, have no such vascular developments as would account for the alarming hemorrhages which often appear in connection with them.

The discharge which appears in connection with polypus is either mucous, or muco-purulent. In other respects the constitutional symptoms are very similar to those which arise in cancerous cases; even to the sallowness of the complexion. Only the intense, lancinating, stabbing or burning pains, singly, successively or in paroxysms, which are constantly the attendants of cancer, do not appear to result from polypus. Neither is the discharge so offensively fetid.

Fibrous growths of the uterus principally occur in unmarried and sterile females above thirty years of age; comparatively few are observed in women who have borne children. Many of these forms of morbid growth may appear in the vagina; but more often in the cervix uteri. But under this caption of morbid growths of the vagina, we have given all the description and general principles of the nature of these tumors, which will be necessary, whatever may be their exact situation in the interior of the pelvis. For their treatment will depend not so much upon their exact location, on the vaginal wall, the cervix or the fundus uteri,—as upon the local and constitutional symptoms which they may occasion.

Thus in the treatment,—at the end of this section, we present at one view the principal indications for all the remedies which may be most frequently called for, in adherent or pendulous, fibro-cellular or fibrous tumors,—whether arising from the vaginal walls, from the cellular tissue external to the vagina, or from the cervix or body of the uterus.

Aurum. The mind is tending more or less strongly towards self-destruction. She thinks much about it, even if she does not intend it.

Calc. carb. Leucophlegmatic constitution. The patient cannot sleep after three A. M. The pit of her stomach is convex, like a saucer turned up, instead of being concave. Feet feel constantly as

though she had on cold, damp stockings. Menses too often and too profuse. Vertigo on walking up stairs.

Conium. Intermission in the flow of urine. Soreness and swelling of the breasts preceding the menses. Vertigo on turning in bed, or on turning the head when lying in a recumbent position.

Lycopodium. Urine containing red sand, as a constant symptom. Much borborygmus, particularly in the left hypochondrium. Aggravation of symptoms at four P. M.; amelioration at eight P. M. Varices of the lower extremities. Also in cases in which sharp pains are occasionally running round each labia.

Mercurius. In cases where there is evidently a mercurial condition of the whole system. The mouth and teeth show it,—the glandular system, the urine, and the skin show it. The symptoms are worse at night. They are worse also in damp, cold weather.

Mezereum. (Compare with **Mercurius.**) All the joints feel as if bruised,—they feel weary, as if they would give way. She often has violent toothache at night. A fearful burning pain runs along the left malar bone, from the right to the left.

Nitric acid. Urine exceedingly strong, like horse urine. Sleeps badly the latter part of the night. Leucorrhœa of mucus which can be drawn out. Flesh-colored, green leucorrhœa. Pressing in the abdomen, as if everything were coming out at the pudendum, with pain in the back through the hips, down the thighs.

Petroleum. Much diarrhœa through the day, never at night. Moisture and itching of the hairy surface of the labia. The menstrual blood causes an itching of the genital organs.

Phosphorus. Tall and slim persons. Occasional attacks of violent hemorrhage. Great sensation of emptiness and weakness in the abdomen. Constipation, the stool being slender, dry and difficult to evacuate. Sour eructations and belching of quantities of wind. Feels very sleepy after meals, particularly after dinner.

Phosphoric acid. A remarkable state of indifference, from which she cannot arouse herself. Great sense of weakness. (Compare also, **Phos., Sepia, Pulsatilla.**)

Platina. Constipation. The stool always being difficult, because it inclines and adheres to the parts like clay. Much tenderness of the vulva. Hysterical,—spasmodic. The physical symptoms disappear and the mental symptoms appear, and vice versa.

Pulsatilla. Very tearful; she weeps at every thing, whether it is joyful or sorrowful. Menstrual irregularities,—which see, for further indications characteristic of this remedy.

Silicea. She always gets worse at every new moon. See indications for Silicea, as given under the head of Leucorrhœa and Menstrual Irregularities.

Staphysagria. The patient is very sensitive to the least mental impression. Her teeth turn black, and cannot be kept clean by much brushing. They exhibit black traces and streaks through their middle. She has much trouble with her teeth.

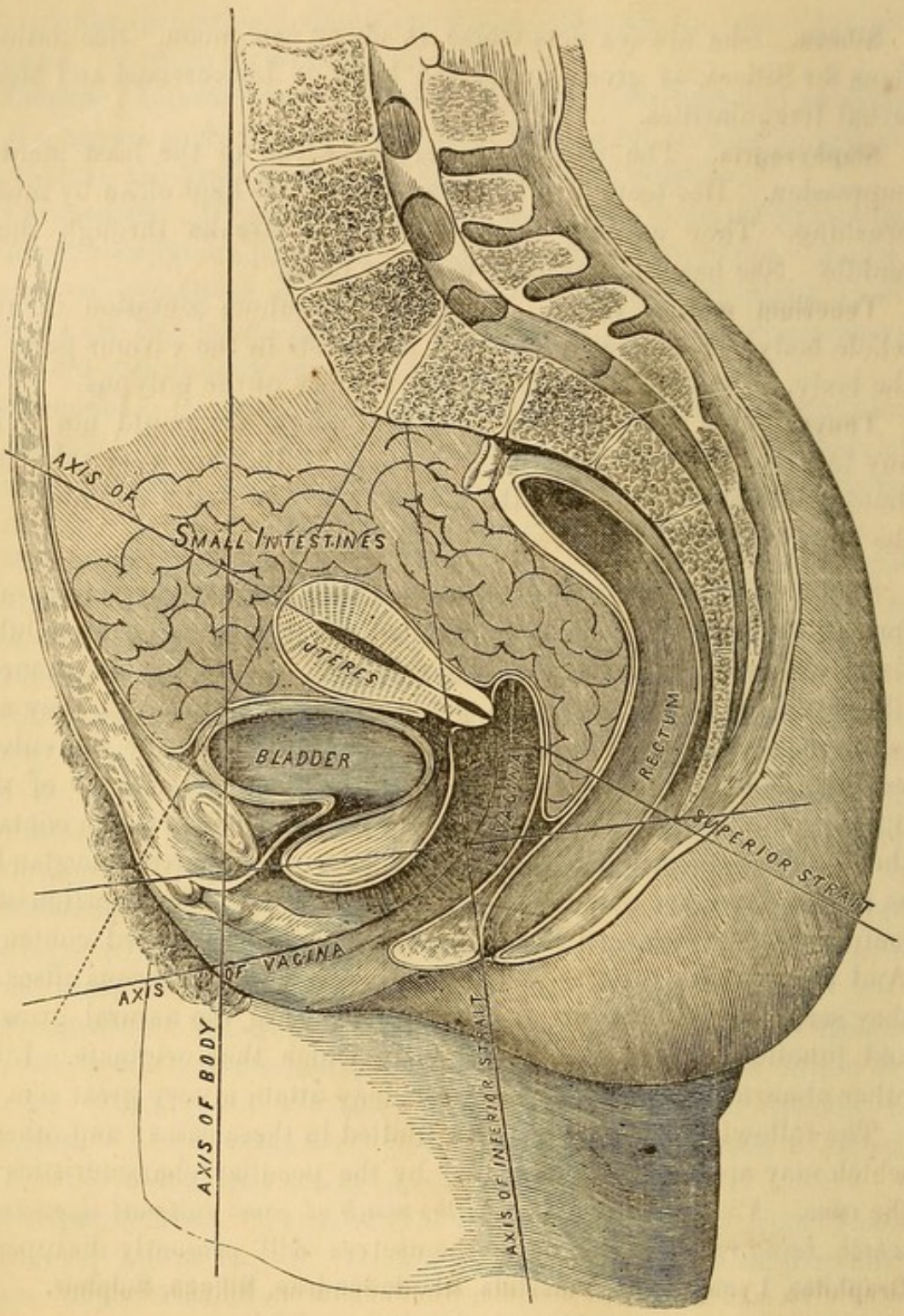
Teucrium marum verum. Irritated, tremulous sensation in the whole body. Frequent biting as if of insects in the various parts of the body. Creeping sensation in the vicinity of the polypus.

Thuya. The patient often feels as though she could not exist any longer. "Sensation as if the whole body were very thin and delicate and could not resist the least attack; as if the continuity of the body would be dissolved."

SEROUS CYSTS OF THE VAGINA.—These are comparatively rare formations in the vagina; or rather they are developed in the cellular tissue external to the vagina. They contain usually a thin or honey-like liquid, of a yellow, brown, green or other tint. And they are most frequently seated in or near the secreting glands, or the vulvo-vaginal glands. But whatever may be the exact appearance of the different fluids, they are all secreted by the membranes which contain them. These membranes may be only enlarged, hypertrophic glands; as in the mammary gland, where the cyst appears to be a portion of a lactiferous duct enlarged and degenerated as to its secreted contents. And where these cysts appear in connection with cancerous disease, they seem to be the result of the disturbance of the natural growth and function of the minute glands in which they originate. Like other abnormal growths, serous cysts may attain a very great size.

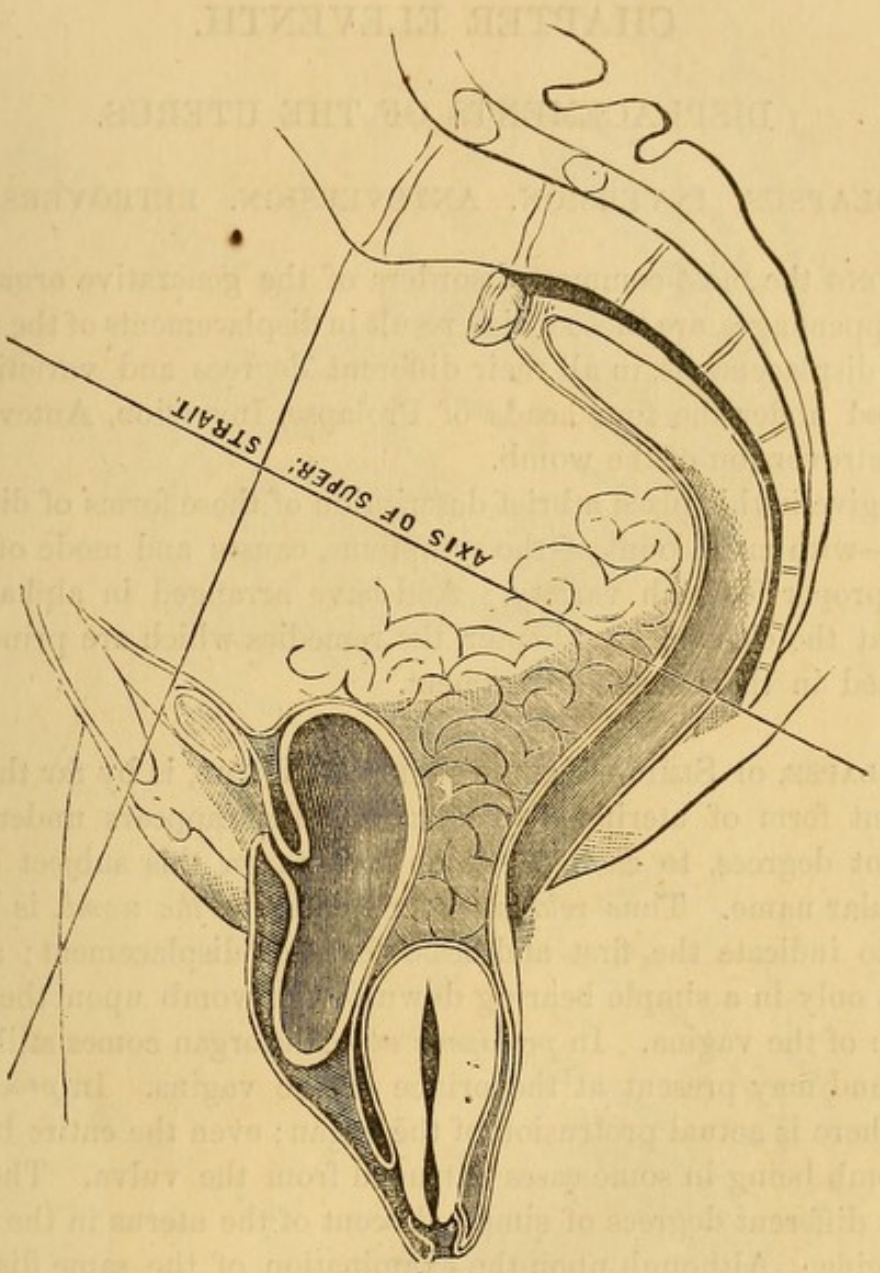
The following remedies may be studied in these cases; and others, which may appear to be indicated by the peculiar characteristics of the case. *These cysts are always the result of some internal dyscrasia, which being removed,* the cysts themselves will presently disappear. **Graphites, Lycopodium, Pulsatilla, Rhododendron, Silicea, Sulphur.**

GRANULAR VEGETATIONS, CONDYLOMATA.—These are new growths of cellular tissue, which may occur upon the mucous membranes, especially upon the female organs of generation. Some of them, the true condylomatous excrescences particularly, are the results of some especial taint of a syphilitic nature. Where there is reason to suspect this to be the case, **Thuya** will be most strongly indicated. **Nitric acid, Staphysagria, Calcarea, Lycopodium, Mercurius, and Tartar emetic,** may also be studied.



Natural position of the pelvic viscera.

The above represents the normal relative position of the contents of the pelvis. The plane of the superior strait is represented by a line running from the superior border of the pubis to the promontory of the sacrum. The plane of the inferior strait, by a line from the superior arch of the pubis to the point of the coccyx. The other lines are all defined in the cut. The fundus of the uterus is on a level with the plane of the superior strait, and its axis, the same as that of said plane. The peritoneum is seen sustaining the uterus by its anterior superior three-fourths, by its fundus and by the whole of its posterior surface. The succeeding nine engravings exhibit the uterus in its various displacements, making a striking contrast with its normal position.



Procidentia.

The above is an illustration of complete falling of the womb, the projection of the organ out of the orifice of the vagina. In these cases the vagina is completely inverted, thus forming a conoid pouch, containing the supra-vaginal portion of the neck of the womb, its entire body, the ovaries, the fallopian tube, a large portion of the broad and round ligaments, of the small intestines, of the bladder and perhaps sometimes of the rectum. The mouth, and the infra-vaginal portion of the neck alone is seen, all the rest being covered by the inverted vagina, although protruding beyond the vulva.

CHAPTER ELEVENTH.

DISPLACEMENTS OF THE UTERUS.

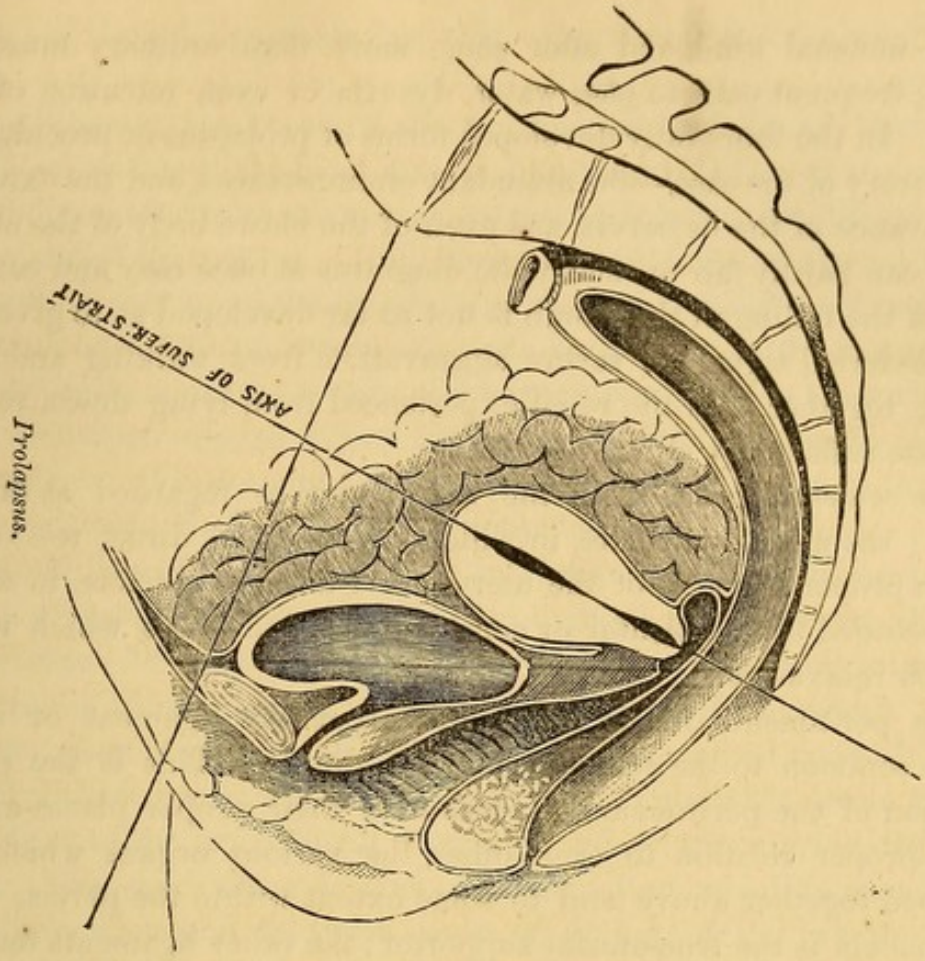
PROLAPSUS. INVERSION. ANTEVERSION. RETROVERSION.

AMONG the most common disorders of the generative organs and their appendages, are those which result in displacements of the uterus. These displacements, in all their different degrees and varieties, are included under the four heads of Prolapse, Inversion, Anteversion, and Retroversion of the womb.

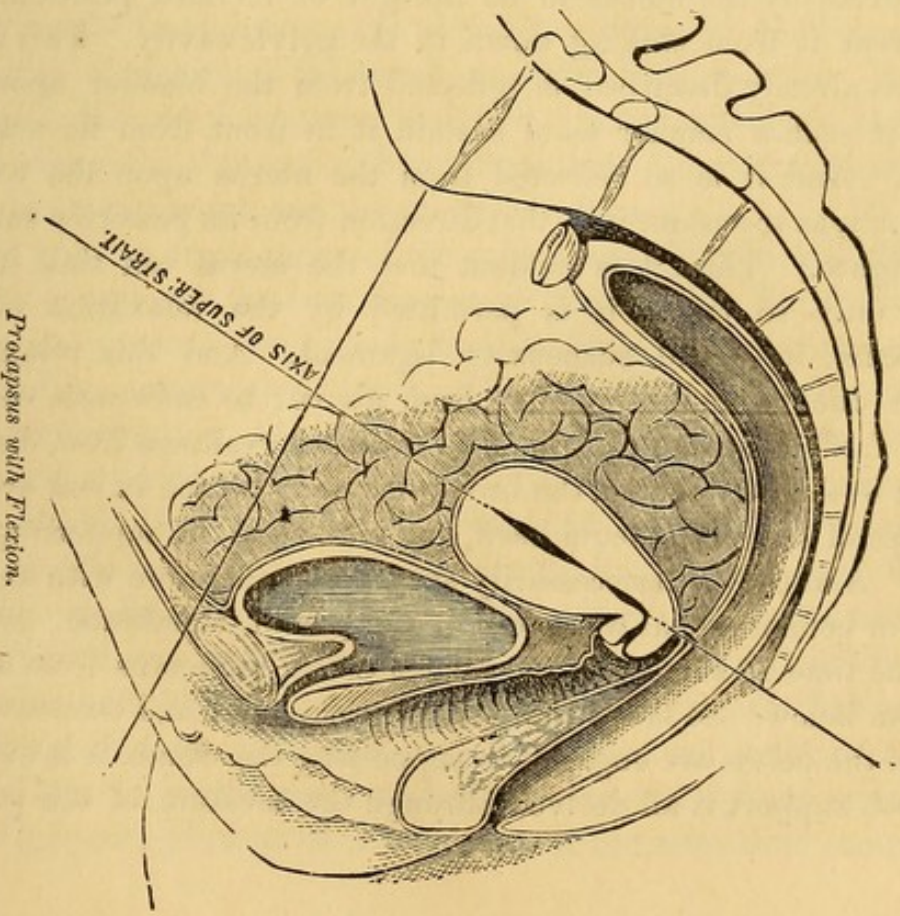
We give in this place a brief description of these forms of displacement,—with an account of the symptoms, causes and mode of treatment proper for each variety. And have arranged in alphabetical order at the close of the chapter, the remedies which are principally indicated in their medical treatment.

PROLAPSE, or SIMPLE FALLING OF THE WOMB, is by far the most frequent form of uterine displacement. This appears under three different degrees, to each of which writers on this subject affix a particular name. Thus *relaxation* or *descent of the womb*, is understood to indicate the first and least form of displacement; and to consist only in a simple bearing down of the womb upon the upper portion of the vagina. In *prolapsus uteri*, the organ comes still lower down and may present at the orifice of the vagina. In *procidentia uteri*, there is actual protrusion of the organ; even the entire body of the womb being in some cases extruded from the vulva. These are all but different degrees of simple descent of the uterus in the line of the vagina. Although upon the examination of the same displaced organ at different times of the day, it may be found to be more or less prolapsed, according to the condition of active exercise or quiet, in which the parts may have been for some hours previous.

Symptoms.—The principal and primary symptomatic indications of the descent of the womb are, dragging and aching pains in the small of the back; pulling, and bearing down pains in the lower part of the abdomen; sensation as if something would issue from the vagina; pains all much worse from walking or other exercise; the pains are remarked to have come on immediately after some exertion



Prolapsus.



Prolapsus with Flexion.

of an unusual kind, and after some more than ordinary muscular effort; frequent calls to pass water, dysuria or even retention of the urine. In the more fully developed forms of prolapsus or procidentia, the history of the case,—the attendant circumstances, and the external appearance of the os cervix and even of the entire body of the uterus itself, can hardly fail to render the diagnosis at once easy and certain. And if the falling of the womb is not so far developed as to give any such external signs, the severe aggravation from walking and from lifting, together with the relief experienced from lying down, render the case sufficiently clear.

The *causes* of prolapse of the womb may be regarded as of two kinds; the more immediate, in which are included direct relaxation of the proper supports of the uterus; and the more remote, in which are included the incidental or constitutional influences which result in such relaxation.

The peritoneum forms the great suspensory ligament or membrane common to the contents of the abdomen. This is the grand function of the peritoneum, to sustain in their proper places and in their proper relation to each other, the various organs which are grouped together above and to some extent within the pelvis. The peritoneum is the true uterine supporter; the other ligaments tending rather to steady the uterus in its upright or inclined position, than to prevent it from sinking down in the pelvic cavity. This membrane, as already described, is reflected from the bladder upon the womb, in such a manner as to sustain it in front from its anterior surface. And it is so reflected from the uterus upon the rectum posteriorly, as to sustain it in that direction from its posterior surface. (See Figure.) Thus it is evident that the uterus can sink in the pelvis, only so far as it is permitted by the relaxation of the peritoneum, its grand suspensory ligament. And this relaxation may be due to undue pressure from above; to influences excited upon it from beneath; or to its own inherent weakness from disease.

Next to the peritoneum, the broad ligaments, which in fact are but processes of the peritoneum itself, are influential in supporting the womb. And they will necessarily sympathize therefore with any inherent or constitutional weakness of the parent membrane; and at the same time be subject to the same adverse influences from above and from below. So far as the bladder, the rectum and the muscular parts of the pelvis are engaged in supporting the womb, it is evident that such support is all derived through the medium of the perito-

neum and broad ligaments, by which the womb is connected with them.

The inherent weakness of the peritoneum and broad ligaments, which seems one of the most prominent causes of falling of the womb, is usually such weakness only as corresponds to the debilitated tone of the rest of the system. And hence the slightest additional strain brought to bear upon the womb from above by exercise, or unusual exertion, once causing these supports to give way, their stretched and strained condition, continually borne upon more and more by the superincumbent organs, allows little opportunity for them to recover themselves. Consequently prolapsus uteri is rather apt to increase more and more, than to recover spontaneously.

Chronic leucorrhœa is set down by some authorities as one of the causes of prolapse of the womb. But this is hardly correct. For in many cases the leucorrhœal discharge will appear only after the occurrence of more or less serious displacement of the womb. And in other cases of persons of lymphatic temperament,—that is of psoric or scrofulous constitution,—the debilitating influence leads at the same time to the leucorrhœal discharge and to the uterine displacement. The same thing is true of constipation, which is recognized as an important and frequent cause of falling of the womb. The same constitutional influence that renders the bowels incapable of expelling the feces, renders the suspensory ligament and membranes incapable of retaining the womb in its proper position. And the violent action of purgatives; and still greater weakness of all the connecting parts, that invariably follows their use, still further aggravates the constipation and the uterine prolapse.

The pressure from above of the organs contained in the abdomen, is often considered to cause descent of the womb. But it is against just such pressure from above downwards, that the peritoneum is intended to sustain the uterus. And except perhaps in cases of great over-exertion, or undue violence, it is not thought that the peritoneum yields to such pressure, unless previously weakened by some morbid influence. This is especially seen in those cases of prolapse which appear in connection with ascites, or ovarian dropsy.

Thus it is that the great majority even of the worst and most fully developed forms of prolapsus uteri may be regarded as disorders properly amenable to Homœopathic medication, rather than as mere local displacements to be remedied by mechanical appliances. The case of Mrs. O., which came under my care some years since, illustrates the principle here inculcated, and at the same time shows what

can be accomplished by the use of Homœopathic remedies. This lady had been subject to complete procidentia uteri for at least ten years. The organ would protrude entirely without the vulva; and neither pessaries, supporters nor perineal pads could prevent it from thus making its unwelcome appearance externally. I requested her to take her bed; carefully washed and replaced the uterus, and gave **Conium.** A frightful leucorrhœa set in; but in the course of a single week this disappeared; and with the help of **Platina**, the induration of the womb and prolapsus were completely cured. The organ came down no more; in fact she never has since had any trouble of the kind. She has borne three children since; and is a well woman at this day. The **Conium** and the **Platina** were all the medicines used in this case; and no bandages or mechanical applications whatever were employed in the treatment, or subsequently used.

The same principle holds true with reference also to the vagina. So far as the descent of the uterus may be fairly attributable to relaxation of its walls, this relaxation is itself an evidence of morbid weakness, requiring appropriate medication. And even in those cases in which the prolapse of the uterus may seem to be owing to an unusually large pelvis, the natural supporters of the uterus can by proper attention be rendered capable of performing these functions in a far better and more satisfactory manner, than we can do it for them by the aid of pessaries or supporters. In like manner all that large and important class of cases of prolapse, which come on after confinement, can be prevented by observing suitable directions, or cured by appropriate Homœopathic medicines.

Inversion of the Uterus.—This is the most rare, the most formidable and dangerous form of uterine displacement. It occurs principally as an accident in connection with delivery. As in sudden and unexpected descent of the fœtus through an unusually large pelvis, when the patient is walking or at the water-closet; or from too violently drawing upon the cord, the fundus of the womb has been known to be inverted and brought down with the placenta. This accident and complication of labor, will be referred to in its proper place in connection with delivery. Inversion of the uterus is here described, because although very unusual in the unimpregnated state, it may occur in consequence of the presence of polypus of the womb.

Inversion of the womb is analogous in its appearance to simple prolapsus of the entire circumference of the vagina. In either case

the change begins above and consists in the inversion and depression of the affected part. In the womb, the fundus is at first simply depressed; and in this first stage the inversion is comparatively slight, and may be difficult or incapable of detection. But as the change increases, the fundus sinks down more and more within the body of the womb; and in this second stage, the inner surface of the fundus may be felt and recognized as a tumor, by introducing the finger within the os uteri. In the complete form of inversion, the womb entirely turned inside out, may be protruded without the vulva. In this case the mucous lining membrane of the uterus in its natural position, becomes its external covering. Thus, as in the case of prolapsus of the vagina, there are three different degrees of the inversion of the uterus,—which may be designated as simple depression of the fundus; partial inversion, in which however the tumor formed by the inverted fundus does not reach the os uteri; and complete inversion, in which the womb is entirely turned inside out and protruded externally, constituting at the same time complete inversion and entire procidentia. This is a very serious complication of all the uterine organs; for the vagina must be more or less compromised and the Fallopian tubes, ovaries and bladder drawn down from their proper positions. Here not only the actual displacement of the womb and its appendages forms a serious difficulty, but the mere dragging upon those appendages on the part of the womb, must also cause great distress and derangement in the organs themselves, and profound depression of the nervous system and vital strength.

The presence of a polypus in the inverted womb, may render the diagnosis comparatively easy. But it must be borne in mind that the inversion itself is due not so much to the actual weight of the polypoid tumor, as to its morbid influence upon the womb, and to the efforts which the womb makes to free itself by expelling the foreign body. Complete cases of inversion in connection with polypi, constitute a very grave form of disease; partly from the occurrence of hemorrhages and from the severe functional and constitutional derangements to which this condition may give rise; and partly from the unhealthy nature of the cause itself. For even if the polypus be not considered a malignant growth, it takes its rise in some depraved state of the system, and may be the index of more serious forms of disease, yet to be developed from the original dyscrasia.

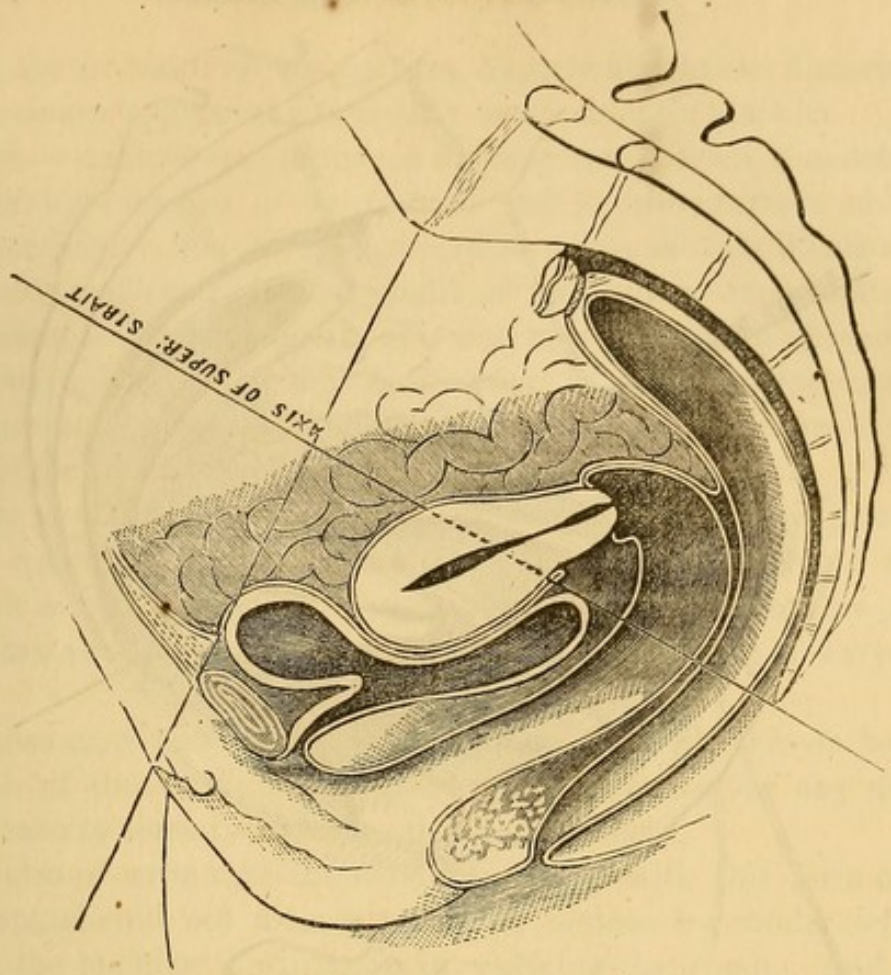
Treatment.—The inverted womb should be carefully reduced and the whole organ replaced in the pelvis, with as little and as gentle

manipulation as possible. The patient should remain in bed in such position as is found most comfortable; receiving such medicines as are best suited to the entire group of symptoms—SENSATIONAL, *functional* and structural. So profound is the relation of the law of the similars to the human constitution, that even comparatively unimportant sensational symptoms, which, however, are peculiar to and characteristic of the case, may lead directly to the true Homœopathic remedy for the entire disease. This simple fact, the stone which the allopathic and the chemical builders and even those of the so-called physiological school have rejected, bids fair to become the head of the corner in Homœopathic therapeia. And this profound principle, confirmed by the constant experience of many careful observers and experienced physicians, should encourage the young physician to rely upon his Materia Medica, and not to despair even in the presence of serious functional derangements and even structural changes,—for which he can see no direct and sufficient Homœopathic analogue. In many forms of disease the sensational symptoms, which occur first, are intended as warning voices, forerunners of the evil to come; and even in the more advanced stages of disease these sensations are still the most unfailing key-notes to the real remedies in the case,—indices to the remedies not for the severe sufferings alone, but for the functional and even structural disorders which cause them *and which they represent!*

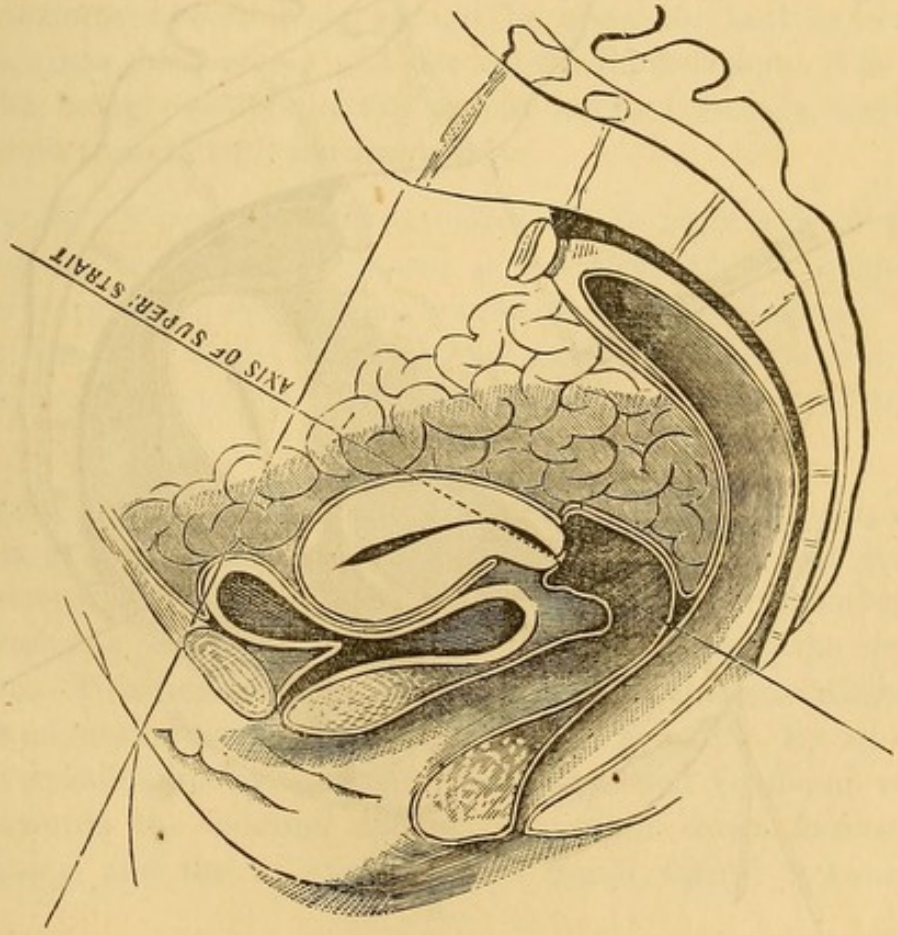
Select the remedy in accordance with all the symptoms present,—with reference also to the constitutional history of the patient.

ANTEVERSION OF THE UTERUS is a displacement comparatively rare in the unimpregnated uterus. *Anteflexion* implies an inclination forwards of the fundus uteri, which though more than is natural, is still much less than actual *anteversion*. The fundus of the uterus, in anteversion is not only thrown forward, but actually impinges against the bladder and upon the pubis; the os and cervix at the same time are directed towards the sacrum. In this position the uterus lies directly across the pelvic cavity. In the most complete forms of anteversion, the uterus is bent upon itself at the inferior angle, the cervix retaining its usual position; this is *anteversion with flexion*.

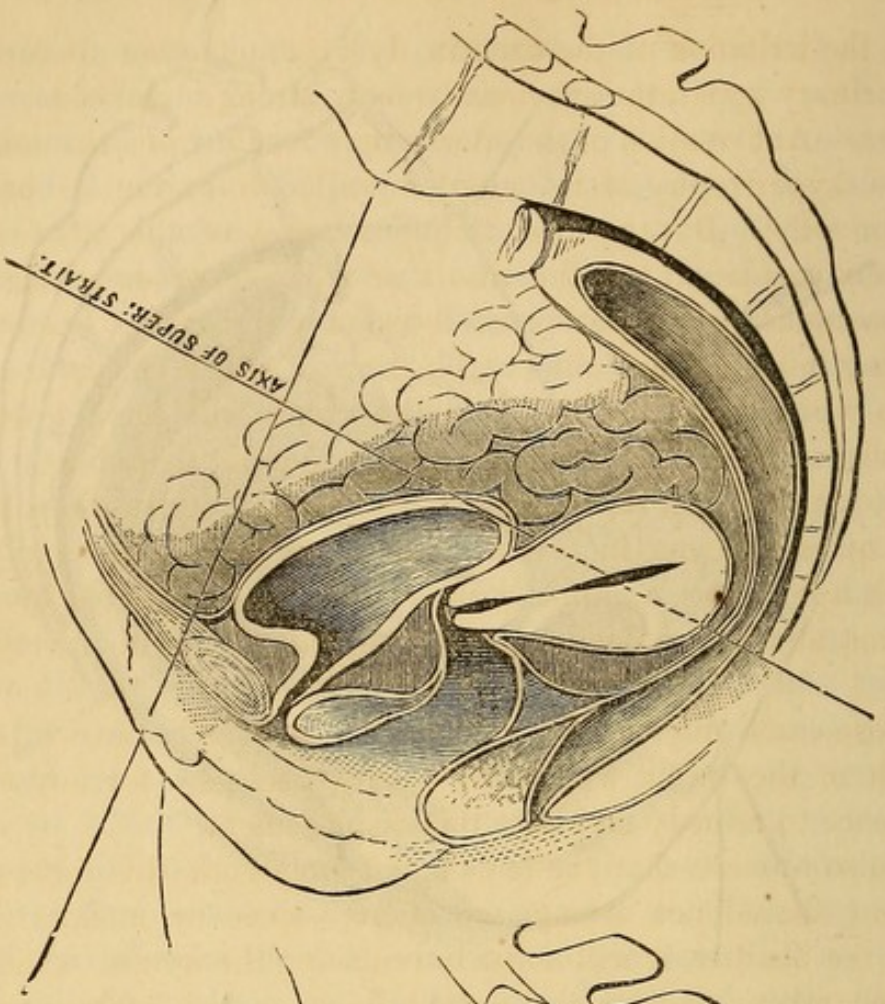
Symptoms.—This form of displacement may come on gradually; and in this case it can be distinguished from simple prolapse, only by the touch. Where this affection suddenly makes its appearance, the symptoms may very nearly resemble those of falling of the



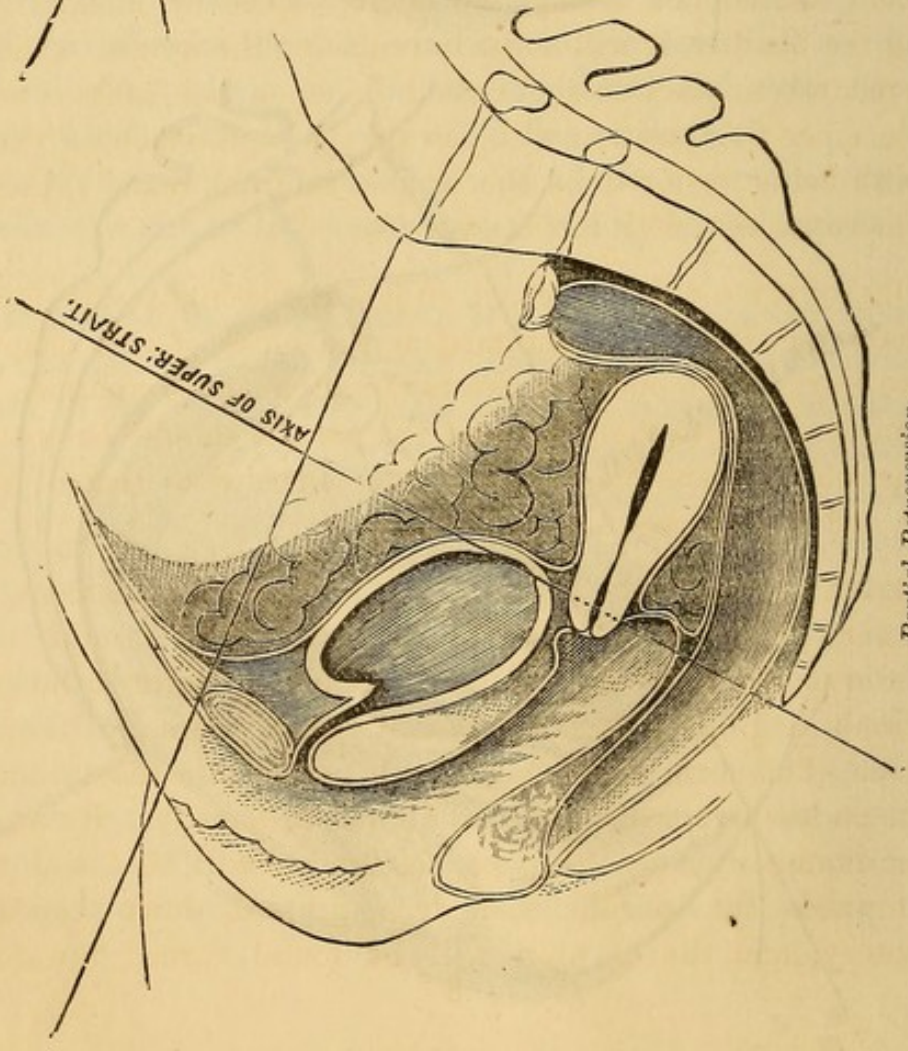
Anteversion.



Anteversion with Flexion.



Retroversion.



Partial Retroversion.

womb; the irritation of the urethra, dysuria and other disturbances of the urinary apparatus are usually more strongly marked.

Causes.—Anteversion of the uterus may result from the not very common hypertrophy of its anterior wall;—from tumors or other pelvic growths. But the most frequent causes of this displacement are purely accidental and the result of violence, or muscular effort. The enormous accumulation of feces may sometimes operate as a displacing influence, and the combination of other causes may then easily serve to throw the fundus of the womb still further down in the pelvis, or even to press it beneath the symphysis pubis.

In the treatment of this form of displacement, desire the patient to remain quiet, or even, in severe cases, to keep her bed and lie on her back a few days, administer the remedy best indicated by all the symptoms, and a complete cure may be looked for in a very short time.

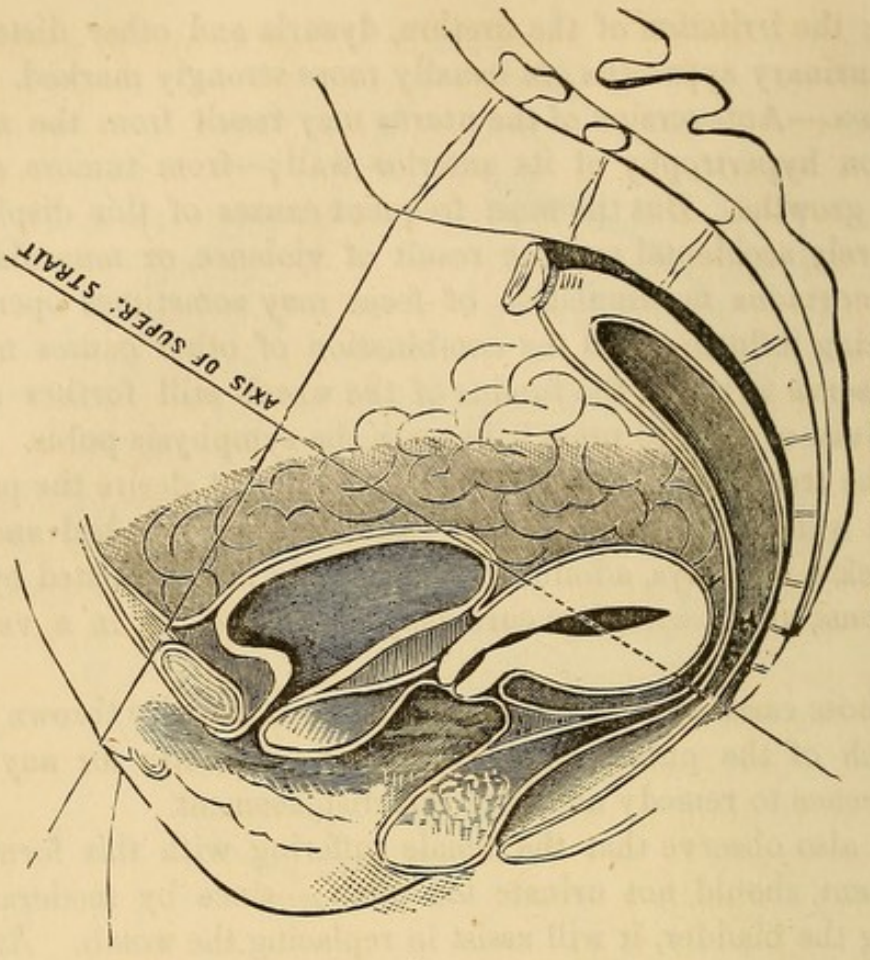
In those cases only in which the fundus is actually thrown beneath the arch of the pubis, will there be any necessity for any manual interference to remedy and cure this displacement.

And also observe that the female suffering with this form of displacement, should not urinate too often;—since by moderately distending the bladder, it will assist in replacing the womb. And when in the recumbent position she should lie upon her back as much as possible, since this position will also aid the replacement. The general health being restored by the proper internal remedy, there will be no more trouble with the anteversion.

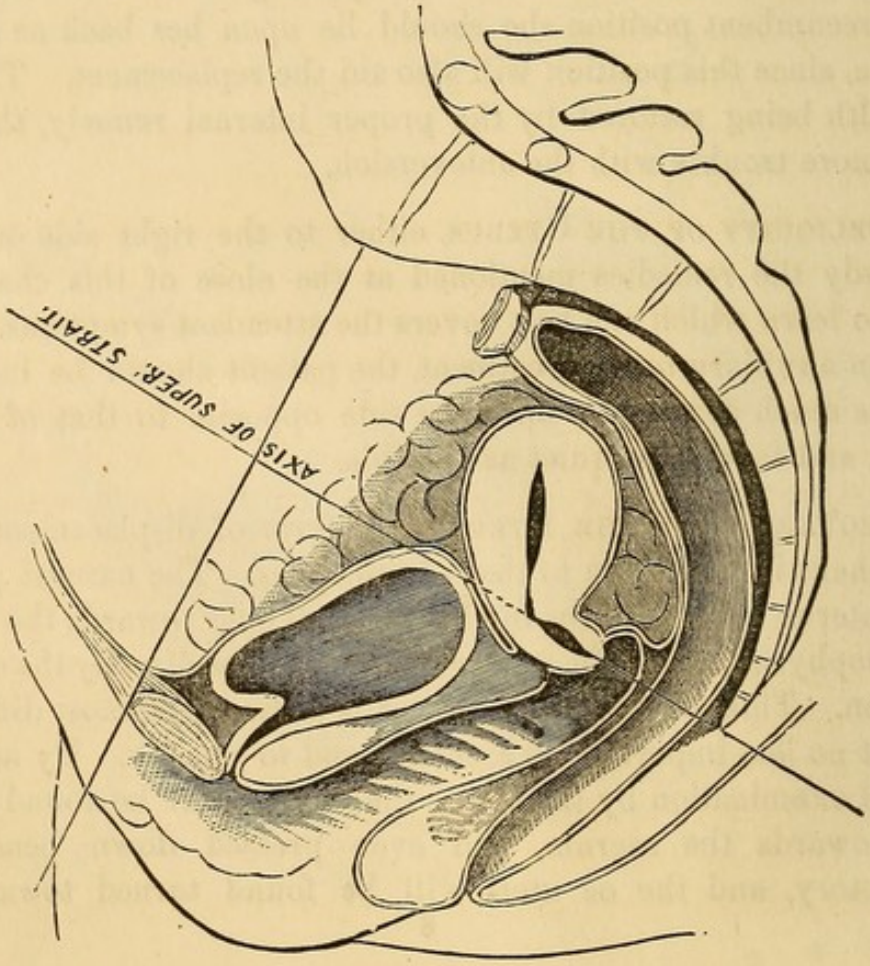
In OBLIQUITY OF THE UTERUS, either to the right side or to the left, study the remedies mentioned at the close of this chapter, in order to learn which one best covers the attendant symptoms.

As an auxiliary to the treatment, the patient should be instructed to lie as much as possible upon the side opposite to that of the obliquity, and to keep as quiet as possible.

RETROVERSION OF THE UTERUS is a form of displacement, which occurs next in frequency to that of prolapsus. The natural position of the uterus being with the fundus inclined over towards the bladder and symphysis pubis,—in *retroversion* it assumes directly the opposite direction. This form of displacement is perhaps the most difficult of all; but no less important to ascertain and to remedy. By an exact internal examination by the touch, the fundus will be found turned back towards the sacrum, and even pressed down beneath its promontory, and the os uteri will be found turned towards the



Retroversion with Flexion.



Partial Retroversion, with Flexion.

pubis. As in simple prolapse of the uterus, so also in retroversion, there may be three different degrees or stages of displacement,—according as the fundus is directed towards the upper, the middle or the lower portion of the sacrum. In all cases in which the womb has been so depressed backwards that its fundus is thrown down beneath the sacral promontory, this forms an insuperable barrier against its return, unless replaced by art. And the best method and the means of replacing it will be pointed out and described, together with the remedies which may be found useful in such cases.

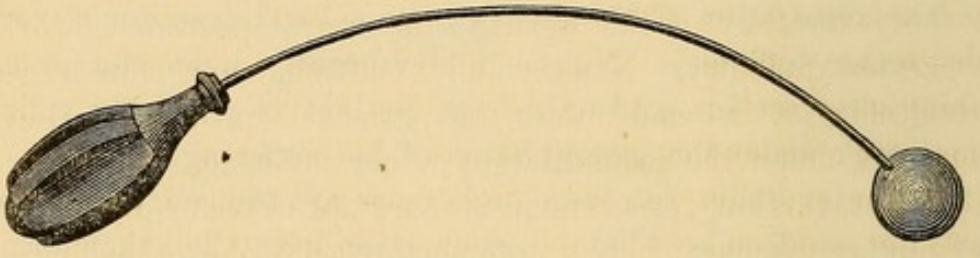
Symptoms.—The most strongly marked symptom indicative of retroversion of the uterus, is found in the inability to empty the bladder,—which in greater or less degree is always present in complete cases of this displacement. Next to this is the pressure on the rectum, and consequent more or less frequent call to stool with great difficulty or impossibility of evacuating the bowel. These two complications, especially the retention of urine, render cases of complete retroversion of the womb dangerous as well as painfully distressing. While the retention and consequent accumulation of feces, serves to make the restoration of the uterus to its natural position a work of much greater difficulty. Nausea and vomiting, even stercoraceous vomiting, may set in—and unless the patient is promptly relieved, she may sink under the accumulation of her sufferings.

Unlike anteversion, retroversion is more apt to occur during pregnancy; but we discuss it here, in connection with the other forms of disease which may appear in the unimpregnated uterus.

Causes.—The fundus of the uterus being loaded as it were in pregnancy, will readily tend to sink down either anteriorly or posteriorly, more and more, when from any reason it has been turned from its natural position. As occurring most frequently in early pregnancy, the chief cause of retroversion must be an unduly distended bladder, which may gradually raise the fundus of the womb from its natural inclination forwards, and cause it to assume more nearly a perpendicular position; then the still further increase in the size of the bladder from accumulation of urine, or some slight muscular exertion as in coughing, or any mechanical violence or pressure, may suffice to throw the fundus of the womb still further backwards and downwards, till it is fast secured beneath the promontory of the sacrum. This result may come on suddenly and be immediately made known by very serious and painful and even alarming consequences. Or it may be much more gradual in its onset, and for a while unsuspected in its nature. It is evident from the consideration

of the inclination forward of the fundus of the womb in its natural position, that it can be made to assume such an inclination as to render it possible for it to be thrown backwards and downwards, only by some mechanical influences, and by such mechanical method it must be replaced; and the more especially since the sacral promontory presents such decided structural hindrances towards its restoration.

The Uterine Elevator, for Retroversion.—This instrument, of which an accurate representation is given below, is composed of an ivory ball, a steel rod and an ebony handle. The diameter of the ball is about five-eighths of an inch; the rod, seven inches in length, and curved as in the cut, is firmly inserted into the ball at one extremity, and into the handle at the other. Originally designed by the writer and constructed for him, for use in retroflexion or retroversion of the uterus, this little instrument has been found capable of affording very valuable assistance in such cases.



The very unsatisfactory manner in which these displacements have generally been managed by physicians, has led the writer to adopt a new and very simple method of treatment, and to offer it to the profession in all such cases, when an operation or mechanical interference is necessary. And for the following reasons:

1st. It is less painful and less disagreeable to the patient.

2d. It always insures a more perfect replacement of the organ, which, consequently, is less liable to relapse.

3d. This plan will be found successful, when all others adopted by skilful and experienced physicians have failed.

4th. This plan will succeed in cases in which it has hitherto been deemed necessary to produce abortion, in order to replace the retroverted uterus. In these identical cases replacement is readily effected by this method, and pregnancy continues until the full term of gestation.

As soon as a case of this form of displacement is clearly diagnosed,

if the urine or feces are retained, the usual means should be at once adopted for their evacuation. The patient should then be placed on the bed, near its edge, upon her knees and elbows, so that the force of gravity may assist in the reduction. The ball of the instrument, well lubricated, is to be brought to the anus, with the convex surface of the rod upwards, then gently pressed till within the sphincter; when the handle should be slightly elevated, so as to bring the ball against the anterior wall of the rectum. The instrument is now to be firmly and carefully pressed up the rectum, when the ball will elevate the fundus,—care being taken to raise the handle of the instrument more and more as progress up the rectum is made; and presently the uterus will regain its normal position immediately posterior to the symphysis pubis.

In cases of long standing,—and the writer has recently replaced one of fifteen, and another of thirty years' continuance,—the reduction is not so quickly or so easily effected. The ball, engaging and partially elevating the fundus, will slip over and pass above it. The instrument must then be sufficiently withdrawn to engage it again; and, if necessary, the operation should be repeated, until the work is proved to have been entirely completed by the instrument's meeting no obstruction as it is pressed with some degree of firmness against the anterior wall and so passed up the rectum.

After the reduction is effected, the patient should be kept in a recumbent position, for a longer or shorter time—from two to twelve days, according to the more or less recent nature of the case; that the womb may become accustomed to its position: such remedies being administered in the mean time as may be indicated. The principal of these are **Nux, Belladonna, Sepia, Sulphur, Calc. carb., Lycopodium, Calc. phos., Kali carb.** We give, for each of these medicines, the principal indications; each symptom being a *key-note*, which may be found a reliable guide. These, and other remedies which may be indicated in particular complications of retroversion, may be found at the latter part of this chapter, arranged in alphabetical order, under the general head of *Uterine Displacements*.

The Medical Treatment of these various forms of Uterine Displacement, will depend in a great measure upon the selection of remedies according to their principal characteristics and to the corresponding characteristics and constitutional symptoms of the individual cases. For this reason we have combined in one *schema* the principal remedies for all the various displacements; believing that

each variety and case of this disease will thus lead to its own appropriate remedy. The uterus is held in its proper position in the centre of the cavity of the lesser pelvis, and in a line with the axis of the superior strait, simply by the round ligaments and a double fold of the peritoneum. When in a healthy state, the round ligaments hinder its retroversion. While the peritoneum, which covers its superior three-fourths anteriorly and its entire posterior surface, serves principally to prevent it from sinking down into the vagina, and at the same time assists also in preventing retroversion. Thus it is very plain that the womb cannot become displaced so long as the peritoneum and round ligaments are in a normal condition. And these ligaments can only lose their normal condition in connection with other disorders of the general system. Hence the remedies below,—or others which may be called for in special cases, as they are indicated,—by restoring the normal condition of these appendages,—will cure all uterine displacements, when no mechanical obstruction, such as is necessarily present in complete prolapsus or complete retroversion, intervenes. These appendages are usually relaxed in consequence of some constitutional ailments, which are shadowed forth by the symptoms indicating the proper remedy. The right interpretation of these symptoms, and the consequent administration of the corresponding remedy, will usually be followed therefore by a *radical cure.*

The practice of applying pessaries, or uterine supporters of any kind, is one which belongs to the principles of Allopathy, and is rapidly becoming obsolete. A few years more, and all these barbarous appliances, as useless and degrading as they are disgusting to the female sex, will be finally laid upon the same mouldy and musty shelves with the cups and the blisters, the leeches, the lancet and the actual cautery!

There is scarcely any remedy in the whole Materia Medica that may not be found useful in these displacements.

Aconite. If the prolapsus has occurred suddenly and there is in consequence great inflammation of the parts, with burning pain as if from hot coals; excessive sensibility to the least touch; bitter, bilious vomiting; anguish and cold perspiration, or hot and dry skin; fear of death.

Ammo. mur. A very characteristic symptom is discharge of a quantity of blood from the bowels at every catamenial period. During the catamenia the discharge is more profuse at night.

Arnica. Where the prolapsus has been caused by a concussion, and a bruised sore feeling remains. She cannot walk erect on account of a bruised, sore feeling in the uterine region.

Asterias rubens. Sensation of pressure on the lower abdominal organs, impeding locomotion. General feeling of distress in the womb, as though something were pushing out.

Aurum. Heaviness in the abdomen, with icy coldness of the hands and feet. Drawing pain at the pubes. Quarrelsome disposition. Melancholy; and thoughts continually running on self-destruction.

Belladonna. Pressure as though all the contents of the abdomen would issue through the genital organs. This is particularly felt early in the morning. Sensation of heat and dryness in the vagina. Drawing pain in the whole circumference of the pelvis. Pains in the pelvic region which come on suddenly and cease as suddenly. Or feeling in the back as if it would break, hindering motion. Suppression of stools and of urine.

Bryonia. Pinching and uneasiness in the distended abdomen, as if the menses would appear. Frequent bleeding from the nose, when the menses should appear. Constipation of hard, dry stools, as if burnt. Lips parched and cracked, and thirst. She desires to keep still, she feels so much better.

Calc. carb. This remedy is very much indicated in pale, leucophlegmatic temperaments. She feels a sort of inward coldness. The least exposure to cold air chills her through and through. She feels as if she had on cold, damp stockings, continually. She has *vertigo on going up stairs;* and she is often all out of breath also, she has to sit down even before she reaches the top. The menses are too frequent and too profuse; the least excitement will often cause their return. Heaviness and painful weight in the limbs and great fatigue on walking. Constant aching in the vagina.

Calc. phos. When every cold causes rheumatic pains, in the joints and in various parts of the body. This is a positive indication; and when this occurs, the exhibition of Calc. phos. will at once remove the rheumatic affection and prevent the reappearance of the uterine displacement.

Cantharis. Burning in the vulva and violent itching in the vagina. Almost constant desire to urinate, with cutting, burning and passing of a few drops of urine sometimes bloody; sometimes followed by a discharge of bloody mucus.

Carbo animal. Great languor in the thighs, particularly before and during the menses. The menstrual function seems to exhaust her

remarkably, so that she is hardly able to speak during its continuance.

Chamomilla. Frequent pressure towards the uterus, like labor pains, with frequent desire to urinate,—often passing large quantities of colorless urine. Frequent discharge of coagulated blood, with tearing pain in the veins of the legs and violent, labor-like pains in the uterus. Contrary to her condition in health, she is always out of humor,—particularly at her menstrual periods, when she is headstrong even unto quarreling. She can hardly speak a pleasant word, she has to restrain herself in order to do so.

China. In cases where the prolapsus and attendant symptoms were superinduced by losses of fluids, particularly of blood. She has much ringing in the ears; painless lienteria and leucorrhœa. A sense of distension in the abdomen which is not relieved by eructations.

Cocculus. Much paralytic pain in the small of the back, rendering walking quite difficult and sometimes impossible. Irregularity of the menses, and at their appearance, nausea and faintness.

Colocynth. A constant heat and dragging pain in the vagina. Chronic and repeated attacks of colic, drawing her double, with great restlessness and lamentation.

Conium. *Induration* and *prolapsus,* at the same time. Much nausea and vomiting. Vertigo, particularly when in a recumbent position and turning over. Intermittent flow at every emission of urine. The breasts become sore, enlarged and painful at every menstrual period. Principally with Conium, fifteen years ago, I cured permanently a case of prolapsus of six years' standing, in which all pessaries and abdominal supporters,—even that of the celebrated Mrs. Betts,—had failed to keep the uterus within the vulva. *The prolapsus was complicated with induration, ulceration and profuse leucorrhœa.* This lady has since borne several children, and has never experienced a return of the malady. All cases of prolapsus can be cured by the use of the indicated Homœopathic remedy.

Dulcamara. The patient has always, as a forerunner of the menses, a rash upon the skin. All her symptoms are aggravated when the weather suddenly becomes colder,—especially if the weather is damp.

Ferrum. The patient is weakly and complaining, yet her face is fiery red. The menses intermit two or three days and then return. Previous to the menses she has stinging headache, ringing in the ears and discharge of long pieces of mucus from the uterus.

Graphites. The menses always delay. They are too pale and

scanty. Before and during the menses, cough throughout the day, fatiguing the chest; no cough at night. Constipation of large, difficult, knotty feces, and itching blotches on various parts of the body, from which oozes out a watery, sticky fluid. Morning sickness during the menses. Pain in the epigastrium during the menses, as if every thing would be torn in pieces.

Ignatia. Menses scanty, black and of a putrid odor. Cramp pains in the uterus, with lancinations. A very weak, empty feeling at the pit of the stomach, with sighing respiration. She is full of suppressed grief, with which she seems to be weighed down.

Kali carb. Very much heavy, aching pain in the small of the back. Pain like a weight in the small of the back, during the menses. Violent itching of the whole body during the menses. Stitching pains in and about the uterine appendages. Much distress in the abdomen for about an hour or two previous to an evacuation of the bowels.

Kali bi. More particularly indicated in fat, light-haired persons. Often where the prolapsus seems to have been produced by hot weather. Especially suitable if there be also leucorrhœa so tough as to be drawn out in long, ropy strings.

Lachesis. Pain in the uterine region, as if swollen. The uterus does not bear contact, and has to be relieved of all pressure. The patient feels, constantly, as if she must lift her dress from the abdomen. Suitable where the displacement occurs in connection with (or in consequence of) change of life. Violent pain of long standing in the right groin, extending either towards the genital organs or upwards towards the liver or chest. Painful oblong swelling and induration in the right ovarian region,—aggravated by moral emotions, rapid movements, prolonged walks and over-exertion.

Ledum. Abundant leucorrhœa; pale face; abundant urination, even at night. Ledum is especially indicated where the sufferings are greatly aggravated by warmth,—as in bed or over the register. Great sensation of coldness all through her; she cannot keep warm; she appears deficient in vital heat.

Lycopodium. Sensation of pressure through the vagina, on stooping. Sensation of great dryness in the vagina. Much borborygmus especially in the left hypochondrium. Much red sand in the urine. Terrific pain in the back, previous to every urination,—with relief as soon as the urine begins to flow.

Magnesia mur. Hysterical complaints and spasmodic turns. Much

weakness in the limbs. Constipation of large difficult stools, which crumble as they pass the verge of the anus. Poor sleep.

Mercurius. During every menstrual period, anxiety, red tongue with dark spots and burning, salt taste in the mouth, sickly color of the gums and the teeth are set on edge. This remedy is indicated in prolapsus of the vagina, which see. It is a very valuable remedy for all displacements, where it is indicated. Cold and clammy sweat upon the thighs every night.

Nat. mur. Pressing and pushing towards the genital organs every morning, she had to sit down to prevent prolapsus uteri; she awakens every morning with violent headache, which lasts a long time. Constipation with sensation of contraction of the anus. Difficult expulsion of stool, fissuring the anus, with flow of blood leaving a sensation of much soreness in the anus.

Nitric acid. Violent pressing as if everything were coming out of the vulva, with pain in the small of the back, through the hips and down the thighs. Very painful stools, with profuse discharge of blood, the pain lasting a long time and exhausting her.

Nux mosch. *Enormous distention of the abdomen* after every meal. Greatly troubled with dryness in the mouth and throat while sleeping. Great pressure in the back from within outwards, during the menses.

Nux vom. Prolapsus uteri from straining by lifting. Pressure towards the genital organs early in the morning, in bed or during a walk, with a sensation of contraction of the abdomen. Constipation of large, hard, difficult stools, or small stools with frequent urging. Dyspepsia from high living. Cannot sleep after three A. M. Pain in the small of her back preventing her from turning over in bed. Frequent urination; she passes little and often, with much burning pain. The prolapsus of long standing is often accompanied with dry cough and a sense of constriction around the hypochondria.

Opium. Among the weaknesses, even of long standing, produced by fright, prolapsus uteri is one,—which is amenable to Opium, given very high. Also in constipation of many years continuance, if characterized by hard black balls, in connection with prolapsus, Opium, high, will be found to be the remedy.

Petroleum. This remedy will be indicated in cases where the patients have been reduced in strength; so that the prolapsus seems to result from a chronic diarrhœa which occurs only in the day-time.

Phosphorus. Great sense of weakness and emptiness in the abdomen. Great sense of heat running up the back. A long narrow,

nard, dry stool, very difficult to expel. Sour stomach; belching up of great quantities of wind after eating.

Platina. Painful sensitiveness and continual pressure in the mons veneris and internal organs, with internal chills and coldness. Scanty stool and difficult expulsion on account of its sticking to the anus and rectum like soft clay.

Podo. pelt. Prolapsus uteri particularly following parturition. Prolapsus ani, as an accompanying symptom. The stools are very frequent, several daily; but they are natural, and yet exhausting stools.

Pulsatilla. Pressure in the abdomen and small of the back, as from a stone, with disposition of the lower limbs to go to sleep when sitting, and attended with ineffectual desire for stool. Menstrual colic with great restlessness,—tossing in every possible direction. Mild, tearful, yielding disposition. She cries at everything, is sad and desponding. Very bad taste in the mouth, in the morning; nothing tastes good. She is pale and feeble.

Rhus tox. Particularly suitable for very rheumatic persons,—worse before a storm and in damp weather. She cannot lie long in any one position, but must shift about to obtain relief,—the relief lasts but a short time, when she must change again. Walking at first is difficult, but as she proceeds she walks better and better. The Rhus in such cases will cure both the rheumatism and the prolapsus.

Sepia. Painful stiffness apparently in the uterus. Pressing in the uterus, oppressing the breathing; sensation as if every thing would come out of the vagina, she had to cross her limbs to prevent it. Prolapsus of the vagina and uterus. Sensation of weight in the anus not relieved by an evacuation. Great sense of emptiness at the pit of the stomach. The urine deposits a clay-like sediment, which it is difficult to remove from the chamber.

Secale corn. Prolonged bearing down and forcing pain in the uterus. She is of a thin, scrawny formation.

Silicea. A pressing-down feeling in the vagina. Great constipation before and during the menses. Prolapsus in consequence of myelitis. Very difficult stools being an accompanying symptom.

Stannum. Great anguish and melancholy the week previous to the menses, ceasing as soon as the menses make their appearance. Old, neuralgic headache is an accompanying symptom. Each attack begins lightly and increases gradually to its highest point, from which it is equally long in declining. The larynx and chest give out in

talking, singing or reading aloud: such exercise induces so great weakness that she is compelled to desist.

Staphysagria. A feeling of weakness in the abdomen as if it would drop. She is weakly and sickly, very sensitive to impressions; her teeth ache much, and have black streaks running through them.

Sulphur. Weak feeling in the genital organs. Burning in the vagina, she is scarcely able to keep still. She finds it difficult to walk ereet; she must stoop on account of debility. She sleeps a heavy, dead sleep, so as to exhaust her; or she sleeps lightly and awakens frequently, and this weakens her. She feels very weak and faint from eleven till twelve in the forenoon; she must have her dinner. Heat on the crown of her head; cold feet; hot and frequent flushes. Terrible sick headaches, which weaken her.

Thuya. A terrible distressing pain occurs in the left iliac region when walking or riding; she must lie down to get relief. The same pain occurs during her menstrual periods, and extends into the left groin.

Veratrum. Dysmenorrhœa with vomiting and purging, or simply an exhausting diarrhœa with cold sweat, in cases of prolapsus uteri. One dose of Veratrum is often sufficient to cause the succeeding periods to be comfortable and to cure the prolapsus.

Zinc. During the menses, heaviness of the limbs, with violent drawing around the knees, as if they would be twisted off. Again, she is never well except during the menstrual flow. At other times she has boring pain in the left ovarian region, which is only partially relieved by pressure.

CHAPTER TWELFTH.

DISORDERS OF THE UTERUS.

ACUTE AND CHRONIC INFLAMMATION; UTERINE CATARRH.

THERE are two forms of disease which may be termed inflammation of the uterus. The *first* is the subacute form, or inflammation of the mucous lining membrane of the uterus alone. This is analogous to catarrhal inflammation of the vagina; and like that, may be either acute or chronic. The acute variety is distinguished by the names *endometritis* and *blennorrhagia;* while the chronic form is more generally termed *uterine catarrh.*

The *second* variety of the inflammation of the uterus is the inflammation of the deeper tissues, or parenchyma of the organ, and is commonly called *metritis.* This may be acute, active inflammation, with more or less congestion,—or it may be chronic, with a lower but much more persistent grade of inflammation. In either form the cervix is usually the principal seat of the disease; and the final tendency of both acute and chronic inflammation of the deeper tissues of the womb is generally towards ulceration; as that of the corresponding inflammation of the mucous coat, is to blennorrhagia or uterine catarrh.

The three different conditions of female life,—the virgin, the mother during the period of child-bearing, and subsequent to that period,—are exposed in various degrees and from various causes, to these different forms of uterine inflammation. The catarrhal variety is the one to which the virgin uterus is most liable; but even this form is comparatively rare in such persons, especially while yet young. The various accidents and changes incident to the period of child-bearing, are promotive of inflammation of the substance of the womb. While the functional and constitutional disturbances which attend the cessation of the menses, may be considered about equally instrumental in promoting those forms of inflammation of the uterus which ultimate themselves in leucorrhœa, and those which tend to result in induration or in some general or special form of ulceration.

ENDOMETRITIS; BLENNORRHAGIA; ACUTE SUPERFICIAL METRITIS.

The acute form of inflammation of the mucous lining membrane of the uterus, thus variously named, is ushered in by some precursory symptoms indicating a general febrile condition, and by others which point to the local development of the disorder. Thus we find general debility, headache, feverishness and even chilliness, followed by severe pains in the pelvic region,—"very low down," as it is sometimes expressed,—which often extend into the surrounding parts. In the more violent cases, the inflammation involves the vagina, and may even show evidences of its presence, in the swollen and sensitive condition of the mucous surfaces of the external parts. This is a true catarrhal inflammation, and the catarrhal discharge of uterine leucorrhœa may make its appearance in a very few days or even hours after the first onset of the precursory and inflammatory symptoms.

"At first the discharge is serous and bloody, but it soon becomes thick, yellowish, or greenish, ropy, fluid or purulent; after drying up, it leaves yellow or greenish stains on the linen and stiffens it as if it had been starched; afterwards the discharge becomes whiter, milky and mixed with transparent pieces of thick mucus. If this change of the discharge sets in, the inflammatory condition is almost entirely dispersed,—which may take place at the end of thirty-six or forty days, or even sooner, when the discharge becomes chronic, or reappears again at the time of the menses, after sexual excesses, over-eating or drinking, or even without any apparent cause. As a general rule, the more acute the inflammation the thicker and darker the discharge. In uterine leucorrhœa the discharge has always an alkaline reaction,—while vaginal secretions always react like acids. Examined by the microscope, the discharge looks homogeneous, thick, containing globules resembling those that float in pus or healthy mucus.

"As regards the course of this affection, we may distinguish four periods. The first period sets in with a rather slight itching at the vulva, in the interior of the vagina and sometimes in the uterus, with a sense of heat in the uterus, pains in the small of the back, and in the back; increase of the sexual desire and frequent urging to urinate. In the second period, which may set in about the third or fourth day, a serous discharge takes place, which is at first scanty, but soon becomes more profuse, assumes a greenish or yellowish, rather dark appearance and is accompanied with increased burning

urination. In the third period, which generally commences about the ninth day, the inflammation becomes less intense, the discharge is still very copious, thickens, becomes more and more whitish and then decreases with diminution of flow of urine. In the fourth period, when the disease inclines to become chronic, the discharge disappears and reappears again, repeatedly and frequently without any known cause."—*Jahr.*

As already remarked under the head of vaginal leucorrhœa, some constitutions are much more predisposed to the catarrhal form of disease than others; that is, in some it will make its appearance under the influence of provoking causes, which in others would have no such effect. Thus all the influences, which may directly or indirectly lead to acute inflammation of and consequent catarrhal discharge from the mucous lining membrane of the womb, may be regarded as either predisposing or provoking. Many of these causes of either class, are identical with those which result in acute inflammation of the mucous lining membrane of the vagina. And indeed very many cases of this form of metritis are nothing more than the extension of the mucous inflammation from the vagina to the uterus. This is an extension of organic disease from below upwards, from the vagina to the uterus;—there is also a very numerous class of cases of acute endometritis, which result from extension of organic functional disease from above downwards, as from the ovaries to the womb. This will be more fully explained in connection with the disorders of the ovaria and the consequent menstrual irregularities.

But as very many of these morbid influences are so gradually developed as to result in chronic mucous inflammation or uterine catarrh, without evincing any very noticeable acute symptoms, we reserve a more particular enumeration of the causes of inflammation of the mucous coat of the womb in general, till, in the succeeding section, we come to the consideration of the chronic variety.

In the diagnosis of acute endometritis or uterine blennorrhagia, care must be taken not to mistake for this idiopathic disease, any morbid appearances or consequences resulting from menstrual engorgement or from accidental injuries or pressure. For although in either of these latter cases the irritation and consequent discharge may simulate a true blennorrhagia,—still, as lacking the constitutional permanency of the latter disease, they will, in most cases, readily subside on the abatement of the immediate provoking cause. The discharge itself which results from the inflammation of the mucous surfaces of the cervix and fundus uteri, is easily distin-

guished by its alkaline reaction from the slightly acid secretion poured out by the vaginal membrane. But while in ordinary cases of uterine leucorrhœa, the cervix uteri constitutes the exclusive seat of the disease,—in the more severe cases, both acute and chronic, the inflammation extends also to the fundus and at the same time invades also the mucous coat of the vagina. And in fact very few cases of leucorrhœa are met with in which the vagina fails to participate. So that in general the secretions which appear in leucorrhœa, are found to be composed of the products of both vaginal and uterine mucous inflammation.

For the purpose of Homœopathic treatment, the exact diagnosis between vaginal and uterine leucorrhœa is less essential; since the remedies are to be given in accordance with all the symptoms, both attendant and constitutional. And as we shall presently see, these latter,—if they indicate the extension of the inflammation and consequent discharge throughout a smaller or a larger portion of the mucous surface of the generative apparatus,—at the same time unerringly guide to the selection of the appropriate remedies. And thus it happens, that whether the view we may adopt of the exact pathological condition of these interior organs be perfectly correct or not, if we but select the remedy which corresponds to all the symptoms, and especially to the subjective and sensational as prior and superior to the objective and structural,—we shall most certainly witness the recovery of our patient. For physiology no more truly precedes pathology, than do the subjective symptoms precede the objective,—and the sensational symptoms anticipate the structural disorganizations and even the functional derangements. And herein is involved the entire philosophy of the Homœopathic treatment, and the secret of the Homœopathic cure. For with such means as alone can do it, the axe is laid at the root of the evil,—*fons et origo mali*,—and instead of beating about the bush, and by rude instruments lopping off the branches that are ready to fall, in hope of arresting the progress of decay, we follow the clue given us by nature herself. Guided by these *cries for help*, we follow the physiological, sensational and vital indications, and acting as it were "under instructions" of the law of the similars, we are enabled to assist nature in her struggle; instead of weakening her by fighting,—inspired by zeal without knowledge,—the phantom of an imaginary disease. We recognize the impurity of the stream, this is pathology,—or the result of disturbed physiological action. But to attempt to purify the fountain,—that is to cure the real disorder itself,—by correcting the impurities of the

stream, is the futile method pursued by the chemical, the pathological and the Allopathic school, by all in fact who practice on the principle *contraria contrariis*. In the Homœopathic school, on the contrary, we seek to assist nature,—and under the guidance of the natural, vital and truly physiological law of the similars, we learn how to cleanse the streams by purifying the fountain;—and in the Homœopathic medicines we are furnished with the only possible and efficient means for the only sufficient end, the complete restoration of health.

Chronic Endometritis, Leucorrhœa, or Uterine Catarrh.

In this chronic form of inflammation,—into which the acute inflammation of the mucous lining membranes of the uterus is most apt to subside,—the symptoms are less violent and less strongly marked. Nor in fact would its presence be suspected in all cases, were it not for the accompanying discharge. In chronic uterine leucorrhœa, the discharge is usually less profuse than in that which attends the first onset of the acute inflammation. And as the acute catarrhal inflammation is the form which principally attacks the young, especially the unmarried,—so the chronic form oftener appears in those who are older, who are married, who are bearing, or who have borne children, or who have passed the change of life.

The uterine catarrh, which forms the principal symptomatic indication, as it is the chief consequence of chronic endometritis, varies in quantity in different persons, and at different times in the same individual. Like vaginal leucorrhœa, it may be so scanty as scarcely to become perceptible externally,—or it may be so profuse as to require the application of several napkins daily. The discharge varies also in color, character and general appearance and effects. It may be colorless and semi-transparent; or it may assume a greenish-brown or even darker hue, as if, in the severer forms, it were mixed with blood. In the same manner its character and quality may be very different in different persons, or in the same individual at different times. Thus it may be mild, bland and unirritating,—or it may be acrid and so cause excoriation of the labia or even of the skin of the surrounding parts. So also in its direct effects, it may vary in a remarkable manner. When very profuse it becomes rapidly exhausting. And while in the first instance due to some dyscrasia, some morbid influence or diseased condition of the system, it still further aggravates the general ill-health by the profuseness of its flow as well as by the important functional derangements, which sooner or later follow in its course.

The *causes of Uterine Leucorrhœa* may be divided into two classes. The first may be grouped under the head of constitutional predisposition. And in this class also we include all those cases which result from the influence of other forms of constitutional or functional disorders,—such for example as menstrual irregularities or organic displacements. From causes and morbid influences of this nature, arise the great majority of the cases of uterine leucorrhœa, which appear either in the young or in older, unmarried females.

The second class of causes of chronic endometritis, we may term the provoking or special causes. These are most numerous in the married state,—as arising from the great excitements and sudden and extensive organic changes to which the uterus and its appendages are constantly liable.

The *constitutional predisposing causes* are in general similar to those which result in chronic vaginal leucorrhœa. They are such as are implied in the terms leucophlegmatic temperament or scrofulous diathesis. Persons who come under this description may be thin or quite fleshy. In either case such persons are remarkably prone to suffer from the least exposure to cold damp weather; and the immediate consequence of such suffering and exposure, appears in the form of some blennorrhœa. These two circumstances, of sensitiveness to the cold dampness, and blennorrhagic discharge in consequence of it,—are characteristics of this particular temperament. This constitutional predisposition is the one which most frequently leads to leucorrhœa,—whether vaginal or uterine, or both,—in young girls.

But after the accession of puberty, the same constitutional influences may, and indeed constantly do, induce leucorrhœas,—but in a less direct manner. The principal diagnostic characteristic of uterine leucorrhœa, is its relation to menstruation. Those forms of leucorrhœa which appear to be unaffected by the menstrual function, being supposed to be purely vaginal,—while those which are greatly aggravated either immediately before, or during, or immediately after the menses or menstrual period, are considered to belong more especially to the uterus.

And there are several varieties of uterine leucorrhœa considered with reference to the menstrual function. Thus in young females of a delicate constitution, the accession of the catamenia may be preceded by two or three monthly attacks of leucorrhœal discharge. This may be considered as a forerunner, and a truly uterine, if not a vicarious secretion. Again in many cases of suppressed menses the proper menstrual flow is replaced by a leucorrhœa which appears regularly

at the proper monthly periods, continues the usual number of days and perhaps discharges about the quantity which would correspond to the natural menstruation of the female. Where the menses themselves are normal and regular, a leucorrhœa may appear in the intervals, which will greatly increase in quantity immediately before the appearance, or immediately after the subsidence of the menses. In some of these cases the leucorrhœa encroaches more and more upon the menstrual flow, until it finally supersedes it altogether. And in the severer forms of this leucorrhœa, it may produce menorrhagia,—or true uterine hemorrhage,—which like the former variety of leucorrhœa just mentioned,—may also occupy the intervals and increase just before and just after the monthly periods. Again, as at the accession of the menses, so also about the time of the cessation of the menses, the few last periods are often marked by the occurrence of leucorrhœal discharges either alternating with, or appearing in the place of the usual menstrual flow. In many persons of a chlorotic temperament, leucorrhœa replaces the menses entirely. And finally after child-bearing, or after abortion, a white, inodorous discharge will sometimes make its appearanee and continue for months. In the case of spontaneous abortions this discharge will either tend to prevent subsequent conception, or where that takes places, it will predispose to successive abortions. But this result will not be so much due to the discharge itself,—although apparently its immediate cause, as to the morbid condition of the womb which produces the discharge.

Those forms of leucorrhœa, which appear under the above-mentioned conditions, may be considered as arising from the uterus; although in the great majority of cases, the uterine leucorrhœa is complicated with a similar discharge from the vagina. And those disorders of the vaginal mucous membrane, which thus induce uterine leucorrhœa, may also be included among its constitutional causes. And the same may also be said of the leucorrhœas of the uterus which result from displacements of this organ.

Among the *special* or provoking causes of chronic endometritis and uterine leucorrhœa, are to be ranked principally those influences which are incidental to the married state. Of these, excessive sexual intercourse is perhaps the most frequent and efficient. Similar in effect are the cold water and other injections, resorted to by many for particular purposes. Child-bearing, abortions, and in fact all other influences capable of producing acute inflammation of the mucous coat of the womb and consequent acute catarrhal discharge, are also to be classed as causes of similar chronic disorders. And

this is equally true whether we consider the less violent and longer continued action of such influences to have resulted in a chronic inflammation,—or whether this latter form of disease be but the continuation of the acute inflammation itself. And in general, all those influences,—mechanical, functional or sympathetic,—which disturb the womb, without exciting inflammation of its deeper tissues, may result in this subacute mucous inflammation, of which the leucorrhœal discharge is at once the evidence and the consequence.

Aconite is the only remedy in those forms of this disease, where there is much irritability of the system with fever and *fear*, thirst and vertigo in rising or setting up.

Aesculus hippo. Leucorrhœa with *lameness* in the *back, across the sacro iliac articulations*, and great fatigue from walking, *because that part of the back gives out in walking* even but a little way.

Alumina. Where the leucorrhœa occurs either before or after the menses; it is acrid and profuse. Relieved by cold washes. Transparent and mucous, running down to the heels in large quantities.

Ambra grisea. Leucorrhœa only at night. Stitches in the vagina before the discharge. Leucorrhœa of bluish white mucus.

Ammo. c. Violent acrid leucorrhœa, sometimes burning watery discharges from the uterus.

Ammo. mur. Leucorrhœa with distention of the abdomen. Leucorrhœa like the white of an egg after a pinching pain around the naval. Brown slimy leucorrhœa, after every discharge of urine.

Anacardium o. Great loss of memory. Leucorrhœa with itching and soreness.

Anti. crud. Discharge of an acrid water from the vagina which causes a sensation of biting down along the thighs.

Arsenicum. Leucorrhœa whilst standing and emitting flatulence; leucorrhœa thick and yellow, corroding the parts which are touched by it.

Baryta carb. *Sanguinolent* mucous leucorrhœa, with beating of the heart, pain in the back, and weakness even unto fainting.

Belladonna. Leucorrhœa with colic; the pains come suddenly and finally cease as suddenly as they came.

Borax v. White albuminous leucorrhœa, with a sensation as if warm water were flowing down.

Bovista. Leucorrhœa after the catamenia, like the white of an egg, coming away whilst walking; or it may be yellowish, green and corrosive.

Calcar. carb. Leucorrhœa like mucus or *like milk;* it may be discharged more whilst urinating; and there may be heat and itching of the vulva.

Cantharis. Discharge of bloody mucus after urinating.

Carbo animal. Watery leucorrhœa, particularly when walking or standing. It may be burning or biting; and may stain the linen yellow.

Carbo veget. Profuse leucorrhœa, only in the morning when rising. Milk-colored;—excoriating the parts. It may be thick and yellowish, or white. Rawness and soreness of the vulva during the leucorrhœa.

Causticum. Leucorrhœa particularly at night.

Chamomilla. Yellowish, smarting leucorrhœa, particularly after a meal.

China off. Leucorrhœa before the menses with painful pressing towards the groins and anus. Bloody leucorrhœa, with occasional discharge of black clots, or fetid, purulent matter, with itching and spasmodic contraction in the inner parts.

Cinnabar. Leucorrhœa causing during its discharge a pressing in the vagina.

Coccus cacti. Leucorrhœa consisting of mucus, preceded by drawing and thrusting pains in the inguinal, vesical, and pubic regions.

Cocculus i. Scanty, irregular menses, with leucorrhœa between the periods; or leucorrhœa instead of the menses. Leucorrhœa like serum, mixed with a purulent, ichorous liquid.

Coffea. Profuse discharge of mucus and sometimes blood from the genital organs which are very sensitive and itch voluptuously.

Conium m. Leucorrhœa of white acrid mucus, causing a burning or smarting sensation. The leucorrhœa may be milk-colored and painful. Excoriating leucorrhœa.

Creosote. Leucorrhœa with great debility, particularly of the lower extremities. It may be mild, or acrid causing much itching.

Drosera. Leucorrhœa with labor-like pains.

Ferrum. Leucorrhœa like watery milk, smarting and corroding when first appearing.

Graphites. *Profuse leucorrhœa* is the great characteristic for Graphites; also great weakness in the small of the back.

Hepar s. c. Leucorrhœa with smarting of the vulva.

Ignatia. Violent, labor-like pains, followed by a purulent corrosive leucorrhœa.

Iodine. Leucorrhœa, corrosive even of the thighs and the linen. The leucorrhœa is aggravated at the menstrual period.

Kali bi. Leucorrhœa which may be drawn out in long strings. It is often yellow, stiff and ropy.

Kali carb. Yellowish leucorrhœa, with itching and burning in the vulva.

Kali hyd. Thin, watery, or acrid, corrosive leucorrhœa, with itching in the vulva.

Lachesis. Leucorrhœa from three to eight days before the menses, copious, smarting, slimy, stiffening the linen and staining it green; also in cases where the menses are too short and feeble, although they appear at the regular time.

Lycopodium. Profuse leucorrhœa at intervals; it may be milky; it may be blood-red, particularly before the full moon. The great characteristic is, *a cutting pain,* attending the lecuorrhœa, *across the hypogastrium from right to left.*

Magnesia mur. Leucorrhœa immediately after every stool; certainly if the stool be hard and crumbling as it escapes from the verge of the anus. Leucorrhœa at intervals, followed immediately by a discharge of blood.

Manganese. In females whose bones are affected in a manner to be very sensitive to the touch.

Mercurius. Leucorrhœa always worse at night; it may be itching,—burning,—smarting,—corroding,—with sensation of rawness,—but the symptoms are always worse at night. Discharges of flocks, pus and mucus as large as hazel nuts.

Mezereum. Albuminous leucorrhœa; chronic and malignant.

Muriatic acid. Leucorrhœa with exceeding soreness of the anus, either from piles or from fissures. She cannot bear the slightest touch upon the anus,—which often itches violently and is not relieved by scratching.

Nat. carb. Leucorrhœa yellowish; putrid leucorrhœa,—ceasing after urination.

Nat. mur. Leucorrhœa early in the morning, after colic; it may be transparent, white thick mucus. Greenish leucorrhœa, particularly when walking.

Nitrum. White leucorrhœa with lameness in the small of the back.

Nicolum. Profuse, watery leucorrhœa, particularly after urinating.

Nitric acid. Leucorrhœa consisting of mucus which can be drawn

out; flesh-colored; leucorrhœa of greenish mucus; cherry brown, and fetid leucorrhœa.

Nux mosch. Leucorrhœa of women who always awaken with a very dry tongue.

Nux vom. Fetid leucorrhœa tinging the linen yellow.

Petroleum. Profuse leucorrhœa every day; also with lascivious dreams at night.

Phosphorus. Smarting leucorrhœa, drawing blisters. Profuse leucorrhœa, with great sense of weakness in the abdomen. The leucorrhœa is often corrosive.

Phosphoric acid. Profuse, yellowish leucorrhœa, with itching, some days after the menses. *Leucorrhœa after the menses.*

Platina. Albuminous leucorrhœa, only in the daytime, particularly in women who have difficult stools from the glutinous nature of the excrements.

Plumbum. Leucorrhœa with a continued sense of drawing in from the abdomen to the back.

Podophyllum. Leucorrhœa consisting of thick transparent mucus. Leucorrhœa with constipation and bearing down in the genital organs.

Prunus spinosa. Leucorrhœa making the parts sore, and tinging the linen yellow.

Pulsatilla. Burning leucorrhœa, thin and acrid. Milky leucorrhœa, with swelling of the vulva, particularly after the menses. Leucorrhœa of thick white mucus, especially when lying; or before and during the menses, with cutting in the abdomen.

Ranun. bulb. Leucorrhœa at first mild, afterwards acrid and corrosive.

Ruta g. Corrosive leucorrhœa after suppression of the menses.

Sabina. Yellowish, ichorous, fetid leucorrhœa and painful discharges of fetid blood every two weeks. Leucorrhœa after suppression of the menses, inclining to be corrosive. Leucorrhœa with itching of the pudendum.

Sanguinaria c. Leucorrhœa of the climacteric period,—it continues after the menses have ceased.

Sarsaparilla. Leucorrhœa on walking, particularly in women who have a sharp pain in the urethra at the close of urination.

Secale corn. Leucorrhœa in thin scrawny women with prolapsus uteri.

Sepia. Leucorrhœa with stitches in the neck of the uterus. Leucorrhœa with much itching in the vagina. Sanguineous-mucous,

yellowish, watery, or mucous leucorrhœa. Discharge of green-red fluid from the vagina during pregnancy. Leucorrhœa worse after urinating. Leucorrhœa like pus; like milk, flowing only in the daytime, excoriating the thighs. Profuse mucous leucorrhœa, having a fetid smell, with drawing pains in the abdomen.

Silicea. A painful smarting leucorrhœa, after taking acids. Leucorrhœa during urination. Milky leucorrhœa in paroxysms, preceded by cutting around the umbilicus.

Stannum. Leucorrhœa with great loss of strength; it may be transparent mucus; it may be yellowish.

Strontiana. Leucorrhœa while walking.

Sulphur. Leucorrhœa smarting like salt. Leucorrhœa preceded by colic. Burning and painful leucorrhœa making the vulva sore.

Sulphuric acid. Leucorrhœa of sanguineous mucus with a sensation as if the menses would appear. Milky, or transparent leucorrhœa, without sensation.

Tabacum. Leucorrhœa of serous liquid after the menses.

Tart. em. Leucorrhœa consisting of watery blood; liable to occur in paroxysms worse when sitting.

Zinc. Leucorrhœa of bloody mucus, after the menses, causing an itching. Cutting colic succeeded by leucorrhœa. Leucorrhœa consisting of thick mucus, for three days before and after the menses.

Inflammation of the Womb, Metritis.

True parenchymatous metritis, or inflammation of the deeper tissue and substance of the womb, is a disease comparatively rare. It must be distinguished from endometritis, or inflammation of the mucous coat of the womb,—which has just been described; and also from peritoneal metritis or more properly puerperal peritonitis, inflammation of the peritoneal or serous coat of the womb and peritoneum generally. This latter disorder usually arises subsequent to parturition,—and will receive attention in its proper place.

Inflammation of the womb may be acute or chronic; and in either form may attack the uterus in each of the different conditions of female life. It may be confined to the cervix uteri, as in fact it is in a great proportion of the cases, especially in the chronic form; or it may extend also to the fundus. It may be restricted to the proper tissue or substance of the uterus; or it may also involve either its serous covering, or its mucous lining, or both. Acute inflammation of the uterus is seldom seen before puberty,—never, perhaps, except

as the consequence of mechanical injury. It very seldom appears in the virgin uterus, during pregnancy, or after the change of life. It is much more common in the married state; and in connection with parturition.

The *causes* of inflammation of the womb are similar in the acute and in the chronic form; and they are here enumerated in common, to avoid repetition. Among the most frequent causes,—especially those which influence unmarried females,—may be ranked exposure to cold while menstruating, and consequent sudden suppression of the menstrual flow; and exposure to cold soon after the monthly period, when, although the menses have subsided, the womb still remains in a highly congested and excessively sensitive condition. Great physical exertion, such as walking, during the monthly period, may result in inflammation of the womb; excessive or violent sexual intercourse; the use of cold water, or astringent or irritating injections; the extension of disease from the vagina or from the ovaries; wounds, violence, or mechanical injuries of any kind; foreign bodies in the uterus; polypi, tumors or other adventitious growths, may induce inflammations of different degrees of violence in different constitutions, and in the different conditions of female life.

Exposure to cold and taking cold soon after child-bearing are the most common causes of acute metritis; and the inflammation which results in such cases,—especially if complicated with suppression of the lochial discharge,—may prove rapidly fatal. This is a much more severe and dangerous complication than suppression of the menstrual flow, since it may lead directly to uterine phlebitis.

Still another form of exposure to cold,—or rather the taking cold in another variety of cases,—deserves especial mention here, both from the frequency of the occurrence of such cases and from the almost invariably fatal nature of their termination. These are cases,—lamentably frequent in these times,—in which what is called "an operation," has been performed in the early states of pregnancy, for the purpose of inducing abortion. Here the violence offered to the parts, aggravated by exposure and over-exertion in traveling,—often unavoidable in such cases,—not unfrequently brings on inflammation, whose approach is marked by very severe chills, accompanied by intense anguish, excessive tenderness of the abdomen, rapidly increasing prostration; and followed by death, sometimes in seventy-two hours. In such cases the inflammation involves the serous coat of the womb, constituting a true peritoneal metritis of the most

violent form and of a character very closely allied to traumatic erysipelas.

Such are the formidable dangers which attend this violation of the laws of God and man. In her hour of extreme peril,—in the midst of the most intense physical suffering and distress of mind,—and in the immediate prospect of eternity,—the dismayed female confesses her own crime and reveals the name of the person, often a practicing physician, but sometimes a male or female abortionist,—who, undertaking to commit infanticide only, becomes involved in a double murder. For in the eye of the law, whoever engages in a criminal act *becomes responsible for all the consequences of his undertaking*, however little some of them may have been expected or desired.

There are men who assume the sacred profession of physician, not to save but to destroy life; who, in defiance of all human and of all divine law, strew their pathway, not with living flowers, but with the withered blossoms, the shattered wrecks and crushed remains of embryonic life—monsters in human form, fiendish ghouls, who devour little children; who live by the slaughter of the innocents; and who qualify themselves for their future and eternal state, by this life-long destruction of such as are of the Kingdom of Heaven! The murderer of a single individual we execute or seclude for life; but before such a murderer by wholesale and by profession; before such a destroyer of entire generations, human justice stands appalled, and mournfully conscious of the utter insufficiency of all human means to arrest or to punish this gigantic social evil, sadly and sternly bids the unrepentant destroyer of "these little ones" fill up the measure of his crimes, and await the dread summons of the Eternal Judge!

Symptoms.—The first symptoms which indicate the accession of acute inflammation of the womb, are similar to those of endometritis but more severe. Thus we find rigors followed by feverishness; heat in the pelvic region; deep-seated pain in the vagina; paroxysms of pains in the back, which dart through to the symphysis pubis and extend to the groins and even down the thighs. The constant pain is less severe; but aggravated by coughing, sneezing, and accompanied by a sensation of bearing down; there is also usually a painful *sense of weight in the pelvis.* These are the most prominent symptoms where the cervix is principally affected.

But where the inflammation extends to the fundus, there is also pain in the hypogastric region, which is tender to the touch. In this

case there is often a complication of the inflammation of the substance of the womb, with that of its outer or peritoneal coat. The hypogastrium is excessively sensitive,—the painfulness is greatly aggravated by the least movement or pressure upon the parts; and the febrile condition is far more general and severe. The disorder extends by contiguity or sympathy, to the neighboring organs; and there is tenesmus of the rectum,—difficult and painful micturition. The pains are of that sharp, lancinating character and aggravated by the least motion, which are so peculiar to inflammation of the serous tissues. The pulse is quick, full and hard; the skin hot and dry; the thirst may be extreme; the bowels constipated; the stomach irritable; the tongue dry and furred; and there is *often a disposition to faint, especially on sitting up.* Headache may also be present, with redness of the cheeks and flushing of the face; disposition to delirium; twitching of the tendons; and alarming collapse of the vital forces. This accession of what is called the typhoid condition, presents a formidable group of symptoms, which may appear in metritis occasioned by sudden and severe repression of the menstrual flux, with re-absorption, perhaps, of matters which should have been eliminated. In such cases the return of the menstrual flow indicates a favorable change in the condition of the patient. But the appearance of the menstrual flow, in inflammation of the uterus from other causes, whether complicated with peritonitis or not, is not regarded as a favorable sign.

The very great amount of nervous organization connected with the womb, and the intimate relation and profound sympathy of this organ with the great nervous centres, render inflammation of its substance a very grave disease. And the severe headache, vanishing of sight and even diminution of hearing, nausea, vomiting, excessive debility, fainting turns and other important constitutional symptoms which may appear in such cases, indicate the serious nature of the affection itself and the extent of its influence over the entire system. In the advanced stages of the more severe forms, we find tympanitis, hiccough, low delirium, coldness of the extremities and discharge of offensive sanies from the vagina. These symptoms, especially, if developed in spite of proper Homœopathic treatment, indicate approaching dissolution.

The Termination, or Consequences. Acute metritis may terminate in resolution,—or simple abatement of the symptoms; and this mode of termination is much more often seen under Homœopathic medi-

cation. The fever runs a rapid course, especially in its severer forms; and where its progress is not arrested by the appropriate treatment, it may destroy life in three days or even in two,—or in cases of less intense severity it may prove fatal at the end of one week or more. In these continued uterine fevers, the consequences of the fever may destroy life after the original disease has subsided. Intermediate between the prompt recovery and the fatal termination of the case from the severity of the primary inflammation, are various forms of disease, which may be regarded as the consequences of the original disorder, and which may either destroy life,—or establish themselves as varieties of chronic disease of the womb.

I. *Hypertrophy* either with or without induration we find, among the immediate consequences of acute inflammation. The hypertrophied womb usually attains to twice its natural size, or even more. This increase in size is of course accompanied with increased weight; this of course affects its position in the pelvis, and its relation with the other pelvic organs. This actual thickening of the substance of the walls of the uterus, must not be confounded with physometra, or uterine tympanitis.

A certain amount of *induration* usually appears in connection with hypertrophy of the womb. This is the common result of inflammation particularly of the cervix, and especially where this part of the uterus has been subjected to frequent inflammatory attacks. Induration is said to be simply the result of a bygone inflammation; but it is usually the consequent of such inflammatory action as is accompanied by hypertrophy or permanent thickening of the cervix, and so of these cases which assume the chronic form of metritis. This condition is very rare in the young and unmarried; but not uncommon after matrimony. Induration may be, as above stated, the simple result of repeated inflammation; or it may be the primary stage of scirrhous hardening and cancerous ulceration.

II. *Softening* of the walls of the womb, *ramollissement*, is another and more grave consequence of inflammation. This is sometimes found to be the condition of the uterus in females who have died of acute inflammation of this organ. The tissues of the uterus in such cases are found dark red, swollen, softened and friable; with even disposition to gangrene from decomposition of the unhealthy (purulent) blood with which these tissues are engorged.

III. *Gangrene and sphacelus*, is a much more rare, but necessarily

fatal termination of acute metritis. This may result directly from violent inflammation; and occurs at any period from the third or fourth to the seventh or eighth day. It may result from such inflammation as occurs in consequence of strangulation of the uterus in cases of procidentia; *from the death and consequent decomposition of the fœtus in utero;* or finally it may appear in connection with phagedenic ulcers, which occupy the inner surface of the womb. Only the former of these three causes of gangrene concern us at present,—but it seems best to give a complete picture of this rare form of uterine disorganization while under consideration. This gangrene generally begins in the cervix, and is confined to it. According to Allopathic authority, it is impossible to detect this form of disease before it terminates in death; since the cessation of the pain and of the fetid discharge from the vagina, may occur from other and independent causes. But a careful study of the symptoms present and a faithful application of the corresponding Homœopathic remedies, will enable the physician to do all that human means can accomplish to arrest the mischief, even if he does not certainly know that such disorganization is imminent. "The pulse is low, quick, concentrated; the patients are seized with shiverings, startings and even convulsive shakings of the body, without any apparent cause; and at the same time they cease to feel any pain in the uterus, or but a less degree, they fall into a state of oppression or extraordinary uneasiness, which is but little short of fainting; and the extremities become so cold that scarcely any warmth can be detected in them." Such is the description, given from actual observation of uterine gangrene. As the disease advances other and still graver symptoms appear, which threaten the speedy close of life if not promptly arrested; from the vagina is discharged a brownish liquid of exceedingly fetid odor; a cadaverous-smelling diarrhœa sets in; and cold clammy perspiration appears over the whole body, or on some parts of it only; the features change, and the patient sinks into a prolonged coma, with or without delirium. And with symptoms so strongly marked, the physician would have no difficulty in selecting the proper remedy. Whether this would prove sufficient to arrest the disorganization, would depend upon how much progress it had already attained, and upon the constitutional strength of the patient. In some cases of gangrene of the uterus, this organ has been known to become detached from the body, expelled through the vagina, and the patient nevertheless survives this terrible accident.*

* Jahr on Diseases of Females.

Pus may be infiltrated into the tissue of the uterus, where the inflammation is very severe. And the reabsorption of this purulent formation, especially in cases of puerperal inflammation, gives rise to *uterine phlebitis*.* In this case both the veins and the lymphatics become the receptacles of the puriform matter, which lodging in them, in different places, leads to the formation of fresh abscesses.

IV. The *effusion of coagulable lymph* is another consequence of acute metritis, especially in those cases in which the serous coat of the uterus is involved. The adhesions which result from the coagulation of this serous effusion, by confining the ovaries and especially the frimbriated extremities of the fallopian tubes to the neighboring parts, may become the occasion of sterility or of extra uterine pregnancy,—preventing these extremities from embracing the ovaries.

Acute metritis, which occurs in pregnancy, from whatever cause, will commonly result in the death of the fœtus. And the secondary inflammation, of a very low form, which is slowly developed in the womb, in consequence of the retention of such blighted embryos, may even lead to the death of the mother. So intimate and profound is the sympathy between the life of the mother and of the fœtus in utero, that while the death of the former almost necessarily leads to the destruction of the latter,—the death of and subsequent putrefaction of the fœtus, where it is not expelled from the womb, may result in fatal gangrene of that organ. A remarkable deathly look, sunken appearance of the eyes, and dark discoloration of the lids, together with a peculiar deathly feeling, malaise, which pervades the entire system of the patient without any especial assignable cause, may be considered ground of suspicion of the death of the fœtus in utero. Especially where this state of things, beginning at a particular time from no other perceptible cause, has continued for months. Such cases have been known, in which the womb retained within itself and preserved from decomposition a blighted fœtus which had attained the age of three months before its death. In these cases the constitutional symptoms attracted attention to the examination of the case, before any specific indications were given by uterine pains or vaginal discharge. In such cases the womb may seek to retain the product of conception, till the full period; and then throw it off.—Of course the farther advanced the ovum is before its vitality is lost, the more serious are the symptoms which ensue if it is retained in the womb.—While in many instances, the products of conception,

* See Puerperal Peritonitis.

blighted in the first weeks, are entirely taken up by the uterine vessels, reabsorbed as it were,—at any rate disposed of without being thrown off externally.

Aconite. This remedy is useful where there is a real synochal fever; hard rapid pulse, hot, dry skin, intense thirst; sharp shooting pains in the whole abdomen which is very tender to the touch.

Arnica. In cases where the inflammation has been caused by a bruise or a concussion.

Arsenicum. Burning, throbbing, lancinating pains; burning like fire. Great restlessness, and anguish, with fear of death. She is sure she will die. Thirst for frequent sips of water, only a little at a time. Cold water aggravates her symptoms. She wants more covering over her,—wants to be wrapped up.

Belladonna. The pains are sudden,—coming on quickly and ceasing as quickly after continuing a longer or shorter time. Or there are clutching pains, as if the hand were clawing with the nails. Pressure, as if all the parts would issue out through the vulva. Throbbing headache with heat, red face and eyes; throbbing of the carotids. Involuntary flow of urine. Furious delirium. The menstrual or lochial discharges suppressed or very offensive. The parts are very sensitive; she cannot bear the least touch, or a part of the bed even.

Bryonia. The least motion aggravates her sufferings. Her head aches as if it would split open. Sitting up (as if in bed) causes nausea and fainting. Lips parched and dry; mouth dry, and very thirsty. Constipation, the stools being hard and dry, as if burnt.

Calcarea carb. This remedy will often be found indicated in persons of leucophlegmatic constitution. The feet feel cold and damp. The head and upper part of the body are in a profuse perspiration; constant aching in the vagina. Thirst for cold water; worse at night. Pulse tremulous, or full and accelerated. Stitches in the neck of the uterus. The history of her case shows that her menses have been too profuse and return too often or too soon.

Cantharis. Frequent and almost continual desire to urinate, ineffectual, or with cutting burning pain, and passing a few drops only at a time, which are often mixed with blood. Burning in the uterine region. But the urinary symptoms are of the greatest importance in determining upon the selection of this remedy.

Carbo anima. In cases of metritis not very active or acute. Inefficient urging to urinate, with painful pressure in the loins, groins

and thighs. Great sense of soreness in the pit of the stomach. General sense of lassitude. Leucorrhœa coloring the linen yellow.

Carbo veg. Much soreness about the vulva, with aphthæ. Aching or pinching in the iliac regions. Languor, weariness and physical depression toward noon, with faintness and hunger. Flatulence, momentary relief from eructations, or downward emissions. She wants to be fanned.

Chamomilla. In cases of inflammation, which come on in connection with a fit of passion, Heat all over, with thirst and redness of the face; one side of the face red, the other being pale. Great impatience; she can hardly restrain herself to patience and to treat people with civility. Urine abundant and light-colored.

China. The inflammation has supervened upon great loss of blood. She suffers from distention and oppression of the abdomen, which is not relieved by eructations. Much ringing in the ears. The sufferings are increased by the least touch. Painless diarrhœa.

Cocculus. Much paralytic pain in the back and paralysis of the lower extremities. Sensation as of sharp stones in the abdomen on motion. Head and face hot; feet cold. Pulse hard and small. Metallic taste in the mouth. Intense thirst or aversion to drink. Shivering over the mammæ.

Coffea. In cases where the inflammation is induced by excessive joy; she is in a state of ecstacy, and is very sensitive to contact.

Colocynth. Inflammation which comes on in consequence of violent indignation. Severe colicky pains, causing her to bend double, with great restlessness. Cutting, as from knives in the bowels, with great distress, distension of the abdomen, diarrhœa, which is aggravated by everything which is eaten or drank. Feeling in the whole abdomen, as if the intestines were being squeezed between stones. Full, quick, pulse; great thirst; bitter taste in the mouth.

Conium. Burning, sore, aching sensation in the region of the uterus. The urine intermits in its flow. Much vertigo, particularly on turning over while lying down. She usually has a bitter taste in her mouth and thirst. The pulse is unequal. Some pulsations are smaller than others. The pulse is also irregular; sometimes it beats slower, sometimes faster.

Creosote. Stitches in the vagina, proceeding from the abdomen, causing her to start at every pain. Putrid, acrid, corrosive leucorrhœa. A low form of fever. Putrid fever.

Crocus. Black, stringy, discharge from the uterus; rolling and

bounding in the abdomen, as from a fœtus. Stitches in the abdomen arresting the respiration.

Ferrum. Fiery, red face. The bowels feel sore, on touching them, as if they had been bruised, or weakened by cathartics. Leucorrhœa resembling watery milk.

Graphites. Particularly when the ovaries are affected. Eruptions, tetters and excoriations on various parts of the body. A tendency to obesity.

Hepar s. c. Particularly where there is evidence of a tendency to suppuration. Burning, throbbing pain,—chilliness.

Hyoscyamus. Especially if the inflammation be developed by emotional disturbances. If there appear spasmodic symptoms,—jerks of the extremities, face and eyelids, etc. In cases which fall into the typhoid state with delirium,—the patient throws off the bed-clothes—she wishes to be naked.

Ignatia. Cramps with lancinations; the pains are aggravated or renewed particularly on touching the parts. The female is apparently full of suppressed grief. There is sorrow and sighing. An empty feeling at the pit of the stomach.

Ipecac. The patient suffers with a continual nausea; every movement is attended with a cutting pain almost as constant, running from left to right. Pain about the umbilicus, extending towards the uterus. A continual discharge of bright-red blood from the uterus. Rapid pulse, with or without thirst.

Jodium. Acute pain in the mammæ, developed by the inflammation of the uterus; the mammæ also become very sore. There is a low cachectic state of the system, with feeble pulse.

Kali carb. Intense thirst, morning, noon and night, continually, and very rapid pulse. Distressing cutting, shooting, darting and stitching pain all over the abdomen,—the stitching pains being in the ascendancy; the more completely the stitching pains seem to predominate, the more certainly will Kali carb. be the appropriate remedy.

Lachesis. She cannot bear any pressure, not even of the clothes, upon the uterine region. She wishes frequently to lift them, not that the abdomen is so very tender, but that the clothes cause an uneasiness. A sensation as if the pains were ascending toward the chest. This remedy is especially indicated in cases where the inflammation is an attendant symptom of the critical age. The pain in the uterine region increases till relieved by a flow of blood from the vagina; not long afterwards the same symptoms are repeated. Ex-

acerbation of the sufferings after every sleep,—whether by day or at night.

Lycopodium. Cutting pains across the abdomen from right to left. Much rumbling and working in the abdomen, particularly in the left hypochondrium. Red sand in the urine. Much pain in the back previous to the flow of urine. Dryness in the vagina. Discharge of wind from the vagina.

Magnesia mur. Hysterical complaints and spasmodic turns. Uterine spasms extending to the thighs. Constipation of large, difficult stools, which crumble as they pass the verge of the anus.

Mercurius. Lancinating, boring, or pressing pains. Much perspiration, which however affords no relief. Moist tongue often accompanied with intense thirst. She is worse throughout the night.

Nux vom. This remedy is very frequently indicated. Pain, as if bruised in the neck of the uterus; frequent desire to urinate with pain. Scalding and burning. Frequent and ineffectual desire to defecate; or passing a small quantity of feces at each attempt. Much pain in the small of the back, which is made worse by attempting to turn in bed. Heaviness and burning in the abdomen. Much pain in the forehead above the eyes and fainting spells. The symptoms are aggravated after four in the morning. She is despondent; sleepless; or dreams frightful dreams.

Opium. In cases originating in fright; the fear of the fright still remaining. Flushed face; delirium; soporous. In her lucid intervals she complains of the sheets being too hot for her. She is sleepy but cannot sleep. Coldness of the extremities. Discharge of fetid matter from the uterus.

Phosp. acid. In some cases of great debility, with great indifference to all about her. Meteoristic distention of the uterus. Slow fever.

Platina. Particularly after confinement, if there be excessive sexual excitement. Painful pressure in the region of the mons veneris and genital organs. Voluptuous tingling in the vulva and abdomen. Profuse discharge of thick black blood. Constipation; the stools adhering to the anus and rectum.

Pulsatilla. In mild yielding, tearful temperaments. Tension and contraction in the abdomen as if the menses would make their appearance, with nausea and sometimes vomiting of mucus. Semi-lateral headache; bad taste in the mouth; nothing tastes good. Absence of thirst. Nightly diarrhœa and scanty urination.

Rhus tox. Particularly after confinement. Worse at night, espe-

cially after midnight. Restlessness, she cannot lie still, but must change her position which affords a few moments' relief. Slow fever; dry tongue. Powerlessness of the lower limbs, she can hardly draw them up. Pains worse at night; and especially after midnight.

Sabina. Especially after confinement or miscarriage. Metrorrhagia of clotted and fluid blood, with pain extending from the sacrum or lumbar region to the pubis. Severe stitching in the vagina from before backwards. Frequent urging to stool; finally a liquid portion is discharged, followed by a hard portion.

Secale c. Where there is a strong tendency to putrescence. The inflammation seems to be caused by suppression of the lochia or menses. Discharge of thin black blood, a kind of sanies, with tingling in the legs and great debility.

Sepia. Burning, shooting and stitching pains in the neck of the uterus. A constant sense of pressing into the vagina; she feels that she must cross her limbs to prevent a protrusion. A painful stiffness in the uterine region. Sense of weight in the anus. Putrid urine, depositing a clay-like sediment which is difficult to remove. Icy coldness of the feet. A great sense of emptiness in the pit of the stomach.

Stramonium. The face is bloated with blood. She awakens with a shrinking look as if afraid of the first object she sees. She desires light and company. She is disposed to talk continually. Strange fancies; she imagines all sorts of absurd things. That the bed is full of creases; or that she is double, and lying crosswise, &c.

Sulphur. The vulva seems much inclined to become excoriated early in the attack. Frequent flushes of heat passing off in a little moisture and faintness. Feet cold; or with burning soles, so that she wishes to find a cold place for them, or to put them out of bed. Sense of heat in the crown of the head. She feels suffocated; she wants the doors and windows open. Very light sleep; she awakens very frequently. Weak fainty spells occurring frequently during the day. After having improved under other remedies, she gets worse again until she receives a dose of Sulphur. She feels unusually faint with strong craving for nourishment from eleven o'clock till twelve at noon.

CHAPTER THIRTEENTH.

HYSTERIA.

Hysteria is a purely nervous affection, which may arise and continue without any functional or organic derangement of the female sexual system on which it is based; and which does not necessarily produce such derangement or disorganization. Hysteria bears the same general relation to the nervous apparatus of the reproductive system, that chlorosis does to that of nutrition; and has no more exclusive connection with the uterus or other particular sexual organ, than chlorosis has with the stomach or other particular digestive organ.

As a purely nervous affection not necessarily painful, Hysteria must be distinguished from irritable uterus on the one side, and from hysteralgia on the other. In irritable uterus, although there is neither disorganization, nor structural change,—except perhaps that of displacement, which is the most frequent cause of the irritability itself,—the uterus is excessively sensitive to pressure or even to the touch;—which is not necessarily the case in Hysteria. In hysteralgia the pain,—sometimes mild, lingering, worrying, and sometimes violent, severe and acute,—is always positive and decided.

But in the location of the disease itself may be found another important distinction between Hysteria and the somewhat analogous forms of uterine disease with which it is so apt to be confounded. In irritable uterus and in hysteralgia, from whatever cause these disorders arise, their actual location, principal seat and ultimate development appear to be in the uterus itself. This, however, is not the case with Hysteria. The uterus indeed has usually been considered the seat of Hysteria, hence the name; but the *ovaries, as the head-centre of the sexual system,* must now be regarded as the real *fons et origo,* the fountain head of all hysterical affections.* Thus pressure upon the ovaries will invariably bring on hysterical attacks in persons predisposed or subject to the disorder. Hysteria extends its influence over the entire sexual

* It must not be forgotten that a corresponding irritation of the nervous system belonging to the sexual apparatus of the male, may sometimes occasion a similar hysterical condition in men.

apparatus; from its profound connection with the sympathetic system, may extend its influence to all the involuntary organs, and by its final extension to the cerebro-spinal nervous system, may involve also all the voluntary muscles; but its original seat and constant source, must be found in the ovaries. Hysteria is as truly and as exclusively due to irritability of the ovaries, as irritable uterus and hysteralgia are to a similar condition of the uterus.

Hysteria again has been found to co-exist with the most perfect performance of all the functions of the uterus and its dependent organs, such as menstruation, conception, utero-gestation, parturition and lactation,—although this is perhaps true rather of the milder than of the severer forms of this disorder. Still as not necessarily disturbing the functions, still less involving the structure of the sexual organs, and as not being invariably painful, Hysteria establishes its claim to be regarded as a purely nervous affection, capable of being distinguished from irritable uterus and from hysteralgia, both of which are also nervous affections, although of quite another sort. This distinction will appear more strongly marked, when we come to notice the differences in the nervous systems principally involved. And this definition of Hysteria is still further strengthened by the well-known influence of imagination and sympathy in extending this disorder from one person to others; as in the hospitals, where many are simultaneously and sympathetically affected from seeing a single one attacked by hysterical convulsions. And it is still more fully confirmed by the powerful influence of fear in preventing and allaying such convulsions. In this respect, as well as in some others, Hysteria bears a very remarkable resemblance to epilepsy.

The *neuralgic* and the *convulsive* forms constitute two distinct varieties of Hysteria; but this distinction, although sufficiently well marked, is one of degree rather than of kind. In what is termed the neuralgic form of Hysteria, the symptoms "are merely manifestations of nervous susceptibility." While in the convulsive form, they are more intense, permanent, regular and periodic. And the principal apparent distinction between this latter condition of periodic menstrual convulsions and that which presents in uterine epilepsy, is to be found in the loss of consciousness which manifests itself in the latter form of disease, but not in the former.

A corresponding distinction may be seen in the nervous centres involved in Hysteria. For in the milder, so-called neuralgic form of the disease, *which yet may be of hereditary origin*, the ganglionic

or sympathetic nervous system seems principally concerned. While in the severer or convulsive forms of Hysteria, the original, predisposing, hereditary influence is, by provoking causes, extended to a full development in the cerebro-spinal nervous centre. In this case then we find the discordant influence extending itself to the muscular apparatus; and in consequence we have occasional spasms, or regular and periodically recurring convulsions. And it will be observed that these spasms first appear in those parts of the body and muscular tissues, which are in immediate relation with the abdominal, the cœliac and the thoracic ganglia.

From these remarks it may be concluded that Hysteria is a purely nervous affection; which, being to a great extent hereditary in its origin, finds its primary seat in the ganglionic or sympathetic nervous centre; which finds its secondary and ultimate development in the cerebro-spinal nervous system; which in this extended development occupies the *motor* rather than the *sensory* nerve filaments; and which thus finally results in spasmodic contractions rather than in poignant sensations. And here is to be found perhaps the last, most important and reliable distinction between Hysteria and hysteralgia. In their constitutional origin, in their primary ganglionic seat of development, and in the provoking causes of their extension to the cerebro-spinal sphere, they may show but little difference; but here they diverge,—for where Hysteria seizes upon the *motor filaments* of the nerves and so leads to convulsions,—hysteralgia involves the *sensory filaments* and occasions the intense pain which characterizes this affection. This distinction is exactly the same as that between asthma and angina-pectoris, the former affecting the motor nerves, and the latter the sensory nerves of the chest; so that in asthma we have severe constriction, with little if any other pain,—while in angina-pectoris we find the most poignant distress, but no constriction.

Hysteria thus becomes an affection principally (although not exclusively) of the female system, which, constitutional in its origin and so underlying the organic nervous system, is also capable of extending itself over the entire nervous organization, and of simulating almost every form of disease, with the single exception, perhaps, of acceleration of the circulation. For some of these states of hysterical excitement can hardly be distinguished from inflammatory fever, except by ascertaining that the rapidity of the pulse does not correspond with the other apparently febrile symptoms.

To attempt to enumerate all the legions of symptoms which may

appear in hysterical cases, would be a hopeless task. Hence our description of this multiform affection must be confined to the statement of the more prominent symptoms only, and to a general division and classification of those which make up the principal forms of the disease.

And the first and most general division of the symptoms of Hysteria, will be into those which belong to the *mental* and *moral sphere*, and into those which are purely *physical sensations*. And in each of these two divisions there will be found the same variety and even diversity of conditions. Thus among the moral symptoms there may be great depression of spirits with involuntary tears, or equally great exaltation of spirits and meaningless laughter; in these cases the exaltation and the depression being alike incapable of being attributed to any apparent cause. There may be sudden changes and even frequent alternations from one extreme to the other; and always an uncertainty, and want of fixedness and even positive mobility of character. And these revulsions are not confined to the individual states of joy and sorrow in the persons affected, they extend also to their affections towards the members of their families and towards others. And in addition to those changes which arise from no perceptible cause, there is a remarkable susceptibility to impressions, many of which, although in reality of the most trifling nature, appear to exert a fixed and powerful influence. Other, no less remarkable changes, in feeling and in affection arise from purely imaginary causes. Thus in hysterical persons, it is not uncommon to see personal dislike unaccountably take the place of previous affection; and the most violent and furious paroxysms of jealousy arise from the influence of imaginary and baseless suppositions. As in the personal condition of the hysterical females, there may be alternations of gaiety and of gloom, of frolicksome levity and of melancholy seriousness,—so in her relations to others, and if married, to her husband especially, she will at one time be full of affection and devotion, while at others, sentiments of aversion and positive dislike obtain the entire sway. One day, she will express herself as the happiest of wives and assure her friends that her husband is as good as he can be; the next she pours into the gaping ears of all the gossips her peculiar condition gathers around her, long tales of suffering, neglect and abuse, and represents the man, who has the misfortune to be her husband, as the most detestable monster. This form of Hysteria is a real monomania, with lucid intervals,—but which may become a fixed insanity, in relation to

the married state, and so not only destroy domestic peace, harmony and affection, but even break up the family.

But Hysteria in all its most aggravated moral forms, is distinguished from insanity, by the fact that the personal consciousness is never lost sight of. There is always a sort of alienation of the personality in cases of insanity, a forgetfulness of self,—which never appears in hysterical cases. In these latter, on the contrary, there is the most remarkable and persistent prominence of the *self-love*. Egotism, especially in married females as opposed to their husbands, is the most prominent and the only constant moral symptom of Hysteria. Such persons entertain their hearers with marvelous tales of the greatness and exploits of their past lives, and of the richness and abundance of their possessions,—of the number of their friends and of the distinguished consideration they have always received in society in their former places of residence. Such marvelous accounts are uttered with an air of sincerity well calculated to deceive the honest listener; and such unbridled license of the imagination and total obliviousness in regard to the truth, which are vulgarly attributed to entire want of principle and the most inordinate vanity, are in reality due to that morbid condition of the female organism which is designated by the comprehensive term Hysteria; a condition which, if it were properly understood, would prove far less mischievous in society, and less frequently destroy the family tie.

The second part of our division of the symptoms of Hysteria, includes all those which have relation to the physical system. These physical symptoms may be again divided into the *sensational* and the *convulsive*. Among the former may be ranked all those various uneasy sensations which appear at different times in different parts of the body,--as in the abdomen, in the pit of the stomach and in the throat,—sensations which are not very positively painful, but which are for that reason perhaps, all the more distressingly annoying; and which in the most aggravated forms become developed into actual spasmodic contractions in those parts. These sensations do not appear to exert any direct influence upon the organic functions,—still they are attended with disturbances of the appetite, indigestion and general languor and debility, which are no doubt the consequences of the nervous derangement. These sensations are innumerable, variable or fixed, and either constant or excited by the slightest influence and even by the least touch.

As there is a constant indecision, want of fixedness or persistence in the mental sphere,—rendering the mind liable to be swayed by the

slightest breath of external influence,—so in the physical system there is a corresponding want of permanency in the animal spirits. The same mobility that appears in the mental and moral states, and in the affectional relations towards others, appears in a corresponding degree in all the bodily conditions. And as the merest fancy will often bring on a paroxysm of jealousy in hysterical women, so the slightest direct touch, or the reflex influence from ordinary functional action, may give rise to a long train of hysterical sensations, or even occasion the most determined convulsions. This remarkable sensitiveness of the physical system to external impressions, and no less remarkably *increased reflex excitability*, form the chief characteristics of the first or sensational variety of the physical symptoms of Hysteria.

The *convulsive* symptoms of Hysteria begin in the hypogastric region and gradually pass up the abdomen like the ripple of a wave, through the chest to the larynx and phayrnx. First comes on a strange sensation, as of pain, in the hypogastric and ovarian regions, followed by suffocative feelings in the pit of the stomach, and then by the *globus hystericus*, which is characteristic of the complete hysterical passion. These form the precursory symptoms of the true hysterical convulsions, and are analogous to the *aura* which precedes the accession of an epileptic attack. And from appearing at the first in this mild form of semi-spasmodic contractions, these attacks may momentarily or hourly increase in severity, till trismus, or lock-jaw, supervene. And as the hysterical attack, in its successive forms of development, involves the different nervous branches and ganglionic centres, corresponding symptoms appear. Thus from the disturbance of the nerves of the pharynx, there results dysphagia, globus hystericus;—from the larynx, an affection, —with the most imminent danger of suffocation,—not to be distinguished from croup, except that there is no false membrane and that *Nux vomica*, rather than *Aconite* or *Spongia*, may prove curative;—from the bronchia, dyspnœa and cough;—from the heart, attacks of palpitation, irregular beating and sense of anxiety;—from the stomach, hiccough, retching and vomiting;—from the bladder, ischuria or dysuria. And finally, as the paroxysms extend through the voluntary and involuntary muscles, there are developed tonic and clonic spasms of every kind and degree of violence, from mere tremor or nervous quivering to the most convulsive movements and contortions. "The masticatory and histrionic muscles of the face take part; trismus, chattering of the teeth

as in the rigor of fever, the sardonic laugh and a rolling of the eyeballs upwards occur. After a duration varying from ten minutes to several hours, the paroxysm often terminates suddenly with a flow of tears or a copious discharge of urine; but not unfrequently it passes off gradually."*

The globus hystericus, which has already been mentioned, merits a fuller description, since it forms one of the most characteristic symptoms of the invasion of the hysterical paroxysm. It consists in an obscure sensation, as of a globular body, which gradually ascends from the pelvic cavity, or at least from the hypogastrium, to the throat, where it seems to be arrested, and to produce a most painful sense of constriction and suffocation. This causes a peculiar choking sensation, which may be attended with sobbing. It is not confined to women, but may sometimes appear in those of the opposite sex, especially in young persons about the age of puberty, whose naturally delicate and sensitive temperament is agitated in a particular manner. Globus hystericus may arise from mentally or morally caused interruption of the delicate currents of the nervous fluids; and may, particularly in males, be at once removed by such relief and revulsion of these feelings as will again permit the free and unrestrained flow of these most interior and subtle fluids, of which we know but little more as yet than their hypothetical existence.

The *causes of Hysteria* are as various as they are numerous. No doubt very many cases of this disorder, especially of the convulsive form and most obstinate kind, are originated and maintained by displacements, functional derangements or structural disorganizations of the uterus or other parts of the sexual system. But since in these instances the hysterical affections are but the consequences or attendant symptoms of other and primary disorders, we do not consider them in this place. They require to be studied in connection with all the accompanying and causative conditions. But in all cases in which hysterical symptoms appear as part of the *tout ensemble* of the disease, the remedies advised, in the present chapter for Hysteria itself, should be carefully compared; since these various nervous, mental and moral states should always be covered by the medicine to be administered.

To *hereditary predisposition* we may assign then the first place among the causes of idiopathic hysteria. This may exist in the

* Romberg, Diseases of the Nervous System.

form of (otherwise) latent psora, which thus irritates the organic or sympathetic nervous system in its relation to the sexual system. And the connection of the hysterical affection with such constitutional psora may be traced in the eruptions known to have appeared in the parents,—or which may have been temporarily manifested in the hysterical patient herself. "A predisposition to Hysteria is, no doubt, to be ascribed in many cases to congenital inheritance of physical conformation and temperament. The greater number of sufferers from this disease, observes M. Georget, have descended from parents, or have been members of families remarkable for their liability to nervous diseases, in the several forms of hysteria, epilepsy, maniacal affections, hypochondriasis, nervous headaches, deafness, blindness, palsies, &c." * And I remember to have seen a remarkable instance of the most aggravated form of this disease in a young woman whose father was subject to epileptic attacks. This hereditary constitutional predisposition to Hysteria, is very greatly aggravated by the personal influence of the mother, if she still remain subject to similar affections. And just in proportion as such predisposition exists in greater or less degree, will the patient be more or less liable to have it developed by the ordinary provoking influences.

The *sexual organization* itself, in its various conditions and crises, exerts a powerful influence in producing or developing the hysterical affection. As long as the sexual organs remain undeveloped, Hysteria does not appear, except perhaps in persons whose constitutional inclination to this form of disease is so great as to retard the sexual development. In like manner, after the cessation of the menses, when the sexual organs return to a second-childhood state of abeyance, Hysteria does not appear, except as the result of some organic disease of the uterus or ovaries. But after the accession of puberty, the retention or tardy appearance of the menses and all the various derangements of the catamenial function,—the excitements incident to coition, conception, abortion, miscarriage, utero-gestation and parturition may become capable of developing the constitutional predisposition to Hysteria, or perhaps of originating the disease itself where such predisposition did not exist. So sensitive, and delicately organized are some constitutions in respect to the sexual system, that the enforced continence of protracted virginity, the imperfect, incomplete performance of sexual inter

* Davis' Obstetrics, p.

course in the married, and the deprivation of such intercourse in those who suddenly become widowed, are alike capable of giving rise to hysterical affections; and even the moral sufferings of disappointed love, unrequited affection and inconsolable grief, have in many instances been known to lead to the same result.

The influence exerted in the production of Hysteria by the uterine life of the female is as unquestionable as it is unlimited. And this includes all the organs of the sexual system; but most especially the ovaries, of which mention has already been made in this connection. An irritated condition of the ovaries we regard as being the foundation of and inseparable from the hysterical state. And even as inflammation will extend from one serous or cellular tissue to another with great rapidity, even where the tissues themselves are not adjacent,—so where the ovaries are in this chronic state of irritability, they exert by sympathy such an influence upon other nervous centres that the slightest irritation of their peripheral extremities may induce hysterical paroxysms. Thus in persons subject to Hysteria,—which is but another name for laboring under *chronic ovarian irritation*,—the reflex action from irritation of the gastric, the intestinal, or the uterine mucous surfaces, or even of the external cutaneous surface, is often sufficient to throw them into the most violent hysterical convulsions.

The remedies which may be used in cases of Hysteria are very numerous. Indeed there are but few in the Materia Medica, which have not in their pathogenesis some reference to this varied and ever-varying form of disease. Great care should therefore be exercised to prescribe the proper remedy at the commencement of the treatment; then very great caution should be observed in regard to repeating the dose; and still more in changing to another remedy. The habit of changing the remedy to suit the different phases of the disease is a most pernicious one; and this is still more especially true in cases of Hysteria, where a single disorder of the system assumes at different times such an infinite variety of forms. Some one or more of those grand characteristic symptoms, that are nearly always present, and that are observable by the patient herself or by her attendants, should govern the choice of the remedy. And when once thus carefully selected, the medicine must be allowed to act for days or weeks, or perhaps even months,—in cases where the improvement continues so long,—without repetition of the dose, and still more especially without changing the prescription.

And in cases of Hysteria, as also in epilepsy, or other chronic

spasmodic affections, never prescribe for the convulsive stage *per se;* rather let it pass off by itself without medication. But observe closely all the symptoms; for it may be that here, in the very last ultimation of the disorder, we may detect the symptom which shall conclusively indicate the remedy for the entire case. The characteristic symptom of a case,—that which corresponds to the key-note of the appropriate, homœopathically indicated remedy,—may appear in the course of the convulsive attacks, or at their close; it may be the precursory herald of their approach, like the *aura epileptica;* it may appear only in the interval of comparative quiet; or as, in those cases which have no positive spasms, it may be a more or less constantly attendant symptom; or finally it may even be merely a condition of aggravation or amelioration of time, place or circumstance.

Only a few of the leading and more frequently indicated remedies for hysterical affections can be mentioned here. The entire Materia Medica has sometimes to be ransacked to find the true similimum for some of the forms of this disease; a disease whose forms are as numerous as the individual constitutions and temperaments of its subjects, *multiplied* by the innumerable physical, mental and moral influences which become the means of provoking, exciting or developing the original constitutional delicacy or hereditary predisposition.

Aconite. She has much fear, fear of going into places of business, into crowds, down town for example, or anywhere where many persons are actively passing and repassing. Vertigo on rising from a recumbent position. She dreads too much activity about her; she complains much of her head; she is possessed with a great and distressing fear of death. Predicts her day of death. Aconite, high, will remove all these symptoms; and with them, probably, the whole train of morbid sensations, if allowed to act a long time, with occasional repetitions when the improvement seems to have ceased.

Anacardium. Where great forgetfulness seems to characterize the case. Loss of memory. Uses profane language.

Arsenicum. Where a real *hysterical asthma* seems to be developed at every little excitement. Worse at night, particularly the latter part of the night. She cannot lie down for fear of suffocation. She wants a little water every few minutes. Great fear of death. She has many other troubles, but these seem to predominate.

Asafœtida. There is much trouble about the œsophagus; every excitement that brings on hysterical symptoms, points thither. Dry-

ness and burning in the œsophagus. Sensation of pressure, or as if a body or lump were ascending in the œsophagus, obliging frequent deglutition to keep it down. This feeling in the œsophagus often causes great difficulty in breathing. Soreness in the œsophagus preceded by burning. Dartings upward towards the œsophagus from the chest. When the hysterical symptoms develop themselves in this direction, Asafœtida will cure the case. Globus hystericus.

Aurum. The more her hysterical troubles are developed, the more her thoughts run on the act of committing suicide. This act is more or less constantly and forcibly in all her thoughts. In such cases, under the influence of Aurum, the patient will cease thinking of suicide, and she will get well. This remedy is also indicated by a fine eruption on the lips or face and forehead; and by thoughts of suicide with palpitation of the heart.

Belladonna. There is a general tendency of blood to the head, with redness of the eyes and face, which is still more developed in the spasmodic attacks. She moans very much, even at night, without much sleep. She is very despondent. She will sit and break pins into pieces, half a day at a time. She is very much troubled with throbbing headache, particularly over the eyes. She has a wild look. Sleepiness but cannot go to sleep.

Calc. carb. This important remedy will be particularly indicated in hysterical as in other affections,—where the symptoms correspond,—in persons of a leucophlegmatic temperament. She swells at the pit of the stomach, like a saucer turned bottom upward. She has many spasms per day. She is easily chilled. She suffers from cold damp feet. Vertigo on going up stairs. Her menses are too frequent and too abundant. She is often unable to sleep after three o'clock in the morning. Cold feet at night in bed. She cannot go to sleep, her mind turning on the same thought all the time.

Causticum. One of her chief troubles is she cannot keep her upper eyelids up; they are paralyzed or nearly so, and will fall down over the eyes. She is very apt to have piles which are made almost intolerable by walking.

Chamomilla. Great tendency to quarrel, to speak in an obstreperous manner. She has to restrain herself much in order to give civil answers to questions.

China, may be useful in cases which are usually worse every other day; and in such as are attended with unusual strong appetite. Sensation of distention in the abdomen.

Cocculus. In the fullest development of this disease, this remedy

points to a choking constriction in the upper part of the fauces, with difficulty in breathing and an irritable cough or disposition to cough. Retarded menses, which finally appear with great weakness, so much so that she can hardly talk; or she feels nausea, even to faintness. A sensation of roaring in the ears as though there were shells before the ears.

Coffea. Great sensitiveness with general excitability; she is in a state of ecstacy. Headache as if a nail were driven into the brain, or as if the brain were torn or dashed to pieces.

Conium will be particularly indicated where much vertigo is developed, especially when in a recumbent position; she cannot turn in bed without occasioning distressing vertigo. During micturition, her urine alternately flows and stops. The breasts swell, become hard and painful before the menses, when her hysterical symptoms increase very much; the vertigo often becomes very severe at these times; and she may also have constipation, with constant and ineffectual urging to stool. Globus hystericus.

Euphrasia. In cases where there is dimness of vision as a result of the hysterical condition, with great suffering from profuse lachrymation. Tears acrid.

Hyoscyamus. There is some resemblance to epilepsy in the remarkable jerking and twitching of her spasms; still they are less regular in their form. She is disposed to uncover herself and to be naked; she indulges in much silly laughter and many foolish actions.

Ignatia. When a state of anguish is developed in which she shrieks for help, with suffocating constriction of the throat; difficult deglutition, and she finally comes out of the spasm with deep sighing. She frequently complains of an emptiness at the pit of the stomach, with frequent sighing, and much despondency simulating grief. Mental symptoms change very often, cheerfulness with great despondence. Silent grief. Inclination to start.

Ipecac. Every fresh development of the hysterical symptoms brings on a sensation of continual nausea; there are many other symptoms, but the nausea is constant, she feels it every moment.

Jodium. There is a remarkable and unaccountable sense of weakness and loss of breath in going up-stairs. Leucorrhœa corroding the linen.

Lachesis. Sensation as if a lump were rising in the throat which does not particularly incommode her, but merely feels unpleasant. But she cannot bear the least pressure externally about her throat, she would suffocate; or even about the chest, stomach or abdomen.

She is almost constantly relieving herself of the pressure. She awakes from sleep distressed and unhappy, as if from loss of breath.

Lycopodium. She has a constant sensation of satiety; she takes no food; and if asked why, replies she wants nothing because she is so full and that the least morsel causes a sensation of fulness up to the throat. Cutting pains across the abdomen, from right to left. Much borborygmus, particularly in the left hypochondrium. She becomes worse at four in the afternoon. Red sand in the urine. Frequent and abundant micturition; urine pale especially during the night.

Magnes mur. This is one of the most important remedies in hysterical conditions. She has many spasms, day and night, with great sleeplessness. Constipation of large, difficult stools, crumbling as they pass the verge of the anus. Fainting fits at the table, nausea and trembling; relieved by eructations.

Merc. sol. She has profuse flow of saliva; and her breath has a mercurial odor. The gums bleed and are inclined to ulcerate about the teeth. She is disposed to perspire much: the perspiration does not relieve; it is cold and clammy, particularly about the lower extremities. She is very sensitive about the epigastrium or pit of the stomach.

Moschus. Violent, long-continued, inveterate scolding, until she falls down in a swoon. Great anguish, as if she had to die; she talks of nothing else except that she will die. She exclaims it is my death, and then falls down in a swoon. Frequent swooning. Great desire for beer, or brandy. Constriction of the chest.

Nat. mur. This remedy is indicated in all females whose menses delay and decrease more and more. She awakens in the morning with a bad headache. Vivid, painful dreams, during a light sleep. Dreams at night of robbers being in the house, so vividly, that she will not be satisfied till the house has been searched. Somnambulistic rising and sitting about in the room. A constant desire for salt. Great aversion to bread. All her symptoms are relieved as soon as she gets into a perspiration. Great debility, excessive thirst, great inclination to weep.

Nux mosch. Sudden change from grave to gay; from lively to serene; excessive tendency to laughter. Enormous distention after meals. Vicarious leucorrhœa, in place of the menses. Excessive dryness of the tongue and mouth after sleeping.

Nux vom. She seldom sleeps after three A. M., but after five A. M., and late in the morning; she feels worse in the morning. Constipation of large difficult stools. Very dyspeptic. She is much excited

by coffee, spirituous liquors, or highly seasoned food. She feels much better on plain and simple food. Menses irregular, never at the right time.

Palladium. She imagines herself neglected; wounded pride.

Phosphorus. Particularly indicated in tall slender females. The stools are long, narrow, dry, hard and voided with much difficulty. She feels a great sense of weakness in the abdomen; this distresses and aggravates all her other symptoms. She eructates vast quantities of wind after eating. She is sleepy, particularly after dinner. Sexual desire very much increased.

Platina. Self-exaltation, and contempt for others. Violent crampy pain at the root of the nose. A strange titillating sensation extending from the genital organs upwards, into the abdomen. Stools difficult, adhering like soft clay to the rectum and anus. Spasms with wild shrieks. Menses in excess, dark and thick. Chilliness predominates. Thirstlessness. Amelioration in the open air.

Pulsatilla. The forms of her symptoms are very changeable. She is easily moved to laughter, or to tears. She is very well one hour or half hour, and very miserable the next. She is timid and fearful, and yet extremely mild, gentle and yielding. She is sometimes silent and melancholy. She has a bad taste in her mouth, especially in the morning. Nothing tastes good to her; or she has no taste.

Sabina. She is very nervous and hysterical; and if she becomes pregnant, she is almost sure to abort about the third month. Now if Sabina is administered, she will not abort any more; and if kept a long time under the influence of this remedy, she will eventually and entirely recover.

Sepia. Paroxysms of something twisting about in her stomach and rising toward the throat; her tongue becomes stiff, she becomes speechless and rigid like a statue. Painful sensation of emptiness in the pit of the stomach. Urine very putrid; it deposits a clay-like sediment which adheres with great tenacity to the vessel. Icy cold hands and feet. Sudden fainting with profuse sweats and undisturbed consciousness, without being able to speak or stir. Involuntary fits of weeping and laughter. Sensation of coldness between the shoulders, followed by general coldness and convulsive twitchings of the right side and difficulty of breathing.

Stannum. Great sensation of faintness after going down stairs; although she could go up stairs well enough. She can hardly sit down; she must drop down suddenly; she can get up very well. Very much exhausted from talking or reading aloud. All her pains

increase gradually to their highest point and then as gradually disappear.

Staphysagria. She is very sensitive to the least impression; the least word that seems wrong hurts her very much. She throws everything given her in her hands away indignantly, pushes things away from her. The sound teeth, as well as those decayed, are very painful to the touch of food or drink.

Stramonium. She is full of strange and absurd fancies. She is fearful, so that she starts back and stares wildly at the first sight even of familiar objects. Very great loquacity. She desires light and society. Her face is puffed up with blood.

Sulphur. She comes out of her spasms feeling very happy, and every thing seems very beautiful to her. She discharges large quantities of colorless urine, at the termination of the spasms. Her attendants have learned to recognize this, as a sign that her spasms are at an end. She has flushes of heat; coldness of the feet; heat on the top of her head; and cannot wait for her dinner as usual, she is so faint and hungry.

Valeriana. A sensation as if something warm were rising from her stomach, arresting her breathing, with tickling deep in the throat and cough. She feels a sensation as if a thread were hanging down the œsophagus from the pharynx. Fearfulness; tremulousness; and palpitation of the heart. The intellect predominates over the mind.

Veratrum. In addition to other symptoms, she has cold sweat on the forehead. Cold sweat all over her; and a very weak pulse, so weak that it can scarcely be counted.

Viola odor. Much weeping without knowing why; distress in the chest; difficulty in breathing; anxiety and palpitation of the heart.

Zinc. Incessant and powerful fidgety feeling in the feet, or lower extremities. She must move them constantly.

CHAPTER FOURTEENTH.

HYSTERALGIA. IRRITABLE UTERUS.

NERVOUS IRRITATION.

In the preceding chapter was commenced the consideration of a class of cases which, although neither structural nor directly functional, are no less important both from the severe sufferings in which they principally consist, and from the complications to which they eventually give rise. These are the *nervous disorders of the uterus,* which in their various forms are included under the names of Hysteria, Hysteralgia, Irritable Uterus, Neuralgia of the Womb, &c.

The two different nervous systems of the human body,—the ganglionic and the cerebro-spinal,—although distributed to some considerable extent to the same organic structures, possess entirely different functions and susceptibilities. Thus the ganglionic nervous system is the one which supplies all the organic structures and sustains all the functions of the organic and involuntary life. While the cerebro-spinal nervous system supplies the same structures in their various degrees, with the still higher powers of voluntary action, sensation, perception and sensibility. The former has exclusive relation to the phenomena of nutrition and reproduction; and so its filaments and ganglionic connections are distributed more or less palpably to all the substances and tissues of the body. The latter has more especial relation to sensation, volition, perception and *sensibility;* hence also its fibres are to be found in nearly all the structures of the body, even in those known as involuntary and not directly subject to the voluntary nervous system.

Thus while the nerves from each of these two great vital centres are supplied alike to almost every structure or tissue in the body, those from each centre have their appropriate and readily distinguishable functions. And the disorders which may arise in connection with the nerves from the ganglionic system, are entirely different from those which may arise in connection with the nerves from the voluntary or cerebro-spinal system. In the former case we have *inflammation, congestion, engorgement,*—in connection with the circula-

tory apparatus, which is under the immediate and absolute control of the organic or involuntary nervous system. This inflammation may be *active;* and it is then usually considered to be more immediately dependent upon excitement of the arterial circulation. Or it may be *passive;* and it is then supposed to be connected with arrest or stagnation of the venous circulation. Thus organic nervous irritation gives rise to inflammatory congestion, both active and passive, acute and chronic.

On the other hand the cerebro-spinal irritation gives rise to a purely nervous congestion; that is to one which corresponds in the nervous system, to the inflammation of the circulation in organic irritation. Thus in disorders which arise in connection with the cerebro-spinal nervous system, we have *irritation,* irritability, increased and excessive sensibility. And the susceptibility to this painful irritability is augmented just in proportion to the extent of this form of nervous development in the particular structure. As where the tissues are most vascular there may be the most active inflammation, the most violent congestion,—so where the voluntary and sensitive nervous filaments are most abundant, there may be the most excessive irritability, the most distressing sensibility. Such is the case in the most remarkable manner in the uterus. In addition to its necessary relation to the ganglionic nervous system, the womb, although not immediately subject to the voluntary nervous system, *is alive with nervous filaments and most intimately connected with the entire cerebro-spinal nervous system and sensitive sphere of the whole female body.* The womb and ovaries are the seat of the highest vital action and functions of the female life; the highest and holiest joys and hopes are associated with the healthy condition of these organs, and the proper performance of their functions; and the profoundest suffering and the most extensive and lifelong distress must necessarily result from the disorder of the nervous system connected with them and from the impairment of their functional action.

Inflammation, whether acute or chronic, active or passive, involves some structural change, especially some more or less perceptible derangement of the arterial or venous circulation; and is essentially a disorder of the ganglionic nervous system of organic life. *Irritation,* whether existing in the condition of excessive irritability of the nerves, or of positive pain, as in neuralgia, is essentially an affection of the cerebro-spinal nervous system, the nervous apparatus of animal life. And as inflammation may exist, even very extensively without pain,—so pain, or the disorder of the higher nervous system,

may exist without inflammation. Inflammation necessarily involves a certain amount of structural change of tissue, as in congestion; but irritation does not involve change of tissue, except perhaps such modification of the substance of the nerve itself as is entirely beyond our minutest scrutiny. In inflammation the development of the disorder is always, perhaps, at the originally affected part: while in irritation the sensation of pain or other evidence of nervous disorder may be at the sentient extremity of the affected nerve, or it may be in some other and remote part. Inflammatory congestion leads to effusion or to suppuration, according to the nature of the tissue which becomes the seat of the morbid action and to the severity of the action itself. Irritation or nervous congestion may result in irritability,—excessive sensibility,—intense pain,—cramps or spasms where the nerves distributed to the muscles are affected,—and finally in paralysis from exhaustion or collapse of the nerve power itself.

As too ready susceptibility to inflammation indicates a weakness of the organic nervous system,—so excessive irritability indicates a corresponding debility of the cerebro-spinal nervous system. The weaker are the nerves the more sensitive they are, and the less can they bear of opposing influence without being thrown into a state of excessive irritability, or pure nervous erethism. But this form of nervous debility which leads to excessive suffering does not seem incompatible with a most remarkable power of endurance of pain. Females of delicate constitution and exceedingly irritable nervous system, are often seen to endure for days and nights such distressing neuralgias with entire loss of sleep, as would seem capable of destroying a strong man. Such pains are often seen to come on with suddenness,—to continue with most intense severity for many hours, and often finally to disappear with equal suddenness, and leave no mark or trace of their long continued presence.

But as in those forms of disease which have been referred to as connected with the organic nervous system, pain may precede the acute inflammatory action,—so in those forms of purely nervous disorder, which have been described as *irritation*, the excessive sensibility and distressing irritability may precede such nervous derangement as would actually impair the functional action of the parts. Thus we find in the first stage of a purely nervous irritation of the uterus, no positive failure of its functions; but only an exceedingly great amount of pain in their performance. The menstrual function may be neither prevented nor impaired otherwise than by an intense and agonizing pain preceding and accompanying it; so in coition,

especially if the womb is touched; and so finally in pregnancy, the nervous irritation may not at first prevent the fulfilment of the functions of the uterus, only render them exceedingly painful. But such irritation cannot but cause all these functions to become more or less impaired in the course of time, even without producing any positive structural changes.

These nervous affections,—thus shown to be irritations of some portions of the cerebro-spinal nervous system in its connection with the uterus,—may be transitory and evanescent, when such are the influences from which they arise. Or they may be permanent and life-long, in accordance with the persistent nature of their causes. But as we have shown that the irritability of the nervous system is in proportion to its weakness, so it will presently appear that debilitating influences are among the most frequent causes of this irritation of the uterus; thus complete recovery can only be possible in those cases in which the patients can altogether escape from these debilitating influences, and also have their dynamic effects entirely remedied and removed by suitable medication.

Irritable Uterus; Hysteralgia; Neuralgia of the Womb.

In *irritable uterus* the womb is in a painful and tender state; morbidly sensitive and irritable; the least touch or pressure producing the most exquisite pain; still there is no apparent congestion, inflammation or induration.

The principal symptoms which may indicate this condition are, deep-seated pain in the lower part of the abdomen, as if in the pelvis; aching pain in the back and loins, always present, but sometimes much more and sometimes less severe. Upon examination by the touch or even by the speculum where this is practicable (which is seldom the case in this affection) the os and cervix uteri are found in their normal condition, except the remarkable sensitiveness to the touch. And as remarked by Dr. Gooch,—who first described this form of uterine disorder as distinct from inflammation,—this painful and tender state of the organ is neither attended by, nor tends to produce change in its structure.

Late writers on female diseases have inclined to consider irritable uterus a very rare form of disease. Thus Tilt says: "Irritable uterus as an essential disease independent of inflammation, can only be Hysteralgia, a rare disease of which I have only seen two instances, and Scanzoni three."* But even if this irritable uterus is but rarely

* "Uterine and Ovarian Inflammation," London, 1862, p. 228.

found as an original disorder, it is still so common,—being an almost universal attendant upon displacements of the womb,—and it exerts so important an influence upon the entire female economy, that there is little danger of attracting too much attention to it. And in fact under this general head are properly enumerated many conditions and symptoms, which Allopathic nosologists might designate by other names; but these conditions and symptoms are the very things which make up the case of the patient for whom we wish to prescribe, and not for some nosological disease by which she may be supposed to be infested.

The pain is not confined to the sacral and pubic region; it is often felt in the sides of the abdomen; in the hips,—or in other parts of the body,—or it may extend from the back completely around to the groins, the hypogastric region, and down the thighs.

In its nature the pain of irritable uterus is as various as is its seat. "It is most frequently described as a dull, aching, wrong feeling in the back, with more or less sense of pressure, weight, dead feeling, heaviness, fatigue or debility. Not unfrequently, in the abdomen, it is a sore pain, a sharp, needle-like, lancinating pain. With some it is mere soreness, and in very many, after the acute character has subsided, soreness remains often so great that the weight of the bed-clothes becomes troublesome. In the hips and down the limbs, there is often the same wrong and dull pain with a sense of fatigue and an inability to move; but sometimes it is sharp, neuralgic and toothache like, and occasionally excites spasmodic and painful action of the hips, thighs, &c. The sensations are often *pulsatile*, resembling those preceding or accompanying the suppurated stage of inflammation. This beating, 'strumming,' vibrating pain is referred to the womb, vagina, bladder, rectum, &c., and is often very tormenting. A *burning* sensation, or feelings of moderate or severe degrees of heat, are not uncommon in the vagina, the vulva, urethra, sometimes in the sacral or hypogastric regions, over the whole lower part of the abdomen, and extending to all the anterior portions of the thighs. This is very distressing, and sometimes so severe that patients have declared the burning could not be greater were they to stand perfectly exposed before a hot fire, or if coals of fire were placed within them."*

In addition to pain and very frequently where there is no pain whatever, there are numerous sensations more or less distressing,

* Hodge, Diseases Peculiar to Women, p. 55.

indicating an irritable state of the uterus and the adjacent organs. Some of these are very common, as sensations of weakness, debility, languor, often with feelings of fulness, pressure, weight; a bearing down sensation in the back, vagina, rectum; an open feeling as if there were no support, and all the pelvic contents must escape, or as if the patient would "fall in pieces" when in the erect position; a sense of pressure on the rectum as if the bowels must be moved, or simulating the fulness and weight of hæmorrhoidal tumors. A great sensation of distress, of prostration, often exists after the bowels have been moved. Similar troubles are also experienced about the neck of the bladder and the urethra, especially at its orifice, with frequent, sometimes almost constant inclination to urinate, and then a burning scalding sensation.

Such are some few of the multitude of sensations which arise from irritable uterus, sensations which vary in different cases both in kind and in severity. Some persons having some and other persons other symptoms,—which may be so mild as hardly to be noticed, or so intensely painful as to be almost unendurable.

These sensations are very severely *aggravated* by every kind of *motion*,—such as walking, sneezing, coughing, vomiting, and by every effort or movement of the body which may cause pressure of the contents of the abdomen upon the irritable womb. They are also aggravated in the most remarkable manner by *menstruation*. It may be that a disorder of the ovaries was the original cause, in part at least, of the irritability of the uterus; and that such ovarian disease also tended to produce what is termed dysmenorrhœa. But even if this were so, the irritable uterus could not but render the function of menstruation still more intensely painful. When perfectly quiescent and motionless, even the most irritable womb may be comparatively easy. But physiological stimulus no less than mechanical violence arouses its painful irritability; hence both before and during menstruation, in such cases, the pain is intense and agonizing. And from whatever cause the irritability of the uterus arises, dysmenorrhœa is an invariable result.

Leucorrhœa of some kind is also an almost invariable attendant upon irritable uterus. This discharge may be functional and not inflammatory; it may even be apparently vicarious, as appearing in place of the menstrual flux at the first onset of puberty in the young, or sometimes instead of the regularly established catamenia; or it may appear as a temporary substitute for the menses at the change of life. In each of these various forms of leucorrhœa, this discharge

is the result of what may be termed a physiological irritability of the uterus, a condition of the womb which will be regarded as more or less morbid, according as it gives a more or less abundant secretion, and is more or less persistent in its duration.

As has been elsewhere shown, irritation of the organic nervous system leads to inflammatory congestion; while irritation of the cerebro-spinal nervous system leads to simple congestion, and to painful sensations or to spasmodic contractions, according to the *sensory* or *motor* nature of the nerve filaments which are principally involved. This *irritability of the uterus*, if it be supposed to involve each of the classes of nerves distributed to that organ and its appendages, becomes the initial stage of a great variety of disorders of the sexual apparatus and of the entire organism of the female. And this general conclusion has been reached by some, who certainly did not understand the reasons which support it. This is fully implied in the expression of a recent and able English author, where, speaking of irritable uterus, he calls it "that scapegoat of uterine pathologists in England."* The whole subject has been discussed in an extended manner and with remarkable clearness and ability, by Professor Hodge, to whom, in the preparation of the present work, and in common with the profession at large, we are greatly indebted,—and to whose work† we would refer all those desirous of a more thorough exploration of this and kindred subjects. The various disorders of the female sexual system, Dr. Hodge considers as the causes, the consequences or the complications of *irritable uterus*.

Hysteralgia or neuralgia of the uterus needs here to be considered as connected with irritable uterus, and yet as to a certain extent distinct from it. Irritable uterus is rather a negative condition of susceptibility or excitability from general nervous weakness in the organ,—while hysteralgia is a more positively painful condition, which may be considered to be added to the irritable state by some special provoking cause. Thus in cases of irritability of the uterus, the patient may be comparatively easy when perfectly at rest; while any exertion, such as rising from the bed, walking, coition, or menstruation, may develop the most painful sensations. "In dysmenorrhœa, or painful menstruation, the greater portion of the pain consists, I am convinced, of neuralgia; the deep lumbar pain is decidedly

* Tilt, "Uterine and Ovarian Inflammation," p. 334.

† On Diseases peculiar to Women, including Displacements of the Uterus. By H. L. Hodge, M. D., Professor of Obstetrics, etc., in the University of Pennsylvania, Philadelphia. Blanchard & Lea.

ovarian, and not uterine."—*Tyler Smith.* Here it is evident that both irritable uterus and hysteralgia may depend upon some primary morbid condition of the ovaries.

Symptoms.—"Neuralgia of the neck of the womb often exists independently of any other lesion of this organ or of the body of the uterus, the patients complain of pains that are seated high up in the vagina, without any alteration being perceptible, even after the most minute investigation. Contact is always painful, and sexual intercourse often produces such agonizing distress that the patients would rather bear any other torture."—*Jahr.* "In real uterine neuralgia, the pain is situated in the uterus itself, to which it is referred by the patient throughout the attack,—or in the uterus and ovaries simultaneously. This pain, generally speaking, comes on suddenly, without being preceded by any premonitory symptom, unless it be slight numbness. A few minutes before and after the attack, the patient may be perfectly well and free from pain; whereas, during its existence she is often rolling in agony on the bed or the ground. Real neuralgia is essentially intermitting in its character, returning for a limited time, at stated intervals during the twenty-four hours. Sometimes the attacks only occur once in the twenty-four hours, sometimes oftener. They last from one hour or two, to ten or twelve. An attack is composed of a series of paroxysms, each of which is followed by a period of comparative freedom, of variable duration. During the attack, pains are also felt in the lumbo-dorsal, ovarian, and other uterine regions; and there may be exquisite cutaneous sensibility of the entire abdominal region. All these pains, however, disappear along with the uterine tormina, as soon as the attack ceases, merely leaving for a time numbness and soreness."—*Bennet.*

"That affection, which we shall designate *acute hysteralgia,* is sometimes the immediate consequence of marriage. The pains in such cases, sometimes of a burning nature, are more generally attended with a sensation of pinching, and of forcible pressure in the hypogastrium and pelvic cavity, occasionally extending to the groins and loins. Like cramps and colics, they are intermittent, leaving, however, in the intervals, a tenderness and sensibility of the hypogastrium, which render them liable to be confounded with slight metritis.—In chronic hysteralgia,—the real uterine neuralgia,—the paroxysms occur without assignable cause, and without anything of an inflammatory character. It appears in paroxysms, varying in frequency and regularity." *Boivin and Duges.*

The *causes of hysteralgia,* or uterine neuralgia, may be of two

kinds: First, those influences, termed provoking, which may develop a positive neuralgic condition from an already existing negative state of uterine irritability or excitability. Second, those influences which are capable of developing a true uterine neuralgia where there was no pre-existing irritability. In the first class, as already mentioned, every bodily exertion, the orgasm of coition, or the molimen of menstruation,—as in dysmenorrhœa,—may easily induce the neuralgic sufferings. In the second class, patients of general nervous temperament, subject perhaps to what is termed "spinal irritation," may experience neuralgic paroxysms in various parts of the body upon every over-exertion. Fatigue, too severe and long-continued labor, or any undue exercise, in which such persons go beyond their strength, will invariably produce neuralgia. And it requires only some special, local or functional influences,—such as excessive coition, over-exertion while menstruating,—to cause the neuralgia to be developed as an hysteralgia, rather than as a prosopalgia, a megrim, or a tic douloureux. And in either class of patients there is no doubt that the local irritation unavoidably arising from displacements of the uterus and its appendages, may occasion constant or periodically recurring neuralgic sufferings,—which may be felt in the womb itself, in its immediate vicinity, or developed in the epigastric or other region remote from the real and original seat of the disorder.

For the treatment of the various forms of the more painful nervous disorders of the womb and its appendages, irritable uterus, hysteralgia, or uterine neuralgia and painful coition, study and compare the following remedies.

Asafœtida. May be indicated in decidedly venous systems and nervous temperaments. Labor-like pains with cuttings and bearing down. Menses too frequent and too scanty. Hysteria. Hypochondriac, anxious, sadness and apprehension of dying; paroxysms of shuddering. Fits of great joy with occasional bursts of laughter.

Asterias rubens. General feeling of distress in the womb as though something were pushing out. Twitching in the uterus. Feeling of extreme anxiety, as though some misfortune were impending; as though some bad news were about to arrive. The menses are apt to delay.

Aurum. Almost constant thought, more or less intense, of suicide.

Bryonia. The uterine sufferings are increased from the least motion. Desire for things which cannot be had,—or which are refused or not wanted when offered. Frequent nose-bleed.

Calc. carb. Pale, leucophlegmatic; weakly, fearful persons. Fear of going crazy. Vertigo on going up stairs. Frequent spasms. Sense of weight and soreness in the uterus.

Causticum. Pains in the abdomen causing her to bend double. Fulness and pressure in the abdomen, as if she would burst. Constant but ineffectual desire to eructate. Violent increase of the pain after the least nourishment; or after tightening her clothes round her waist.

Cham. The mental state of the patient leads to this remedy. In all her sufferings there is a vein of ill-humor; she can hardly speak pleasantly; feels like scolding about every thing. She often gives vent to her ill-humor in spite of all restraint.

China. Much singing in her ears. A sensation in the abdomen as if it were packed full,—which is not in the least relieved by eructation. Worse every other day.

Cocculus. Painful pressure in the uterus, with cramps in the chest and fainting nausea. Suppression of menses,—or leucorrhœa in their stead. Feels too weak to talk loud.

Coffea. This remedy also is chiefly indicated by the mental symptoms. Ecstacy. Full of ideas. Quick to act; no sleep on this account. The physical system seems exalted and almost transported by the mental exaltation.

Conium. Stitches extending from the abdomen to the right side of the chest. Vertigo when lying down, or turning over. Intermission in the flow of the urine.

Crocus. Sensation of rolling and tumbling in the abdomen. Great mental dejection. Menses suppressed, or dark and stringy.

Ferrum. The patient is weak and nervous. She suffers much, but has very red cheeks.

Graphites. Itching blotches here and there over the body. Menses delay, or are suppressed. The patient seems bloated and inclines to obesity. She is weak and irritable.

Hyoscyamus. She inclines to that kind of insanity which leads to nakedness,—to throw off her dress or the bed-clothes. Uninterrupted, loud laughing at the approach of the menses. She is very much inclined to spasm. Uterine cramps with pulling in the loins and small of the back.

Ignatia. Uterine cramps with cutting stitches. Great sense of soreness at the pit of the stomach. Full of grief and sighing. Brooding over imaginary troubles.

Ipecac. Much pain about the umbilicus, extending towards the

uterus. The most of the distress is about the navel, but it runs off into the uterus, the real seat of the disease. One continued nausea.

Kali carb. Stitching pains about the tender uterus, or all over the abdomen at times. Always much distress in the abdomen an hour before stool.

Magnesia mur. Sleeplessness, with difficult stools, which crumble as they escape the verge of the anus. Frequent hysterical spasms. Uterine cramps with pains extending down the thighs.

Natrum mur. Very sad and gloomy during the menses. Much palpitation of the heart, and morning headache. Frequent dreams of robbers in the house, and on awaking will not believe to the contrary till search is made. Great disgust for bread. Uterine cramps with burning and cutting in the groins.

Nux vom. Much sense of soreness in the neck of the uterus on rising up or sitting down. Wishes to urinate or to defecate very often, but little at a time, attended with pain. No sleep after three A. M. No appetite. Has indulged in high living, rich food, condiments, &c.

Opium. She is nervous and irritable, and passes nothing but hard black balls from the bowels. Her bed feels so hot that she can hardly lie on it. She is sleepy, but cannot go to sleep.

Phosphorus. Sensation of great weakness and emptiness in the abdomen. Sensation of great heat in the back, running up from the coccyx. Sharp, cutting pains in the abdomen. Sexual desire almost irresistibly strong. Much flatulency.

Phosphoric acid. The uterus is distended with gas. Pain, universally, in the liver during the menses. She must often rise at night in order to pass large quantities of colorless urine. Is very weak, and indifferent to the affairs of life. Listless; apathetic.

Platina. A voluptuous tingling in the genital organs and abdomen, with oppressive anxiety and palpitation of the heart. Frequent sensations as if the menses would appear. The mons veneris and vulva are extremely sensitive, feeling cold at the same time. Menses profuse, with black clotted blood. Much anguish; she feels as if she would lose her senses and die soon.

Pulsatilla. With almost all her sufferings there are sure to be tears and cries. She weeps very easily, about this or that; she can hardly give her symptoms, for weeping. Menses suppressed or flowing intermittently. She has a bad taste in her mouth in the morning, and nothing tastes good.

Rhus tox. In many cases following parturition. A vitiated dis-

charge continues from the vagina, with shooting upwards in the parts, and with a bursting sensation in the head. Much pain continues, in the right limb with numbness from the hips to the feet, for weeks after delivery. General unhappiness of temper.

Sabina. The pain extends from the sacrum to the pubes. A slight sensation of motion in the abdomen as if something were alive. Much irritability of temper. *Music is intolerable to her.*

Secale corn. This remedy is often indicated in thin, scrawny individuals; and in those who are afflicted with melancholy, anguish, dread of death. A constant sensation of pressure, or bearing down in the uterus.

Sepia. Great sense of emptiness at the pit of the stomach. The uterine region is tender to the touch. Little shooting, burning pains in the neck of the uterus. Sense of weight in the anus. Must cross her limbs, as if to keep the uterus from protruding. Very sad and fearful about her health, often weeps about it.

Sulphur. Frequent flashes of heat, which pass off in a slight perspiration with weakness. Much sensation of heat in the crown of the head. She feels badly at the pit of the stomach from eleven till twelve in the forenoon; she is weak, empty at that time, can't wait for her dinner. Sleeps in very short naps and is easily awakened. The most of the pain is in the left iliac region and in the left side generally. Much depression of spirits; or she is very happy and gay; every thing is very beautiful to her.

Thuya. Extremely scrupulous about the least thing. Walking or riding brings on such extreme suffering in the left inguinal and iliac region, that she is obliged to go to bed.

Zinc. The flow of the menses always relieves all her sufferings; but they return again soon after the cessation of the menses. A constant distressing boring pain in the left ovarium, only partially relieved by pressure,—or during menstruation; but returning again after the flow.

CHAPTER FIFTEENTH.

ULCERATION OF THE UTERUS.

EROSION.

ULCERATIONS of the uterus may be divided into four distinct classes: *Erosion; Simple Ulcer; Malignant* or *Corroding Ulcer;* and *Cancerous Ulcer.* The two former will be considered under the general head of ulceration. The latter being a special form of ulceration, distinct and well defined in its character and causes, will be described under its appropriate head.

And as we come now to the consideration of the less general and more minute and particular forms of organic disease of the uterus, it seems proper to say a few words relative to the methods of examination to be pursued in such cases. In the forms of disease of the uterus hitherto treated of in the present work, the *touch* has been deemed amply sufficient to enable the practitioner to determine with sufficient exactness the nature of the difficulty. And in fact the well practiced touch is a surer guide to diagnosis in such explorations than is the speculum, which must necessarily interfere more or less with the position and appearance of the vagina. And the touch, whether per vaginam or per anum, or both, is fully competent to determine the nature of the various forms of displacement. But in the examination of cases of suspected ulceration of the cervix, the speculum may be used to confirm the indications obtained by the touch; and to assist in deciding as to the simple, malignant or cancerous nature of the ulceration itself.

Still from the very great reluctance of many females to submit to such ocular examination,—even when conducted in the most delicate manner possible,—it seems better for the young physician to learn to depend more upon the touch in forming his diagnosis,—in fact to rely upon that in almost all cases; and only to resort to the speculum in doubtful or difficult cases, or perhaps in the first examination of such as come under Homœopathic medication, from Allopathic hands. The finger may be as truly educated to discriminate the different conditions of the uterine surface and substance, as it may be to strike the strings of the harp or the keys of the piano. And it is a subject

of no small gratulation to remember that not only the most eminent Homœopathic physicians, but also the entire body of respectable practitioners of our School, have set their faces against the disgusting and disgraceful resort to the speculum upon every possible pretence and occasion. However fashionable the use or rather abuse of the speculum was at one time in the Allopathic ranks,—and we are glad to say it is now so no longer,—such cultivation of morbid curiosity on the part of the physician,—to give it no worse name; and such pandering to the prurient sensualism of some women, and such unnecessary wounding of the delicate sensibilities of others, has never obtained currency in our School. And not only do all the soundest principles of medical exploration dissuade from the indiscriminate introduction of the speculum,—but the whole tenor of our Homœopathic therapeia leads to a more excellent way, by substituting the subjective, the sensational, the constitutional and functional symptoms for the pathological details of structural changes, as the basis for medical treatment.

Hence we think that in most cases the touch alone will prove amply sufficient for *the purposes of diagnosis*, and far superior in certainty to the speculum in the great majority of cases. In displacements of the womb and other organs, it may be necessary to investigate by the touch, the situation of the parts. And in some of these cases of mal-position, as in retroversion of the uterus, manual assistance may be needed in order to restore the parts to their proper place. But in actual practice, so long as we do not give Homœopathic remedies for diseases by name, as do the Allopaths,—so long as we do not wish to confine ourselves merely to the removal or palliation of the consequences of the illness,—so long as we make it our great aim, as skilful physicians, to restore our patients to health,—and so long as we consider the disease removed only so far as we see such restoration to health,—just so long shall we seek to find the remedy which shall correspond to all the symptoms of the case and *which shall especially represent the subjective and constitutional symptoms*,—instead of relying mainly upon the indications afforded by the speculum or even by the touch.

And we believe that a careful and attentive study of these symptoms, and of the attendant conditions, will enable the physician to make the right, the best possible prescription for his patient. For thus he regards the first elements, the dynamic causes, rather than the ultimate results of the morbid affection. And herein do we differ from the so-called physiological School,—as well as from the

pathological and chemical Schools. The method here inculcated is in strict accordance with pure Homœopathy; and it might perhaps be deemed the physiological method, were not this term already appropriated as the designation of an entirely distinct system. This method, which we may perhaps be permitted to call our own, since we adopt and advocate it, may be termed the vital method. It is essentially the method of Hahnemann, of Bœnninghausen and others, whose learning and skill have contributed to make Homœopathy an honor to the medical profession. In this method, we realize that pains, or subjective (sensational) symptoms come before the functional derangements,—as these latter come before structural or organic changes; and that the two latter forms of disease are but the extension and ultimate development of the morbific influences shadowed forth in the former. So that if we pay strict attention to the subjective, the sensational, the constitutional symptoms, in addition to the local manifestations, and to the attendant circumstances and conditions (which are also constitutional symptoms, and so of the first importance) we shall come far nearer the mark, and be far more sure of healing the sick, than if we directed our principal attention to the more external and ultimate symptoms or forms of the disease.

For purposes of diagnosis, and especially to satisfy the patient, and her friends, the touch may be resorted to,—and in some cases the speculum even. But for guides in the selection of the remedy, the indications afforded by the patient herself,—those which we have designated as subjective, sensational, constitutional and functional,—afford us the greatest certainty, and lead most directly to the happiest results.

But to return from this digression to the *ulcerations of the uterus.* The first form is that of simple *erosion,* or *abrasion of the cervix.* This is in reality an ulceration of the mucous coat alone, and might have been described under the head of the consequences of mucous inflammation, but that we think it is dependent upon inflammation of the submucous tissue,—that it does not occur where the inflammation is confined to the mucous membrane alone. This is called superficial ulceration or excoriation, since it does not include the deeper tissue of the womb. When an abrasion or excoriation only is present, the cervix is generally of a vivid red, and the granulations are often so minute, that it is at first difficult to ascertain whether the membrane is abraded or merely congested, or to perceive the limits of the ulceration when once it has been ascertained to exist.

These superficial erosions are with difficulty recognized by the touch. They may sometimes exist for a long time without the patient being aware of them; the only sufferings which their presence occasions being an indefinite sense of pain in the pelvis; and slight leucorrhœal discharge which becomes tinged with blood after sexual intercourse.

The superficial erosions or mucous ulcerations of the cervix are mostly the result of violence or excess in sexual intercourse; but they may arise from friction of the cervix against the walls of the vagina in cases of displacement. In connection with these causes, such superficial ulcerations are much more apt to occur in those whose general health is poor. In such cases these erosions may bleed readily; and even develop fungous tumors, or other abnormal growths, from the mucous membrane of the cervix. In some cases minute pustules appear in the mucous membrane of the cervix, which, on being brushed off, leave bright red spots. This may constitute an *aphthous* form of erosion, corresponding to the aphthous ulceration of the mucous membrane of the mouth. And cases have been known in which the aphthæ repeatedly appeared at the same time in the buccal mucous membrane and in that of the cervix uteri.

According to the constitution of the patient these ulcerations may be regarded as the development of an herpetic, scrofulous, or even syphilitic taint in the system. Hence a careful study of the constitution and of all the attendant symptoms of the case will be necessary in order to effect a radical cure of the dyscrasia which they may represent. And the same remark is equally true, even if from their deeper nature these erosions should more properly be included under the second class of:

Simple Ulcers of the Cervix. Deep-seated Ulcerations.

The principal difference between the actual ulcers of the cervix and the erosions first described, is to be found in the greater depth of the former, which involve the substance or parenchyma of the womb. They may be supposed to result therefore from a severer form of congestion and inflammation of the parts; from severer injuries; or they may be regarded as the further development of the abrasion or superficial ulcerations. And they are more easily perceptible to the touch. In their depth these ulcerations may vary from a few lines to a quarter of an inch. Sometimes they include and destroy a con-

siderable portion of the cervix. The ulceration is usually on the cervix near the os tincæ; and in many instances the ulcer extends from the exterior surface into the canal of the cervix. When the inner surface of the canal is thus effected, the os uteri is much more patulous; and this will afford some indication of the extension of the disease internally.

In many cases the ulceration is with difficulty recognized by the touch, the ulcerated surface being so nearly on a level with the non-ulcerated. A soft, velvety, mossy character, easily recognized by the finger after a little practice, belongs to these ulcerations.—which are still very different from the excoriations of the mucous membrane. "This soft velvety sensation, and the open state of the os uteri, are the most important evidences of the existence of ulceration that the touch can give." Their edges are clearly defined, neither hard nor elevated, and their surfaces present a granulated healthy appearance and are usually covered by purulent matter. In other cases the granulations may be more abundant, firm, of a vivid red hue, scarcely bleeding on pressure; or they may be large, fungous, livid and bleed profusely on the slightest touch. These fungous ulcerations are generally connected with torpor of the local circulation; and when they appear, the congestion of the vagina is often very great, of a livid venous character, and the non-ulcerated surface of the cervix may present dilated varicose veins.

Simple, deep-seated, non-malignant ulceration of the cervix, is characterized by a burning or stinging pain in the centre of the pelvis; this pain is much more excruciating during coition, or during the menstrual flow; there is severe pain in the back; more or less leucorrhœa, and sometimes considerable discharge of blood. These ulcers are usually found on the inside of the os tincæ, most frequently on the posterior lip; but very often they are developed in fissures of the cervix resulting from parturition, especially at the two lateral angles of the mouth of the womb. They may even ascend so high up the cervix as to involve the fundus of the womb.

Three distinct elements may be considered to include the principal causes of these ulcerations,—attacks of inflammation, local influences and constitutional miasm. As the erosions were deemed the result of inflammation of the mucous coat, so these ulcerations which involve the deeper tissue of the womb may be considered as the consequences of corresponding inflammation. In connection with this must also be taken into account those local injuries which result from sexual intercourse or other violence, from injections, or pes

saries, or other mechanical means, and from the friction against the cervix in cases of displacement already referred to as promoting abrasions of the mucous coat. And thirdly, some specific miasm, psora, herpes, or scrofula, may be supposed to enter into these ulcerations. Where cancerous ulcers become developed, it is because instead of one of these non-malignant miasms, the germ of the cancer was present in the original disease. For it is not to be imagined that any simple ulcer, however severe, finally results in cancer. Nor indeed do the more virulent forms of malignant or corroding ulcer thus deteriorate or become transformed into specific disease.

This form of ulceration never exists alone; but it is either the consequence of some constitutional dyscrasia; of general poor health, —or it may appear in connection with engorgement or chronic catarrh of the womb. In this latter case the ulceration may be either the cause or the consequence of the chronic inflammation. And in either case, the ulcer cannot be made to heal permanently until the other morbid conditions of the womb are removed, and until the general health is more or less completely restored. For it is with the womb as with the eye, in respect to the intimate connection and profound sympathy of these organs with the general health.

Non-malignant ulcerations may heal spontaneously; that is on the recovery of the general health, and on the subsidence of the provoking causes of the ulceration. The contrary of this has been asserted by a late author.* But cases are recorded in which cicatrices were found in the womb of females who had died of other diseases, but in whom the existence of uterine ulceration had never been suspected. But where the general health is neglected or grows worse, where the ulcerations are left to themselves or aggravated by improper treatment, they may continue to spread, and become so extensive as to destroy life indirectly by undermining the constitution, or directly by the hemorrhages which they may occasion.

Simple ulcer of the womb is far more amenable to Homœopathic medication, and far more easily and safely treated by such gentle and yet constitutional means, than by the application of caustics either liquid or solid. At the same time the general health is restored by selecting remedies to suit all the constitutional indications; and the patient is not only cured of her ulcer, but radically cured, by the removal from her system of the dyscrasia, which, combined with incidental local causes, produced the ulceration.

* Scanzoni.

Fungous Growth, or Cockscomb Granulation, is a form of disease which may result from neglected ulcerations of the womb. These granulations may be regarded as a hypertrophied development of those already mentioned as connected with simple ulceration of the cervix uteri. These fungous excrescences spring up principally in the vicinity of the os uteri; they are sometimes found within the canal of the cervix; they are of a livid-red color,—composed of cellular tissue, and are very full of blood-vessels. They discharge an abundant purulent secretion; and are capable of giving rise to copious and almost intractable hemorrhage from the least touch.

Malignant Ulceration, Phagædenic or Corroding Ulcer of the womb, constitutes the third form of organic diseases of the womb. This form is fortunately not very common; and its existence as distinct from cancerous ulceration has been positively denied. In its extent, malignancy, in the rapidity of its course, as well as in the usual fatality of its termination, it is no less formidable than cancer itself. Malignant non-cancerous ulceration is more apt to happen to women at the middle period of life, or at a more advanced age; but it sometimes occurs in women who may still be said to be young. The ulcer generally begins in the cervix uteri; and the uterus is at the same time somewhat harder and larger than in the natural state. It does not however grow to any considerable size. The ulcer spreads from the cervix to the fundus, and it is not unusual to see the greater part of the cervix destroyed by it, and the rest changed into a tattered, ulcerated mass. The ulceration is not always confined in its boundaries to the uterus, but it sometimes spreads into the neighboring parts, as the vagina, the bladder and the rectum, making communication between them and producing dreadful havoc. "This disease attacks females of the lymphatic temperament, and generally about the period of the cessation of the menses, or soon after."

Malignant ulceration of the womb is attended by heat and pain in the pelvis. But the first important symptom is the alarming hemorrhage to which it gives rise; and which may be mistaken for a profuse menstruation. There is also fetid discharge, which varies from a light-straw color to a dark-brown. That portion of the uterus which is not ulcerated is scarcely at all enlarged, and is free and movable, thus differing from the true cancerous ulceration. "In cancer uteri there is extensive deposition into the cellular membrane

and glands between the vagina and rectum, as well as into the substance of the uterus itself, connecting them so as to form one large mass, and *rendering the whole immovable;* the finger on being introduced into the vagina, finds very little space *and no power of moving the parts with which it comes in contact.* Whereas, in corroding ulcer, no deposition having taken place, the uterus can be moved by gentle pressure, and parts of the pelvic contents having been destroyed by ulceration, there is more space than usual in the cavity." From simple ulceration of the cervix, this malignant form is distinguished by the excessive fetor of its discharge, by the more intense character of the pain, and by the rapid extension of the ulcerative process. Corroding ulcer of the cervix, which may also extend to the fundus of the womb, slowly eats away the uterine walls; and in the Allopathic practice is only hindered and delayed in its final and fatal termination. But in the Homœopathic practice we possess the very important double advantage of being enabled at the same time to give remedies which shall promote the healing of the local difficulty, and improve instead of still further injuring the general health. These cases can never be cured, unless by such means as shall eliminate from the system the dyscrasia which lies at the foundation of the ulceration,—and at the same time remedy both the bad health which caused and that which followed the ulceration itself. These ends are far beyond all the means of the Allopathic school, in which the treatment, either local principally, or general principally, and even both combined, usually has the effect to leave the case worse than before.

Ulcerations of the Uterus and Adjacent Parts.

Anti. crud. Profuse discharge of acrid water, containing portions of pus. Gastric derangement with white tongue is often present. The stools are often liquid containing portions of solid matter.

Argentum nit. Bleeding ulcers, the hemorrhage being of short duration. She seems dizzy and cloudy in her head; the headache is not severe, but dull and constant. The moral and nervous disturbances come on in quite regular paroxysms every night, in the morning, or at noon, more particularly after dinner. Great debility, particularly in the lower extremities. Much chilliness and nausea are often attendants in such cases. This remedy, in substance, is often useful in the old practice because of its frequent Homœopathicity to the case; but it is far more useful in our hands, in the two-hundredth preparation, and for the same reason.

Ammo. c. The vulva and anus are sore and especially painful during the emission of urine. The discharges are acrid, making the thighs sore, causing a burning pain. Pain between the scapulæ between the discharges. Violent tearing in the abdomen and vagina. Great debility and soreness of the whole body. Violent acrid leucorrhœa.

Ammo. mur. Discharge of a quantity of blood with the stool at every catamenial period. Leucorrhœa with distention of the abdomen without flatulency. Leucorrhœa like the white of an egg, or brown and slimy, after every emission of urine.

Asafœtida. The menses are scanty; they are often too early and last but a short time. The ulcer has high, hard edges, and easily bleeds. The ulcer is sensitive and painful. The discharge is profuse and greenish, thin and offensive. An hysterical condition is frequently attendant upon such cases.

Hepar s. c. The ulcer has a bloody suppuration, smelling like old, rotten cheese. Its edges are sensitive; and it often has a pulsative sensation. The discharge is also corroding. The ulcer itches very much.

Muriatic acid. The ulcer has a putrid discharge, is sensitive and attended with a great sense of weakness. If the anus be *very sensitive* either with or without hæmorrhoids, Muriatic acid is sure to be the remedy.

Mezereum. The ulcer has a biting, smarting or burning and sometimes a prickling sensation. The discharge is albuminous, sometimes tinged with blood.

Petroleum. Deep fistulous ulcers, with raised edges and pricking pain. The discharge is thin and scanty. A little fleshy growth is often seen in the ulcer. The patient often has diarrhœa, but only in the day-time, never at night.

Phosph. acid. The ulcer has a copious, putrid, bloody discharge. There is an itching or corroding pain, or the ulcer is entirely destitute of feeling. The patient is apt to be quite indifferent to every thing,—even to those things which used to interest her most.

Secale corn. The ulcer feels as though it had been burnt. It discharges a putrid bloody fluid, and is sometimes decidedly gangrenous and painless. It is more frequent in thin and scrawny individuals.

Zinc. The ulcer has a bloody, acrid discharge, but is of itself rather destitute of feeling. Her various sufferings, headache, &c., subside during the menses. An excessively violent and obstinate

pain in the brain sometimes accompanies this ulcer. This pain may even assume the form of an intermittent.

For other ulcerations, whether thought to be malignant or not, see also the remedies recommended for cancer; since the same remedies may answer for either form of ulceration,—the malignant as well as the non-malignant;—the sensational and constitutional symptoms being of primary importance in making the prescription.

For sensation of coldness in the ulcers, the following remedies may be consulted,—they are placed in the order of their importance in this respect: **Bryonia; Arsenicum; Silicea; Mercurius; Rhus tox.**

CHAPTER SIXTEENTH.

CANCER.

CANCER is an hereditary constitutional disease which is characterized by the peculiarity of its several forms, by the progressive nature of its development, by the intensity of its pain and by its remarkable tendency to terminate fatally.

The *hereditary nature* of the cancerous dyscrasia is proved, in part, by statistics, from a variety of sources, of cases in which the relatives of those subject to cancer have been known to have had the same disease. Among the French authorities on this subject, we may mention Velpeau, who states that in one-third of his cancer patients he could certainly trace an hereditary taint. Lebert's experience gives but one in twelve as thus constitutionally predisposed. Among English authors, we find that Mr. Paget traces an hereditary predisposition in this manner in but one in four of the cancerous persons who have come under his notice. The statistics collected by Mr. Libbey, at the Middlesex Hospital, show an average of but $8\frac{3}{4}$ per cent. of the cases as thus proved to be hereditary cancer cases. In the Cancer Hospital, the aggregate collection of the cases seen by the medical officers connected with the institution, yields an average of one in seven, who had relations previously affected by this disease. While Mr. Cooke,—from whose recent work* on this subject I have

* "ON CANCER: ITS ALLIES AND COUNTERFEITS. By Thomas Weeden Cooke, Surgeon to the Cancer Hospital and to the Royal Free Hospital, &c. London, 1865."

taken these details,—states that one in four of the cancer cases which have come under his observation, give evidence of the hereditary nature of the disease in themselves.

But it may be urged that these statistics do but indicate that a large proportion, still a minority of the cases of cancer, appear directly hereditary,—as having relations who have suffered with the same disease,—and that therefore the proof of the hereditariness, that is of the constitutionality of this disease, is very far from being conclusive. And that it may be affirmed that cancer may arise directly, in persons who have no hereditary or constitutional predisposition to this form of disease. This conclusion we deem entirely incorrect. And we attach the more importance to a correct statement of the matter, because it involves some very interesting practical considerations, relative to Hahnemann's Psoric Theory on the one side, and to the interchangeableness of different forms of ultimate disease on the other. Thus in reply to the objection of the insufficient nature of the proof of the constitutionality of cancerous disease, it may be stated that even as individual cases of disease often require a long time to incubate before they develop themselves,—so the cancerous affection may have been increasing in intensity for several generations before it reached a sufficient amount of deviation from the natural state to be able to ultimate itself in an actual cancerous growth. Again it may be remarked that people do not always know the history of their families,—and especially may oversights of this kind be considered probable, when we remember that the cancer like other constitutional diseases may skip over an entire generation.

But the main point to which attention is invited in this direction is the fact, that *this latent dyscrasia, extending from one generation to another, may be developed in entirely different forms in different generations and in different individuals of the same generation.* This fact, which has been in a great measure overlooked, we regard as of great practical interest and importance. It is found that there is another distinct disease, no less fatal, perhaps, and certainly no less surely progressive in its course, which appears to be the constitutional complement of cancer. And this disease is phthisis! which is, like cancer, an ultimate, organic, structural development of a constitutional dyscrasia,—which is, like cancer, a tuberculous affection,—and which, attacking principally a younger class of persons, destroys its victims in about the same average time that cancer does. These two forms of disease appear mutually interchangeable, since both their ultimate and fatal manifestations appear in different generations and branches

of the same family, and in different individuals of the same generation. Thus it happens that *cases of cancer which cannot be traced to any cancerous affection in other members of the family, may be referred to a strongly-pronounced* hereditary predisposition to phthisis: and conversely, cases of phthisis are seen to grow out of dyscrasia, which in other relatives, branches and members of the same family, have been developed as true, malignant, fatal cancer.

In the *peculiarity* of its *principal forms*, cancer differs remarkably from all other organic diseases. These forms are three in number,—the SCIRRHUS, or hard cancer; the ENCEPHALOMA, encephaloid, medullary or soft cancer; and the COLLOID, or gelatinous cancer. The *scirrhus* seldom or never appears before puberty, is moderate in size, and slow in its development. The *encephaloid* variety is the one which most frequently appears in infancy; it may occur in any part or tissue of the body; sometimes attains an enormous bulk; is the form which secondary cancerous deposits usually assume; is liable to very dangerous hemorrhage; and when once ulcerated runs a very rapid course. The *colloid cancer*, itself firm and resisting, contains a peculiar jelly-like matter,—occurs only in adults,—most commonly in the abdominal cavity; may grow rapidly and to an enormous size; rarely proceeds to ulceration; and most commonly destroys life by encroaching upon some vital organ and so permanently obstructing its functional action. The scirrhous form is the most frequently seen generally, and especially in the female breast and uterus, and is also the most difficult of cure. The encephaloid variety comes next in frequency.

These different forms of cancer have been by some supposed to represent merely the different stages of the disease; its different states of development. It may indeed be true that particular cases of cancer may, in the course of their progressive development, successively represent and with more or less accuracy, all these various forms. But in general, such a statement could hardly be supported by the facts. From the difference in the degree and intensity if not also in the kind of the cancer miasm, as well as from the innate variety of the constitutions in which it is developed, the cancer itself naturally assumes a variety of forms from the first. Thus while scirrhus or hard cancer usually softens in its advanced stages, others like medullary cancers,—which may occur in a wider range of human life, in the young as well as in the old,—and which are more malignant as being more rapidly fatal,—are soft from their very commencement.

Still there does not seem to appear in these different forms any

essential difference in the elements which may be deemed the radical constituents of cancer, or any other difference, than that of proportion, in the manner in which they are combined. Without stopping here to enter minutely into the discussion of the question as to whether there exists a true characteristic cancer cell, histologically distinct from all other normal or abnormal formations,—a question once supposed to be settled in the affirmative, but rendered now more than doubtful by recent investigations,—we merely indicate the general elements of cancer structure. These are the so-called nucleated *cancer cell;* a peculiar *fibrous structure,* among the meshes of which the cells are found; and a no less peculiar *viscous fluid,* with which the two former elements are more or less abundantly surrounded. The combination of these three elements constitutes the cancerous growth; and the relative proportion of these elementary ingredients may be considered to determine the form of the cancer itself. Thus if the fibrous element predominate,—as it does in the earlier stages of the great majority of cases,—we have the scirrhous form. If the cells are more abundant, we have the encephaloma or soft cancer. If the viscous fluid be in the ascendant, there results the colloid, or gelatinous cancer.

Some cases are anomalous; presenting more the appearance of *fungous growths;* others again are more like bleeding tumors, hence termed *bloody cancers.* But an attentive study of all the symptoms and conditions will enable the practitioner to decide as to the malignant nature of the disease. But such decision, independent of the data upon which it is founded, is of use rather with reference to diagnosis and prognosis itself, than from any influence which it should be allowed to exert upon the selection of the remedy. For the remedy must be selected at first hands, that is, from the symptoms themselves, which will guide aright,—and not from our diagnosis of the case, which may be,—and often is,—wrong.

As already implied, the cells, which were supposed to be the absolute characteristics of cancer, and so called true cancer cells,—have more lately been deemed less positively determinate. Virchow,* the latest and highest authority in cellular pathology, considers the dry or juicy nature of the cells, as much more decisively indicative of the benignant or malignant character, than is their shape or form. "The forms which yield dry, juiceless masses, are relatively benignant; those which produce succulen tissues have always more or less of a malignant

* Cellular Pathology, p. 530, et seq.

character." And in deciding upon the benignant or malignant nature of any growth he says: "In the case of all these formations, every one of which corresponds more or less completely to a normal tissue, investigations ought not to be conducted with a view to determine whether they have a physiological type, or whether they bear a specific stamp impressed upon them; our final decision depends upon the answer to the question, *whether they arise at a spot to which they belong, or not, and whether they produce a fluid,* which, when brought into contact with the neighboring parts, *may there exercise an unfavorable, contagious or irritative influence.*"

We make this extract in order to show how modern science is finally compelled to pay tribute to the true spiritual doctrine, rather than to the more gross and external theory which it had before received as a revelation from nature. The distinction of cancerous from other cells as a matter of external form, is no longer deemed reliable; the form being, at least as often as otherwise, homologous to the natural and healthy cell-forms. The true distinction to which all must finally come is, that as the cancer cell is itself the result of a morbid deviation, so it tends to perpetuate the same morbid influence implanted within it. It is a homologous growth as to form, and no less truly homologous in its vital activity, in perpetuating its own disordered vitality,—exactly as if a ball projected into space in a curved line and meeting no obstruction, would complete and continue on in the original circle. Thus all the elements of cancer are positively homologous,—that is similar formations to other and healthy tissues. But they are heterologous in their composition, that is in the proportions in which they are combined to form a cancerous growth. In like manner different chemicals may be harmless or poisonous, according to the different proportions in which the same ingredients are arranged;—or as in the case of those called *isomeric,* according to the different manner in which the same ingredients are arranged, even in exactly the same proportions.

The scirrhous and encephaloid forms are the most common cancerous growths in the uterus;—the former occurring much more frequently than the latter. Where the cancerous disease appears as a primary affection in the womb, it occurs in the form of cancerous infiltration into the neck of the womb. But where this disease attacks the uterus as an extension from some other organs, the secondary cancerous deposits which result, are known by the name of sub-peritoneal cancers.

The *progressive nature of its development* forms another important

characteristic feature of the cancer. All the different forms of cancer may sometimes be seen in a single case, in its successive stages; they appear to pass into and succeed each other; the indurated forms becoming softer,—but the soft never, so far as we are aware, becoming hard. The development may be slow, it may occupy years; and for a season appear entirely stationary; although this is scarcely ever the case in cancer of the uterus. Here the disease being usually found to seize primarily upon the vaginal portion of the cervix, the alteration of the tissue will extend from the *os tincæ* to the *os internum*, and from thence it will gradually extend over the interior surface of the fundus. At the same time the softening and other degenerations of tissue extend from within outward. But the progress of this fearful disease is not confined to the uterus alone. From the intimate connection of this organ, through its peritoneal covering, with the bladder, the rectum and peritoneum, and directly with the Fallopian tubes and ovaries, the cancerous affection is in due time communicated successively and in different degree to all these organs and even to the peritoneum itself. In addition to the other and incidental sufferings which must follow such extension, the cancerous ulceration sometimes occasions vesico-vaginal and recto-vaginal fistulas,—accidents which very greatly aggravate the pitiable condition of the patient. From the nature of the disease itself as possessing an essentially progressive character, it cannot but go on extending its ravages and increasing its tortures,—unless arrested in its course by medical skill,—until death closes the scene. For as there are forms of disease which are self-limited in their course, extent and duration; so this one of cancer (so named by the ancients from its large surrounding veins and general resemblance to the body and claws of a crab) is just the opposite.—It seizes upon tissue after tissue and organ after organ, hardening, softening, wasting away all within its reach,—till the exhausted system can endure no more.

The *intensity of the pain* forms another and characteristic feature of cancer. This is a sharp, lancinating or *stabbing pain*. It is similar to that which occurs in felon or whitlow; and it is no less acute—"It is not constant or the patient could not live; but comes at uncertain intervals, and is so startling as well as severe that it makes the sufferer bound from her chair or couch, not infrequently with a sharp cry of anguish. It is as though a dagger had been thrust into the tumor." This pain comes in paroxysms of varying duration, which are accompanied by an increased activity of the circulation,—a turgescence of the enlarged veins which lead out from the cancer; and

the paroxysm may often subside by a more or less profuse hemorrhage which seems to relieve the pain.—Hence these paroxysms may be regarded as periodic (or irregular) aggravations or acute attacks, superadded to the constant chronic inflammation.

These intense stabbing pains afford an almost infallible diagnostic indication; especially when they thus recur in paroxysms. Such pains appear only (except in the case of felon already mentioned, where there could be no danger of mistake) in cancer, and in acute inflammation of the mammary gland. But in the latter cases the two exciting causes which lead to mammary abscess,—lactation, or mechanical violence,—will suffice to prevent the pains which attend such conditions from being mistaken for cancerous. And besides in these cases of abscess, the pains come on much more rapidly, as in fact does the whole inflammation.

The remarkable *tendency to a fatal termination* can never be overlooked in the consideration of cancer. In cancers of the breast and other exposed parts of the body, the mischief may be apprehended and effectual means taken by the exhibition of the appropriate Homœopathic remedies, to arrest its progress before it has too deeply seized upon the system. But cancer of the uterus may become very firmly established before its presence is even suspected. Hence the invariably fatal termination of this form of cancer, according to Allopathic authorities. Originating, as we have already shown, in a constitutional dyscrasia, by its presence, by its derangement of the proper functions of the organ upon which it seizes and by the serious injury inflicted upon the system by the severity of its pain,—it tends to reduce the vital strength, and thus render it more difficult to establish in the system a vital reaction of sufficient energy to throw off the incubus. And this physical depressing influence is greatly increased by the moral influence which the knowledge of the terrible nature of her disease must exert upon the patient herself.

The Causes of Cancer.—These are either *primary*, predisposing, hereditary, constitutional influences; or *secondary*, exciting, provoking causes. Of the former we have already said all that was necessary. Of the latter, we make brief mention here.

And in the first place it should be remarked, in this connection, that nearly if not quite all the secondary or provoking causes of cancer in the female,—with which alone we have to do in the present work,—are directly or indirectly connected with her sexual system. Cancers of the womb and of the breast, which form the

great majority of all that attack women, are evidently thus directly related. While those which, however rarely, occur in other parts either remote from the sexual organs or not in immediate physiological relation to them, may be seen to result from general depressing influences which, as in the case of widowhood or even of those who remain unmarried, have at least an indirect relation to the sexual condition.

And in this connection it is interesting to observe the condition in life of a number of cases. Of one hundred and eight cases recorded by Scanzoni, ninety-one were married, seventeen were maidens; thirty-six were sterile; seventy-two had had several labors.

Excessive sexual excitation and immoderate coition form the most prominent and real causes of cancer of the womb. In connection with this it must be remembered that constitutional predisposition plays a most important part. The insatiable desire known to be present in some of these cases, which is of course the immediate cause of such sexual excesses, is itself a constitutional condition,—existing before it develops itself in this voluptuous orgasm of the sexual apparatus.

In like manner disorders of the menstrual function with leucorrhœa, which, by the author already referred to, are set down as the provoking causes of one-half of his cancer cases, must be deemed to be dependent upon, or connected with a true cancerous dyscrasia. Otherwise why have not the same disorders resulted in cancer in the thousands of other females who have suffered with them for years?

The same thing again is true of the cases of cancer which are developed under the influence of "emotions of grief, fretfulness, the cares of life, affliction after some bereavement, etc." All these powerful depressing influences, are capable of developing cancer only in those females in whose systems are implanted the seeds of a true cancerous dyscrasia, or one which may be interchangeable with it, complementary to it.

If we examine the age at which the great majority of cases of cancer occur, we shall find still further proof of their connection with the sexual system. The average age at which this disease makes its appearance is about the forty-eighth year. This of course brings the disease in immediate relation with the change of life. And in fact there is little reason to doubt that the various causes which so afflict the female economy as to result in the development of this disease, find their culminating point at this climacteric period. All of the provoking influences already mentioned may concentrate

their forces as it were at this period; and produce such cancerous disease at or soon after the cessation of the menses as they could not have done before. And this disease may be developed in the uterus or in the breast, or in some other part or organ, under the influence of other local provoking causes; or under the influence of what may be termed a reduplicated hereditary predisposition. For example, a woman of cancerous constitution whose mother had cancer of the womb, will be so much the more likely to have this dyscrasia in her own case developed in the same organ. And married women are much more likely to have cancer of the womb at this time, than those who have remained single; although many cases of the latter sort are recorded. And, in this country, this form of disease is much more prevalent in the Southern than in the Northern States. It has been observed that at the South the same constitutional dyscrasia assumes the form of uterine cancer, which at the North would, at an earlier period of life, have been developed in the form of pulmonary phthisis.

Cancer of the Uterus.—The preceding discussion of cancer in general, will obviate the necessity of any more than a very brief account of the particular forms and varieties of this disease as it attacks the uterus, breast or other organs. The most common form in which cancer appears in the uterus is the *scirrhous*. This form may be slow and insidious or very rapid in its development, according as it attacks the older or the younger females; and it is usually the least amenable to treatment. In fact, unless it can be diagnosed in its earlier stages, and properly treated from the very first, the prospect of doing any more than to relieve and prevent suffering and so perhaps prolong life, is more than doubtful. Scirrhus of the womb passes through two general stages, and thus may appear to the physician on his first examination, under either of its two forms. These are the primary form of induration and the secondary form of ulceration.

The Indurated, Non-ulcerated Cancer of the Uterus.—This disease almost invariably attacks the cervix; but in some rare cases it is found primarily in the fundus or body of the uterus itself. From the view we have taken of the nature of the cancerous affection, it will be natural to conclude, as is taught by high authority on this subject, that the disease does not spring from a previous and different form of inflammation with or without induration. But that cancer is *sui generis*, that it arises as it were on a general constitutional foun-

dation all its own, seated, built up and developed under the influences of special provoking causes.' And from its remarkable tendency to a fatal termination, it becomes most important to determine the existence of the disease at the earliest possible moment; but this is no less difficult than it is desirable. For where the indurated form of cancer attacks females at the critical age or more advanced period of life, its onset is gradual and insidious; and it is liable to be confounded with the induration which may result from benign inflammation. And where it attacks younger females it may develop itself in a much more rapid manner and without any such severe local symptoms as would lead to an examination of the affected organ.

Disease of the uterus of much less importance than cancer, may give rise to much more strongly marked symptoms. "I must again repeat, that my own experience, as well as the analysis of that of others, leads me to the conclusion, that cancerous growths of the uterus in the incipient or non-ulcerated stage of their development, are always indolent, and give rise to no symptoms sufficiently decided to induce patients to complain or to seek advice. Thus we can explain how the disease in its incipient stage does not come under the notice of the conscientious practitioner, who never uses the speculum without serious reasons for so doing." Easy as it is, generally, to recognize cancer of the uterus in the advanced periods of the disease, it is often very difficult to distinguish it in the commencement, from a simple induration of a benign character in the lower portion of the uterus. The diffused swelling of the affected part, with a considerable hardness and complete absence of sensibility, the appearance of the disease at the critical age and the impossibility of referring the commencement of the affection to an anterior labor, may be regarded as characteristic signs of the commencement of cancer. And there is no doubt but that in many cases, especially of women who still menstruate, the cancer is very rapid in its growth and progress; and so may attain considerable size and present extensive induration and adhesion to the surrounding parts before its existence is suspected. And even then the results of vaginal exploration are said to be insufficient to distinguish in a certain manner a chronic engorgement of the vaginal portion of the cervix uteri from a scirrhous induration. A careful study of all the symptoms and conditions of the patient will be absolutely essential in order either to determine the nature of disease or to decide upon the appropriate remedy.

As it is of the utmost importance to distinguish cancer of th

womb at the earliest possible period, we gather from other writers the records and summary of symptoms which may appear before the cancer advances to the ulcerated stage. Among the earliest symptoms, are: "Leucorrhœa alone or combined with menorrhagia; aching in the back; and sense of heaviness in the hypogastrium; dull pain in the top of the thighs; with bearing down; then there occurs darting lancinating pain between the pubes and the sacrum, or in the course of the vagina, with a sensation of glowing heat, more or less frequently experienced, and often attended with dysuria and mucous deposition from the urine; itching of the vulva; which is affected with a kind of flabby swelling, or with erysipelatous inflammation; pain in coitû; dyspeptic symptoms prevail, such as flatulence, heart-burn, sometimes vomiting and sympathetic cutaneous eruptions." Or the appetite may at first be very greatly increased,—and the digestion excellent,—or with attacks of indigestion from over-eating. "In the course of the disease, retention of urine frequently occurs, requiring the use of the catheter; or incontinence of urine may take place."

The first symptoms generally are: menstrual irregularities, a temporary increase of the menstrual flow; leucorrhœa, which is either continued or lasts for a short time only,—white or yellowish, sometimes changing to a reddish color after intercourse, or after any other local irritation; sense of weight at the hypogastrium, with pressure on the rectum, or on the urinary organs; stool and emission of urine sometimes more painful and always more or less difficult; disagreeable sensation during intercourse; occasional transitory shooting stitches, especially at the period of the menses, or after physical or moral excitement; transitory pullings in the loins or groin and hysterical ailments; hæmorrhoidal distress; alternate distention and caving in of the abdomen, etc. Sometimes we discover even at this period, slight swellings or indurations of the womb, occupying rather the neck than the body of the womb, with a sort of irregularity in the shape of the neck. These symptoms may remain unchanged for a long time; but as soon as cancer has openly set in, the neck and even the body of the uterus, and likewise the lips of the os tincæ are swollen, hard, knotty, lobed .and more or less red, but smooth and not sore, covered with bloody mucus, or with pure blood, painful to pressure and sometimes accompanied by engorgement of the ovaries. In some cases there is only a single clearly circumscribed tumor, the seat and extent of which may be discovered by an examination through the rectum; in most cases there are several tumors,

or even, if the entire uterus should be invaded, a group of several rounded irregularities at the surface. These tumors might sometimes be confounded with fibrous bodies, if the other signs that accompany the cancer did not render such a mistake impossible. Besides, in its attacks upon the uterus, cancer but very rarely commences in the body or fundus; whilst these are the parts which are especially selected by the fibrous tumor. When cancer does involve the body of the uterus, it may be distinguished from fibrous tumor, by its presenting a hard swelling of the whole uterus,—and by the adhesions to the adjacent parts, which attend such malignant indurations.

In attempting at the earliest possible period a diagnosis of a supposed cancerous affection of the uterus, we should consider:

I. The portion of the womb affected; the vaginal portion of the cervix being the most likely to be attacked by scirrhus.

II. The extreme hardness and general insensibility of the tumor.

III. The period of life; the cancerous disease being most apt to occur at the cessation of the menses.

IV. The gradual development of the tumor in such females; or its more sudden appearance in those who are younger.

V. The severity, lancinating, *stabbing* and paroxysmal character of the pains.

VI. The extension of the disease into the adjacent tissues, and consequent adhesion of the tumor to the surrounding parts.

The Ulcerated Form of Cancer of the Uterus.

In its second or ulcerated stage, scirrhus of the uterus is much more easily recognizable. The ulceration itself, in connection with the surrounding induration, and the peculiarly fetid nature of the discharge, very strongly mark the nature of the case. While as the disease advances, the countenance assumes a no less peculiar straw-colored complexion, which when once seen can almost always be relied upon as an infallible indication of the presence of cancerous affection. "As soon as the cancer has broken out, the pains, which until recently had been transitory, become more permanent, with acute lancinating pains like needles or knives thrust through the part; the loss of blood becomes more frequent and sometimes habitual; a fetid, serous or bloody leucorrhœa sets in which becomes fouler the more the ulceration progresses, being sometimes mixed up with small flocks of putrid matter, of a brownish color, and frequently having an excessively pungent (offensive) odor, or also with little

coagula of blackish blood. If the menses have continued so far they often increase to a flooding; in women where they have stopped, they act as if they would reappear; others discharge constantly a profuse watery liquid without smell, or having an insipid sickening odor,—at the menstrual period this liquid becomes rose-colored. This serous discharge generally indicates that the ulceration has either commenced or is imminent. Pain now succeeds pain; the loins, small of the back, hypogastrium, iliac region, even the nates down to the thighs become the seat of contusive tearing or distensive pains, sometimes mingled with smarting pains or acute stitches in the neck of the uterus, and sometimes preventing sleep to such a degree that the patients dare not give themselves up to it."

The mental functions remain unimpaired in spite of all these distresses. And these cancerous diseases do not always prevent conception; although the products of such conceptions seldom survive birth or the full term, and in most cases they perish at an earlier period. Neither is the cancerous disease communicable by contact; as is proved by the immunity of the husbands in such cases.

As the disease advances in its course, the ulceration becomes more extensive; the patient's strength is wasted by the intense pain which is now almost constant with dreadful paroxysmal aggravations; the loss of sleep and the repeated hemorrhages break down the system still further; hectic fever makes its appearance daily or even oftener, leaving the sufferer, after each accession, weaker than before; the appetite fails, the digestion becomes impaired, assimilation is impossible; and the life itself is finally exhausted by a chronic disease which originates in its constitutional foundations, and which while ultimating itself in a single organ, eventually involves every vital function within its fatal influence.

This disease may reach its termination in from five or six months to as many years; in its latter stages it may be attended with most obstinate constipation or excessive diarrhœa, or both; the body may be reduced by gradual emaciation so as to resemble a skeleton; or the lower limbs may become infiltrated and the whole body bloated as with dropsy. In this latter case, especially in those advanced in life, colliquative diarrhœa sets in with putrid and dark-colored stools and horrible pains, which reduce the patient to a state of collapse in a manner not unlike that of the Asiatic cholera.

The diagnosis of the more frequently seen open or ulcerated cancer is comparatively easy. Here,—in addition to the constitutional symptoms and conditions already referred to under the diagnosis of

the non-ulcerated form of the disease,—we have others, afforded by the touch, which are at once more full and less liable to be mistaken than the indications obtained by the use of the speculum.

I. The ulcerated surface is hard and diversified by lobules, tubercles and ridges.

II. The peculiar pale straw-colored complexion is very characteristic of this stage of cancerous disease.

III. The odor of the discharge from ulcerated cancer, so exceedingly offensive and so persistent, on the finger after examination and even in the whole room, is alone sufficient to determine the nature of the disease in the great majority of cases.

The *medullary cancer*,—known also as hæmatoid cancer, melanosis, encephaloid disease,—is the most common, next to the scirrhus; this may appear in the womb, or in any part of the system; runs a very rapid course; but is more amenable to treatment than the scirrhus. It is composed, in great measure of a soft white, pulpy substance, in color and consistence very closely resembling that of the healthy brain, whence its name encephaloid. The *fungus hæmatodes* bears the same relation to the medullary cancer that the open ulceration does to the scirrhous,—it constitutes its secondary stage. When the medullary disease advances to ulceration, red, ragged, bleeding growths sprout rapidly from the open surface, hence their designation as fungus hæmatodes, bleeding fungi. The medullary cancer is far less liable to form adhesions with the contiguous parts than is the scirrhous.

The *colloid cancer* is much more rare than the encephaloid, and consists of a congeries of gelatinous cysts, generally of the size of a hazle-nut, containing serous fluid, and having an investing envelope of delicate structure, which binds the cysts into a connected mass. "This form may exhibit the appearance of small portions of greenish yellow transparent gum, or jelly, arranged in regular cells; hence it is sometimes denominated *alveolar* cancer." The most common seat of this form of cancer is in the abdominal cavity, although it has been known to occur elsewhere. It grows rapidly; often to a very great size; rarely proceeds to ulceration; but eventually proves fatal by encroaching upon organs whose healthy action is essential to the prolongation of life.

The female breast is even more frequently than the womb, the seat of cancerous disease. In this situation it is much more readily and much earlier detected; and thus an opportunity is offered for administering the proper remedies at the very onset of the disease.

The extreme, stony hardness of a suspected tumor in the mammæ, and the fact that it appears already adherent to the surrounding tissues, will greatly aid in deciding as to its malignant character. Some of these apparently scirrhous formations are developed in consequence of a blow upon the breast; many of these, whether they might have finally resulted in open cancer or not, are readily cured and caused to disappear entirely by the exhibition of Conium.

Volumes have been written in description of the forms of cancer; but we do not deem it necessary to give more minute accounts of these and the other less common varieties of this disease, since the symptoms themselves will inevitably lead the Homœopathic physician to select the most suitable remedy in each case.

Treatment.

Arsen. a. Lancinating pain through the part. Terrible dartings and lancinatings, which burn like fire. The more like fire, the burning sensation is, the more strongly does it indicate Arsenicum. Acrid, corroding, burning discharges. The discharge may be thin or thick, brown or black. The discharge is often extremely offensive. The sufferings are usually worse after twelve at night. The patient is very easily fatigued.

Aurum. The womb is discovered to be prolapsed and indurated. The pain is like that of a bruise, with shooting and drawing. The mind constantly dwells on suicide.

Belladonna. The woman finds it difficult to stand on account of a pressing down, as if the internal organs would pass out. Occasional pains which come on suddenly, and finally leave as suddenly. Flow of blood between the periods; the blood often feels hot. The blood often has a very bad smell and flows profusely. Violent pain in the back. The parts feel dry and hot internally.

Calc. carb. Pale, leucophlegmatic temperament. The feet feel as if she had on cold damp stockings. Vertigo on going up stairs. The menses flow too often and too abundantly. Sore, burning feeling in the internal genitals. A constant aching in the vagina. Very sensitive to the least cold air, which goes right through her.

Carbo. ani. Violent pressing in the loins, the small of the back and the thighs, during the menses with unsuccessful desire to eructate, —with chilliness and yawning. Great languor in the thighs before and during the menses. After the appearance of the menses she feels so tired she can hardly speak, accompanied by yawning and stretching. Weak, empty feeling at the pit of the stomach.

Carbo veg. Varicose veins are very abundant in the external genital organs, so as to cause dysuria.

Causticum. A good deal of burning in the internal organs with varices in the anus,—the sufferings from which are made intolerable by walking. Her upper eye-lids are so heavy she cannot keep them up, they seem paralyzed.

Cham. This remedy is indicated by the mental and moral symptoms. See Leucorrhœa.

China. This medicine will be useful when a profuse and long-continued hemorrhage has seemed to produce the suffering. There is usually an ichorous leucorrhœa; and dysmenorrhœa. The patient is worse every other day. Flatulency, which is not relieved by discharges of flatus.

Clematis. For softened scirrhus, with corrosive leucorrhœa and lancinating pain, the other symptoms agreeing.

Conium. There are burning, stitches, stinging, nausea, vomiting and sadness. The breasts are relaxed, except at the menstrual periods, when they often swell and become sore and painful. The urine intermits in its flow. There is much vertigo, particularly on turning her head when lying in a prostrate position.

Creasote. Shooting stitches in the vagina; burning and swelling of the external and internal labia. Profuse discharge of dark coagulated blood, or of a pungent bloody ichor, preceded by pain in the back. Aggravation of the pains at night; fainting on rising from the bed. She always feels chilly at the menstrual period. Complexion livid; disposition sad, irritable.

Graphites. In females inclining to obesity, and whose history reveals a disposition for the menses to delay; swelling of the feet: itching blotches in various parts of the body which discharge a glutinous, watery fluid. Now that she has symptoms of cancer her skin is better. The ovaries are also affected. She has violent, lancinating, stitching pains through the uterus down to the lower extremities. Heaviness in the abdomen with exacerbation of the pains when standing.

Iodium. Uterine hemorrhage after every stool, with cutting in the abdomen and pains in the loins and small of the back. Great weakness during the menses, particularly on going up stairs. Long-lasting uterine hemorrhages. More particularly indicated in scrofulous persons. Dwindling and falling away of the mammæ.

Lachesis. More particularly if the cancerous affection be developed at the critical period, or as a consequence of the change of life. The

frequent hemorrhages at that period may indicate the approach of this disease. Sometimes the pain increases more and more, until relieved by a profuse discharge of blood; and after the lapse of a few hours, or days, the same phenomena are again exhibited, and so on. At times the pain is as violent as if a knife were thrust through the abdomen, the pain itself resembling this sensation.

Lycopodium. Pressing through the vagina on stooping. Darting pain in the labia. Discharge of wind from the vagina. Much borborygmus and gurgling in the left hypochondrium. All her sufferings increase at about four P. M.; and abate at about eight or nine in the evening. The urine deposits a red sand; it is often very frothy. Pain in the back before the flow of urine, which is much delayed.

Mag. m. If the peculiar constipation of this remedy be present; large, hard, difficult stools, which crumble as they come or pass to the verge of the anus. Let the action of the remedy be continued a long while after the bowels become regular and comfortable, and the scirrhus will also disappear.

Mercurius. This remedy may be particularly indicated if there be prolapsed vagina. The inguinal glands sympathize with the cancerous affection. In cases in which there is syphilitic taint in the system, see the most characteristic indications for this remedy under leucorrhœa and prolapse of the vagina.

Murex pur. Has cured carcinoma uteri, where very great depression of spirits, a sort of deep hypochondria prevails as the characteristic symptom.

Nitric acid. In cases where the syphilitic taint is the basis of the affection. *The urine is very offensive.* The inguinal glands are sympathetically affected. The patient is worse after twelve at night. Violent cramp-like pains, as if the abdomen would burst, with constant eructations. Violent pressing as if everything were coming out at the vulva, with pain in the small of the back, through the hips down the thighs.

Phosphorus. In tall slim females, with sense of emptiness in the abdomen; much heat up the back; and a narrow, tough, dry stool, like a dog's. Cutting pains through the abdomen sometimes with vomiting. Very sleepy, particularly after dinner. Belching up of an immense quantity of wind after eating. Frequent and profuse hemorrhages, pouring out freely and then ceasing for some hours or days.

Rhus t. Is particularly indicated where repeated drenching in the rain has deranged the uterine functions. The menstrual discharge

causes a violent biting pain in the vulva. Vitiated discharge with shooting upward in the vagina. Rheumatic pain and stiffness, relieved by motion.

Sepia. Lancinating pains from the uterus to the umbilicus. A putrid excoriating discharge from the vagina. A sense of weight and pressing down, which causes her to cross her thighs lest the organ should escape. Sensation of weight in the anus, not relieved by an evacuation. Very cold feet and hands,—icy cold. Great sense of weakness and emptiness at the pit of the stomach. Yellowness of the face, particularly across the bridge of the nose like a saddle. Shooting stitches with burning in the neck of the uterus.

Silicea. Discharges of blood between the regular periods. Increased menses with repeated paroxysms of icy coldness over the whole body. Attacks of melancholy, anguish in the pit of the stomach. She wishes to drown herself. Fœtid, brownish, purulent, ichorous leucorrhœa. Always great costiveness immediately before and during the menses. Momentary attacks of sudden blindness.

Staphysagria. Particularly indicated where syphilis, or mercurialization, acts as an exciting cause. Flow of blood from the genital organs occurring a long time after the critical age. Spasmodic pains in the vulva and vagina. The teeth turn black, or show dark streaks running through them.

Sulphur. This great polychrest will be found suitable in a large majority of cases, if we are called early; and if we find a few of the following symptoms prominently developed.—Offensive, corrosive, ichorous leucorrhœa. Sensation of heat in the crown of the head; coldness of the feet; or burning in the soles of the feet at night; flushes of heat which pass off in a perspiration with faintness. The patient feels remarkably weak and hungry at the pit of the stomach from eleven in the morning till noon; she cannot wait for her dinner. She sleeps lightly at night, and awakens very frequently. Violent burning in the vagina, with painful soreness during sexual intercourse.

Thuya. This remedy will be particularly indicated, if syphilis acts as an exciting cause of the disease. Cauliflower excrescences, bleeding easily, having an offensive pungent odor. To be especially studied, *and given, in cauliflower excrescences*, if the other symptoms correspond. Warts, condylomata, and other excrescences about the vulva or anus. Ulcers on the internal surface of the vulva. The vulva has a sore and smarting feeling. Pressing and contractive pain in the vulva when sitting. Cramp-like pain in the vulva and

perineum when rising from a seat. Cramp pain in the vulva, extending as far as the abdomen.

For other remedies and indications see leucorrhœa, amenorrhœa, dysmenorrhœa, menorrhagia, inflammation of the various organs, and compare and study the various remedies there recommended.

Gangrene, Putrefaction or Ramollissement of the Uterus.

These forms of degeneration of the womb arise only in consequence of other primary disorders,—and require no particular description in this place. The following medicines should be carefully studied, and the remedy selected according to the individual characteristics of each case.

Aconite. When the congestion and inflammation of the part are extreme. Great anguish, and fear of death. Dry heat of the skin, and intense thirst for cold water. When the pain has suddenly ceased; the characteristic discharges have taken place; and the febrile and mental symptoms continue, Aconite is unquestionably the remedy to be administered first and in repeated doses.

Apis. Absence of thirst and scanty secretion of urine.

Arsenicum. Rapid sinking; cold perspiration; extreme restlessness; great fear of death. Aggravation after twelve at night. Thirst for little water at a time and very often. Undigested food passes the bowels with great distress and increase of prostration. Repeat the medicine frequently till better.

Belladonna. The eyes are more congested with blood. She rather desires death than fears it. There is a strong sense of heat about the vagina; involuntary discharge of feces and urine.

Carbo veg. The patient wants more air; wants to be fanned all the time in the face. Eructates frequently, with momentary relief.

China. Sensation of great distention in the abdomen, which distresses her much. Frequent eructation, which affords no relief. Ringing in the ears. The characteristic discharges of China.

Creasote. There is very great fetor; excoriation and prostration. The fetor has a pungent effect.

Helleborus. The evacuations from the bladder settle and look like coffee grounds.

Muriatic acid. Varices of the anus which are exceedingly sore to the least touch. Much prostration.

Phosphorus. Great sense of sinking in the abdomen, and heat in back. Particularly indicated in tall and slender persons.

Sabina. There is a distressed sensation in the sacrum and pubes. A quivering as if of a living substance in the abdomen.

Secale corn. The patient is of a passive character; of a thin, scrawny appearance; and subject to passive hemorrhages.

For GANGRENE DURING CONFINEMENT. See also the remedies mentioned under Gangrene.

CHAPTER SEVENTEENTH.

DROPSY OF THE UTERUS. PHYSOMETRA. MOLES.

DROPSICAL accumulations in the uterus, may consist of mucous or serous fluids. In the former case, they appear to be simply the result of such closure of the orifice of the uterus as may prevent the discharge of its natural secretions. In the latter, the fluids assume, in quality and in quantity, rather the character of ordinary dropsical effusions.

Displacements of the uterus, by producing flexion of the cervix and so bringing its walls in contact at the point of flexion, may occasion such an obstruction of its orifice as to cause the mucous accumulation. The same result may follow the pressure of a polypus or tumor, or other approximation of the walls of the cervix. And as amenorrhœa is nearly always associated with uterine dropsy, this mucous secretion appears sometimes to take the place of the menses. Cases have been recorded in which these mucous accumulations would occur from time to time, in the absence of the menses; and then again disappear on the return of the proper menstrual flow.

This mucous form of dropsy of the uterus may thus be called *recurrent*, in contradistinction from the other, serous variety, which is more continuously persistent. Mucus from the accumulation sometimes appears to break away with more or less regularity; discharging itself and again re-forming. This variety appears in some instances to have relation to the menstrual nisus; aggravating about the time of the usual monthly periods.

In many women the cessation of the menstruation extinguishes the inflammatory affection of the womb,—which has been kept up by the menstrual molimen. But in some cases the deprivation of the monthly discharge increases the inflammation and renders chronic the congestion, which before had been but occasional and relieved

by the menstrual flow. In such cases while the body of the womb becomes the seat of a persistent morbid activity, *its neck becomes atrophied, so as to impede more or less the exit* of the fluids contained within the cavity of the uterus. The result is that the womb becomes more and more distended by a sero-sanguinolent, a muco-sanguinolent or a muco-purulent fluid. Severe uterine pains of an expulsive character may repeatedly occur, till at last the fluid is rejected and the patient is relieved. The same process of formation and expulsion of such accumulations may be renewed again and again.

While in the *persistent* form of uterine dropsy the fluid appears to be of a much more decidedly serous nature; and to be connected with a true dropsical diathesis. Reasoning from the analogy of similar disorders in other parts of the system, we may suppose that in this case, there is considerable thinning of the mucous membrane of the uterine walls, and that this serous fluid is secreted from the submucous cellular tissue,—or rather from the vessels which it contains. This is the *idiopathic* dropsy of the uterus; and the accumulation may go on for years,—until relieved by art, or terminated by death.

Either of these forms of dropsy may be associated with hysteria or anæmia. And in those cases of dropsy of the uterus which appear in consequence of structural disease of that organ, the fluid is generally mixed with purulent matter or blood. While in certain conditions of the system, the dropsical accumulations in the uterus, principally those of the mucous variety, become decomposed, and so give rise to volumes of gas, which may escape with a loud report. This is termed *physometra;* where both water and gas are contained in the womb, the term *pneumo-hydrometra* is descriptive of this anomalous and unusual condition.

Dropsy of the uterus may be recognized by the enlargement of the uterus itself; by the sharp pains, which may be present; by the suppression of the menses by which it is attended; by the displacements, severe losses of blood, and other and perhaps malignant disorders of the womb which accompany or precede it; by the constant oozing or occasional gushing of fluid from the uterus; or where no such escape of the fluid occurs, by the long continuance and gradual increase of the enlargement of the uterus itself.

By a careful observation of all the attendant symptoms and circumstances of the case, uterine dropsy may be distinguished from pregnancy, with which it is most apt to be confounded; and from *physometra*, by the duller sound on percussion, and greater gravity of the concomitant symptoms. And in cases where the catheter or ute-

rine sound can be introduced, the discharge, whether mucous, serous, purulent or bloody, will go far to determine both the existence of the dropsy and the nature of its cause. And where flexion of the cervix, as in displacement, or total occlusion of its canal from organic disease prevents the introduction of the sound, this circumstance will prove scarcely less certainly diagnostic.

In cases, especially recent ones, principally dependent on occlusion of the cervix resulting from flexion in displacement, the removal of the cause may at once relieve the complaint. The remedies should always be selected after a careful comparison of all the symptoms and conditions, as well constitutional as organic and local. And in cases of more direct dropsical condition,—*idiopathic dropsy;*—or where the dropsy appears in connection with scirrhus or other malignant disease of the uterus or its appendages,—*symptomatic dropsy,*—the evacuation of the accumulated fluids may afford temporary relief, and give more time and better opportunity to remedy both the organic disease and its consequences.

Those forms of dropsy which occur in connection with pregnancy, —whether the accumulation be formed between the membranes of the ovum and the uterus, or consist in an excess of the liquor amnii itself,—will be considered with the other disorders accompanying the pregnant state.

Dropsy of the uterus, like that in all other organs of the human system, will cause a corresponding sympathetic affection of the whole body.

Apis. *Absence of thirst* is very characteristic of Apis in uterine dropsy. Stinging pains, as of bee-stings. Abdomen very tender to the touch.

Arsenicum. Very thirsty for small and often repeated portions of water. Water disagrees with her; it does not pass from the stomach; but seems to remain there and distress her. The lower limbs seem almost paralyzed. She can hardly walk. She is very weak, and easily wearied from exertion. She wants to be in a warm place, and to be wrapped up warmer.

Belladonna. The characteristic symptoms of pressure, as if all would pass out of the genital organs, particularly early in the morning. Urine dark and scanty; sometimes it is as yellow as gold. She is usually worse after three in the afternoon. The tenderness of the abdomen is aggravated by the least jar even of the bed or chair upon

which she sits; and she is obliged to step with great care, in walking, for fear of a jar.

Bryonia. The swelling increases during the day and diminishes during the night. Her lips are dry, she wishes to moisten them often. She is thirsty for cold water. The urine is dark and scanty although discharged frequently, and it deposits a pinkish colored stain. All her symptoms are aggravated by motion. Her stools, are hard and dry, as if burnt.

Calc. carb. In persons of a leucophlegmatic temperament. She has been menstruating too often and too profusely; she has some amenorrhœa and dropsy of the uterus and adjacent parts. She has vertigo on going up stairs; fluttering of the heart and faintness. Damp, cold feet. Swelling at the pit of the stomach. She is very weakly in general.

Camphor. Red urine, depositing a thick sediment,—with much coldness of the external surface. The urine is emitted *very slowly*, the bladder being nearly paralyzed. The urine is sometimes *green*.

Cantharis. More or less strangury. Tenesmus of the cervix vesicæ. Bloody urine. Pains in the limbs, coryza. There is much swelling of the uterus; pain in the abdomen, vomiting and fever.

China. The dropsy has been developed by profuse hemorrhages, or in aged women. Uncomfortable distention of the abdomen, she wishes to belch up wind frequently,—which however affords no relief. Urine dark, scanty and sandy.

Colchicum. The urine is very dark, very scanty and discharged in drops depositing a whitish sediment. Watery stools without sensation. The dropsy had supervened upon the sudden suppression of the menses, which had but just made their appearance. Much flatulency.

Conium. The mammæ sympathize very much; they enlarge, become hard and painful. The urine intermits. There is vertigo when lying in a recumbent position, especially on turning over.

Digitalis. The heart sympathizes very much; the pulse is accelerated; or intermittent. The stools are very light-colored.

Dulcamara. This remedy will be indicated when the dropsical affection makes its appearance after the suppression of perspiration by cold damp air. Every cold change in the weather makes her worse.

Ferrum. Dropsy of the uterus with great debility and fiery red face.

Helleborus. The secretion of urine is almost suppressed; the

urine is very dark, and deposits a dark, coffee-ground sediment. Debility; coma somnolentum; piercing pains in the limbs; loose gelatinous evacuations.

Kali carb. Will often be found particularly indicated in aged women.

Lactuca. Excessive swelling of the abdomen, feet and eyelids.

Ledum. Pains in all the limbs; the skin is dry;—she feels very cold and cannot keep warm. Worse from warmth.

Lycopodium. There is much red sand in the urine. Borborygmus, particularly in the left hypochondrium. Sensation of fulness clear up to the throat, on eating even a little. Constant sense of satiety.

Mercurius. Much perspiration affording no relief. Constant, short and choking cough. Anguish.

Phosphorus. Œdematous swelling of the hands, feet and face. Cough, shaking and exhausting, with shortness of breath. The urine contains quantities of gray sand. The bowels are loose and stools whitish. Belching up of quantities of wind after eating even a little.

Rhus t. In cases of dropsy resulting from amenorrhœa caused by being drenched in the rain. Rheumatic stiffness. Restless at night; she must change her position frequently. Terrible cough, which seems as if it would tear something out of her chest.

Sepia. Dropsy supervening upon a case of miscarriage. The urine is very putrid; or deposits a clay-like sediment which is difficult to remove from the vessel. She feels as if she must cross her limbs to hinder the escape of some of the internal parts through the vagina.

Sulphur. In persons whose skin is full of pimples and eruptions. Heat upon the crown of the head, with coldness of the feet. Frequent hot flushes with spells of faintness. She is unusually hungry before noon, cannot wait for her dinner. The soles of her feet are hot, she must put them out of bed or find a cool place for them. She walks all bent over forwards.

Physometra—Uterine Tympanites.

Physometra or Uterine Tympanites consists in the formation and accumulation of gas in the uterus. This may be of two kinds: first, that in which the gaseous fluid is secreted by the lining membrane of the uterus itself; and second, that in which the gas is the result of the decomposition of certain substances,—such as shreds of the membranes, portions of a dead fœtus or of putrid coagula,—which may be retained within the cavity of the uterus.

The first mentioned kind, is the true *idiopathic physometra.* The air formed within the cavity of the womb, may be retained for several months, distend it to a considerable magnitude, and then be expelled at once.—Of this variety a single instance is mentioned by Dr. Gooch. Or the air thus formed instead of being retained, so as to distend the uterus, is expelled with noise many times a day. In another instance of this sort related by the same author, the woman "was subject to this infirmity only when not pregnant; but she was a healthy and breeding woman, and the instant she became pregnant her troublesome malady ceased. She continued entirely free from it during the whole of her pregnancy; but a few weeks after her delivery it returned." In this idiopathic physometra, or *flatus* of the uterus, the gas is usually inodorous.

This affection has sometimes proved so exceedingly troublesome as to have become a cause of seclusion from society; and it is usually accompanied by an excessive secretion of a viscid mucus-like fluid. Idiopathic physometra may be the result of the reflex influence of irritable uterus; or it may itself become a cause of irritation of the uterus through the displacements to which it may give rise. And even intestinal tympanites may result from morbid nervous excitements of the uterus; as in patients affected with hysteria or dysmenorrhœa.

In the second variety, the gas results from the decomposition of a fœtus, or of any extraneous substances remaining in the uterus after parturition; from the decomposition of the products of menstruation,—where by sudden suppression of the catamenia by cold they may have been retained in the womb,—or from the decomposition of leucorrhœal mucus, or of cancerous discharges. All the effluvia from such putrefying processes are fetid and offensive, and many of them are inflammable. In these cases there may be serious constitutional symptoms and even putrid fever.

Symptoms. The uterus distended with gas forms a round and more or less extended tumor in the hypogastric region; in the idiopathic variety of uterine tympanites there may be no constitutional symptoms,—nothing to attract attention save the increase in size, or occasional discharge of flatus per vaginam. In the symptomatic variety, which results from decomposition, there may be chills, a low form of fever with symptoms more or less grave, according to the quantity of the matter undergoing decomposition in the womb, and to the rapidity with which the process takes place.

Diagnosis. 1. Idiopathic physometra may be distinguished from

pregnancy, by the resonance of the tumor; by the absence of ballottement, of fœtal movement and of the signs afforded by auscultation, and by the occasional pain.

2. From *hydrometra*, or dropsy of the uterus, by the greater elasticity of the abdominal tumor, and by its resonance.

3. From *ascites*, by the defined shape of the tumor, by its resonance, and by the absence of fluctuation.

4. From *scirrhous* and *steatomatous* depositions, by the elasticity and resonance of the tumor.—*Churchill.*

The objective symptoms,—noisy discharges of flatus; and the circumstances of the patient, as in those cases succeeding parturition, will greatly aid in determining the nature of the difficulty.

Treatment. Idiopathic uterine tympanites may be radically cured by one or the other of the following named remedies, selected according to the indicating symptoms. The symptomatic variety, inasmuch as it depends upon the decomposition of foreign bodies remaining within the cavity of the womb, may require special attention to remove these decaying substances if possible. And injections of warm water may be employed to cleanse away the peccant matters. For other remedies consult gangrenous affections of the uterus.

Bromine. Loud emission of flatulence from the vagina. Aggravation of the symptoms from evening till midnight. Rest also aggravates: motion relieves. The left side is the most affected.

Phosphoric acid. Meteoristic distension of the uterus. She has always a pain in the liver during the menses. She passes large quantities of colorless urine at night. Indifference to all the duties and concerns of life.

Lycopodium. Discharge of wind from the vagina. Great sense of dryness in the vagina. The symptoms are worse, or come on about four or five P. M., and abate four or five hours later. Much borborygmus in the abdomen, and in the left hypochondrium. Red sand in the urine. Much pain before urinating.

Moles. Hydatids.

The various shapeless bodies which are occasionally discharged from the vagina are termed Moles. These may consist of masses of squamous epithelium from the vagina itself; of the membranous product which is expelled in some cases of dysmenorrhœa; or of fibrinous collections from the cavity of the uterus. These constitute

three varieties of what may be termed *false or spurious moles*, as occurring in the unimpregnated female.

The flakes or tubular pieces of squamous epithelium exfoliated from the vagina are easily recognized. "The fibrinous masses expelled from the uterus resemble an almond in size and shape; being to some extent casts of (the interior of) the uterus; they are smooth externally, and possess a very imperfect central cavity. The dysmenorrhœal product consists of the uterine mucous membrane, exfoliated in a more or less perfect form. When entire it has the shape of the cavity of the body of the uterus, is rough externally, and smooth within, having a distinct triangular cavity, with two openings above, and one below, at the sites of the Fallopian tubes and the canal of the cervix uteri."—*Smith.*

The *true* or *genuine moles* are all the result of impregnation, and their different varieties may be arranged under three classes: blighted ova; fleshy moles; vesicular moles or hydatids.

In the BLIGHTED OVA which compose the first class of these moles, the embryo itself early perishes, while the ovum being retained increases in size and solidity, not by the normal growth of regular pregnancy, nor even as in cases of tumor and polypus,—but by the effusion of coagulable lymph from inflammation of the lining membrane. This forms successive layers over the surface of the dead ovum, giving it eventually a great degree of consolidation. Some of the masses, when cut into, have no cavity; but the chorion and amnion are demonstrable, although the enveloping membrane may be one or two inches in thickness. It seems somewhat surprising, that the covering of the fœtus should be so carefully constructed when there is no embryo. But such is the fact.* In such cases the fœtus is indiscoverable, because it has been dissolved in the liquor amnii; but the remains of the umbilical cord may however be generally discerned, attached to some part of the inner surface. In addition the membranes may be traced, with the placental development, on some portion of the periphery of the ovum.

The influences which cause the death of the embryo transform the ovum from a perfectly normal development into a more or less disorganized mass, which is sooner or later expelled as a foreign body. The blighted ovum, if not expelled within two or three months, degenerates into a fleshy mole.† The influences which originally destroy the embryo, are usually supposed to consist in certain already men-

* Ashwell. † Churchill.

tioned changes in the structure of the ovum itself. But we believe the reverse to be the case; that disorganization of the ovum and membranes results from embryonic death in the first instance. Whence then come the fatal forces? That on the maternal side all is comparatively well, is implied in the continuation of the original growth of the ovum considered externally. That the fatal element may have been inherent in the more interior constitution of the female ovum, is indeed possible. But in most cases we believe it is originally contained in the seminal aura of the male, and thus imparted to the ovum in fecundation. In many instances in which the husband has been affected with syphilis,—which has been treated allopathically and so completely suppressed externally as to induce the belief of a radical cure,—the offspring come into the world wrinkled as if with old age; prove entirely incapable of independent nutrition, and constantly decrease in weight from the moment of birth till that of their death. These received from the paternal side the element which destroyed their vitality as soon as the support of the mother (in utero-gestation) was withdrawn and the stores laid up by her, in the mass of the infant's body, were consumed. Just so, in those cases where a still more concentrated and active form of the fatal element is imparted by the male; by the time the supplies originally furnished by the ovum are exhausted, the embryo is blighted, destroyed;—and the vital forces which should have formed the fœtal body, are vitiated, and perverted,—till the mole is the only result.

The Fleshy Moles appear to be but the fuller development of the perverted process just described in connection with blighted ova. These in the modern pathological language are termed *cancerous degenerations*. They remain three or four months—"until at length the degenerated ovum is expelled, consisting of the nest-like membranes and a small embryo of two or three weeks' growth, or in some instances the fœtus may have disappeared, and traces only of the umbilical cord remain." They may either consist of a solid mass, or they may contain a central cavity possessing a distinct lining membrane, in which there yet remains some of the liquor amnii. The solid moles are generally much larger than the hollow ones, and of a more irregular form. The larger ones are about the size of two fists. If the texture be examined, it will be found solid, but not very dense, spongy like the placenta, but more filamentous in some parts; in others consisting of fibrinous clots, and also portions of the fœtus,

such as one or other extremity. The limbs of the fœtuses have occasionally, though very rarely been discovered.—*Churchill.*

The HYDATIDS, or VESICULAR MOLES constitute what are termed the *hydatiginous degenerations of the ova.* "The hydatids themselves, in the recent state, are full of transparent fluid, and are either round, pyriform or oblong in shape, the size of the vesicles greatly varying. Some of them are borne upon pedicles, others are growing from the larger hydatids. As a rule, the activity of the growth and the increase of the villi, (which degenerate into hydatids) are greatest in early pregnancy, and it is at this time that the hydatiginous degeneration is most prone to occur." These hydatids bear a very close external resemblance to polypi or pediculated tumors; so much so that some of the latter named growths occurring in the virgin female have been considered to be hydatids. But it is now well settled that the name hydatids shall be applied only to such formations as may arise in connection with or subsequent to sexual intercourse and impregnation. Although here it must be remembered that the death of the embryo not being immediately followed by the expulsion of the ovum, the molar formation may be retained for months; and the hydatiginous variety for years, and then be discharged without prejudice to the character of the female who may have become a widow in the meantime.

The hemorrhage which is apt to occur at the period of the expulsion of the hydatids by successive instalments, renders them more dangerous than moles of other varieties.

The *molar pregnancy* which results from the presence of the hydatid variety is more strongly marked; since in this form the uterus at the fifth or sixth month may be as large as it should be at the end of pregnancy. It is not easy to determine the presence of this disease with absolute certainty, at least in the early months. But the duration of the abdominal enlargement beyond the term of utero-gestation; the disproportion between the size of the tumor and the period since it was first observed, together with the absence of quickening, of all fœtal movements and of the sounds of the fœtal heart, will conclusively prove that a regular pregnancy is not present. Then the greater weight of the abdomen, and the absence of resonance will distinguish it from physometra. The absence of the sense of fluctuation will in like manner serve to distinguish molar pregnancy from hydrometra. The occasional hemorrhages and even the irregular discharge of a colorless, inodorous, aqueous fluid, are relied

upon by some authors as unfailing diagnostic signs; but they are by no means sure to occur in every variety of molar pregnancy; and even when they are present they are far from being so characteristic of the existence of moles, as to afford any positively reliable indication. Indeed, the actual condition, in many cases, is only determined by the result, as seen in the nature of the substances discharged.

A careful study of the symptoms of the patient, will be necessary in order to determine the nature of the case; and to make the proper prescription. As abnormal growths, the womb seeks to expel these moles sooner or later. This is effected by uterine contractions and pains similar to those of ordinary confinement, but more closely resembling such as occur in cases of miscarriage after the death of the fœtus. The large quantity of water and sanguineous discharges which may attend such efforts at expulsion, sometimes render the case very serious. And it will be the object of the Homœopathic practitioner to promote this expulsion, and so remove the cause of the dangerous condition.

For the *treatment* of moles, hydatids, &c., we can at present give but few special indications. To promote their expulsion, **Pulsatilla** and **Secale corn.** have been recommended. The hemorrhage, which may follow such expulsion, must be treated as other hemorrhages, according to the indicating symptoms present.

Calcarea carb. and **Silicea** have been recommended to remove a disposition to the formation of moles.

The following remedies have been recommended for particular study in these abnormities. **Calcarea carb.; Sulphur; Silicea; Mercurius; Aconite; Arsenicum; China; Ferrum; Graphites; Belladonna; Hyoscyamus; Kali carb.; Lycopodium; Sabina; Sepia.** And in general all the remedies mentioned in this work under the various heads of *Cancer, Tumors, Polypi* and *Dropsy*, should be carefully studied and compared. For it is only by selecting the medicine in accordance with all the constitutional symptoms and conditions, in such cases, that we can hope, either to promote the expulsion of these morbid growths, or to prevent their recurrence.

CHAPTER EIGHTEENTH.

DISORDERS OF THE OVARIES.

THE nervous centre of the female organization has been described as residing in the sexual system; of which the ovaries constitute the ultimate foci. Hence it might be expected that these organs would be subject to disorders both nervous and inflammatory, similar to those which affect the uterus. And such in fact proves to be the case, notwithstanding their great dissimilarity of structure. Thus as the uterus is found subject to nervous irritability, neuralgia, acute and chronic inflammation, displacements, ulcerations both benign and malignant, dropsy, tumors and other forms of structural disorganization,—so the ovaries are in like manner liable to nervous irritation, ovarialgia, inflammations, displacements, tumors, dropsies, and a great variety of organic degenerations.

These disorders of the ovaries, even while presenting no apparent change of structure, exert a controlling influence upon the other portions of the sexual system, and so upon the entire constitution. Some of the most important of these disorders, being comparatively obscure, are liable to be overlooked in the consideration of more obvious derangements of which they are still the efficient causes. By reason of their situation, the ovaries are less exposed than the uterus, to external injury. But from being as it were the head centres of the entire sexual system, these structures are liable to have concentrated in them all the morbid influences arising from functional obstruction in the dependent organs. And the fact that the ovaries are thus exposed to disorders reflected from other parts of the generative apparatus, in addition to those which may arise from their own functional derangement and structural disorganization, shows the primary importance of a careful study of all ovarian disorders, not only by themselves, but still more especially in their connection with morbid conditions of other organs. In the ovaries are implanted the seeds of life,—and of death! And these latter may destroy the impregnated ova while yet contained in the Graafian vesicles; cause the product of conception to be blighted in the womb,—resulting in a molar instead of a true pregnancy; produce abortion at three months,—a still-born child at full term; or finally destroy life at any period short of the normal three score years and ten.

Some of the forms of ovarian disorder are very common and important, although not necessarily very obvious; these will be fully described. Others, which are rare, will be briefly mentioned, so that they may be recognized when they do appear. In either case a careful study of all the attendant symptoms will be equally essential in order to make a proper prescription. Nor in many cases will the pathological details or diagnosis greatly aid in making such a prescription. But the Homœopathic physician needs to become familiar with the *possible forms and terminations* of such disorders, in order to know how to examine such cases and to anticipate their natural course. And nowhere is the superior advantage of the Homœopathic practice more obvious than in the anticipative treatment of forms of disease so obscure, so deep-seated, and so formidable as are many of those to which the ovaries are liable. The single fact that *ovarian tumors* seldom or never appear in persons who have been brought up under Homœopathic treatment, at once illustrates and confirms this statement.

The *Fallopian tubes* no doubt very strongly sympathize with the uterus and the ovaries in their disordered conditions. But we have not deemed it necessary to make any particular mention of the various morbid conditions to which these organs are liable, partly from the difficulty of distinguishing any separate affections of these tubes; partly from the fact that those disorders which attack them from sympathetic connection with other organs will be most readily removed by treatment directed (in general) to the primary seat of disorder; and partly from the fact that all the symptoms must in any event be considered in prescribing for these disorders. And this totality of the symptoms may be just as truly and completely arrived at in these cases, whether we pay special attention to the Fallopian tubes, or not.

Ovarian Irritation.

Ovarian Irritation is the analogue of irritability of the uterus. By some authors this affection has been termed *sub-acute ovaritis*. But we think without sufficient reason, since, as will be seen from the description, the symptoms are not inflammatory; but purely nervous. And as already intimated, ovarian irritation may be either the cause, the primary indication, or the consequence of severe disorder of some other organ of the sexual system. It may appear in women of all ages between the commencement and cessation of menstruation. Principally an affection of the unimpregnated female,—it is most

frequent in those of a delicate nervous temperament, although by no means confined to them.

Symptoms. A certain sense of uneasiness, which may become a very severe pain, in one or both iliac or inguinal regions, but most frequently in the left, forms one of the chief characteristics of this disorder. This pain may be either a dull aching, or a more acute sensation; it may appear in paroxysms, especially after fatigue or over-exertion; it may be aggravated by gentle pressure,—but is sometimes capable of being relieved by severe pressure; and may entirely disappear in a state of rest, leaving no evidence of its previous existence. "The pain is much more severe than in chronic inflammation of the ovarian tissues. It is, indeed, often intense; comes on in paroxysms; is seldom aggravated, but is often moderated, by firm pressure from a hand, a bandage, or abdominal supporters constantly worn. It extends to the groin, to the front and inside of the thigh, and sometimes is evidently connected with pain in the back. It is unaccompanied by any enlargement which can be discovered by an external or internal examination. The patient has no fever (inflammatory or hectic) is often not emaciated or anæmic, and frequently as regards her organic life is perfectly well, with plenty of rich blood, strength and physical development. The pain may be very persistent for days, months and years, without any local or general change ensuing. In many patients, brought to my care, the antiphlogistic treatment had been perseveringly and repeatedly resorted to, in all its modifications, by rest, leeches, fomentations, by blisters and other revulsives, and had entirely failed to afford any permanent relief; but had rather aggravated the sufferings, by debilitating the patient, and thus rendering her nerves more sensitive, and her suffering greater."—*Hodge.* "When the irritation is great, it may be extended to the bladder, giving rise to a desire to evacuate its contents frequently, and causing great pain in doing so. Hysterical paroxysms are by no means unfrequent. In two of the most violent cases of hysteria that I have seen for some time, there was extreme tenderness of the region of the left ovary, and pressure there aggravated the hysterical paroxysms."—*Churchill.*

These sufferings from ovarian irritation are unaccompanied by any sympathetic pain in the breasts, or fever,—as is the case in actual inflammation of the ovaries. "Should the skin on being lifted give great pain, it cannot depend on a deep-seated lesion; irregular variations and the complete subsidence of pain, point to neuralgia." (Ovarialgia.)—*Tilt.* We have given these fragmentary descriptions

of this affection from different authors, in order to distinguish it from *ovaritis*, (even sub-acute,) and as containing pretty nearly all the symptoms by which it is characterized.

Various forms of disorder of the female organism appear in connection with ovarian irritation; either as its causes or as its consequences. These we will indicate, without attempting to distinguish the former from the latter. Nor indeed would it be essential to make this distinction, even if it were always practicable;—since we must always prescribe for the totality of the symptoms present.

Causes and Connections. *Ovarian Irritation* scarcely ever appears entirely alone; usually it is accompanied by a corresponding irritability of the uterus, or by some other morbid condition to which it either gives rise or by which it is itself caused. In many cases it is impossible to determine what are the exact relations, as primary or secondary, which these various and concomitant affections bear to each other. Nor indeed is it essential; for on the one hand they are all alike caused no doubt by some profound constitutional dyscrasia, (psoric miasm,) and on the other hand they are all alike to be taken into consideration in our prescriptions. And in either case the symptoms present, as in displacements of the ovaries—and the conditions of aggravation, as, worse from motion, will sufficiently indicate the requisite hygienic directions.

A certain amount of ovarian irritation is frequently found in connection with amenorrhœa. The absence of the menses may be due to the same morbid condition of the ovaries that constitutes the irritability itself; or the irritation may be the result of a sudden suppression of the menstrual flux. Or other, deeper-seated and constitutional causes may at the same time occasion an irregularity, or total absence of the menstrual discharge and an irritable state of the ovaries and other sexual organs. The sudden suppression of the menses, as from cold, will almost necessarily result either in irritation or in acute inflammation of the ovaries. This condition is not very different from that in which there is a deficiency of action from some latent dyscrasia or organic imperfection in the ovaries. Here the *ovarian nisus* is incapable of effecting its normal development; but only produces an irritable condition of the ovaries themselves. For it must always be borne in mind, that as organic inflammation is the result of congestions or obstructions of the arterial or venous blood-vessels, so nervous irritation is the result of suppressed, imperfect, or excessive functional action. In dysmenorrhœa there is always more or less

irritation of the ovaries; and this general irritability will be found to be greatly aggravated at the period of the menstrual nisus. The importance of carefully observing the morbid conditions of (irritation, "congestion") the ovaries even in their incipient stage, on account of their strong disposition to lead to serious disorder, is well expressed by Dr. Duncan.* "The propriety of attending seriously to the symptoms of congestion (irritation) of one or of both ovaries, as rendered evident by thrilling pain a little above the centre of Poupart's ligament, accompanied by tenderness on pressure, and increased by the erect posture, ought to be strongly insisted upon. Whether the pain be constant or intermittent, returning at, or exacerbated during the monthly crisis, accompanied by menorrhagia, or co-existing with amenorrhœa and chlorosis, it should receive our urgent consideration; for when an organ has been congested for any length of time, such a state is difficult of eradication—morbid changes rapidly occur and irremediable mischiefs result."

Menorrhagia will sooner or later induce ovarian irritation, in consequence of the nervous weakness of the sexual organs and of the whole system, which follows such exhausting discharges. In all the abnormal varieties of menstruation,—in profuse as well as in suppressed menstruation,—the ovaries are often the organs most severely affected. And even where the profuse flow originates in a morbid condition of these organs, the reflex influence of such flow is capable of greatly aggravating the original morbid condition. In some instances ovarian irritation seems to be the result of erosion or congestion of the cervix uteri; in others the irritability appears only on the repression of such organic diseases by the barbarous, surgical treatment of the allopathic school.

The relation of amenorrhœa to ovarian irritation has already been explained; and in those forms of dysmenorrhœa which are due to imperfect or difficult ovulation, it is easy to see that the ovaries must be in an irritable condition. Thus the entire absence of sexual intercourse; its *imperfect performance*, or excessive indulgence in coition may, in different ways, lead to the same state of ovarian irritation. And in many cases of sterility, the only assignable cause will be found in a similar irritability of the ovaries. Hysteria is a no less invariable attendant upon this form of irritation; but it must be regarded rather as the consequence than as the cause of the irritability. Since, as already stated, in a previous chapter, *hysterical*

* Tilt, "Uterine and Ovarian Inflammation," p. 339.

paroxysms may sometimes be immediately produced by pressure of the fingers upon the ovaries. For treatment of *Ovarian Irritation*, see Remedies for Inflammation of the Ovaries.

Acute Inflammation of the Ovaries.

Acute Ovaritis may be idiopathic or puerperal, according as it arises directly from local or constitutional influences peculiar to the ovaries,—or results from peritoneal inflammation succeeding to abortion or parturition.

Description and symptoms.—Idiopathic Ovaritis is comparatively rare; except where it is the consequence of external injury. It is most apt to occur just previous to, during or immediately after the menses. The ovaries themselves swell to three or four times their natural size, and their peritoneal covering usually becomes tender and inflamed. Scattered through the substance of the inflamed ovaries will be found purulent matter, contained in cysts which have been supposed to be the Graafian cells filled with pus of their own secreting. The patient suffers with severe, deep-seated pain in the pelvic cavity; the pain is accompanied by a burning sensation and is made much worse by motion.

If the peritoneal covering becomes involved, the pain is rendered much more acute and lancinating,—aggravated by pressure and by suddenly assuming the upright position; while the former tenderness on pressure, instead of being confined to the ovarian regions, will be found to have extended over the whole surface of the abdomen. In the severer forms of ovaritis, the fever and other symptoms will greatly resemble those constituting peritonitis; "the skin is hot, the pulse quick and concentrated; the stomach becomes disordered, and nausea and vomiting occur." The inflammation usually does thus extend more or less over the adjacent peritoneal membranes; causing dysuria and very frequent and painful micturition; or the inflammation may be directed more posteriorly and the rectum rather than the bladder become principally affected. In this latter case there may be frequent and ineffectual calls to evacuate the bowel,—even with distressing tenesmus. "In the earlier stages of idiopathic ovaritis, nausea, sickness, and sometimes constipation are frequent accompaniments, depending at first on the irritation of the visceral peritoneum, and on the temporary paralysis of the muscular coat of the intestines. When the tumor has increased, and rests on the rectum, the patient

is troubled by a more constant constipation and by tenesmus. The pressure on the rectum is sometimes so great that the feces are moulded into the form of a ribband. Sometimes constipation is so great that the case is said to be one of ileus."—*Tilt.*

Acute ovaritis may give rise to nymphomania: "the mind is more evidently affected in the sanguine, the irritable, and the plethoric; the desires are inordinately excited, so as almost to amount to uteromania." But this exaltation of the sexual feeling can only arise in the earlier stages of the ovarian inflammation. And on the other hand, "inflammation of the ovary decidedly occurs, not only without the slightest approach to nymphomania, but it is frequently attended by a directly opposite state of feeling on the part of the patient."—*Löwenardt.*

Diagnosis. In inflammation and in irritation of the ovaries, an examination per rectum may be found requisite. "Without the aid of examination per rectum, it would be exceedingly difficult to form a certain diagnosis; the finger per anum, easily reaches to the side of the uterus, *where the swollen and generally painful ovary may be distinctly felt.* Examination per vaginam leads to little or no certain results." And by such exploration per anum, ovaritis may be distinguished from all other affections; because in no other affection is the ovary necessarily enlarged. A careful study of all the symptoms and conditions will remove any remaining obscurity in these cases. The history of the case; the previous condition of the patient; the nature of the pain as sharp, lancinating, aggravated by motion, will all aid to determine the origin and extent of the ovarian affection. This must also be distinguished from simple ovarian irritation, by that symptom of aggravation on pressure, which is common to acute inflammation, but not to nervous or neuralgic conditions.

Termination. The natural course of ovaritis, like that of other acute inflammations, is to terminate in suppuration unless its progress is arrested. In the latter case, whether the result be brought about by art or by unaided nature, the termination is in resolution. This is but another name for the subsidence of the inflammation itself. But a partial resolution or subsidence of the more violent inflammatory symptoms may be supposed to have taken place where the *chronic* ovaritis replaces the *acute.* Here we have the commencement of an *ovarian tumor,* for the enlargement of the ovary which appeared under the acute form of inflammation, may not only continue, but even increase more and more under the chronic form.

Where suppuration occurs as the result of acute ovaritis, the pus

is generally diffused throughout the substance of the ovary. This pus,—whose formation may be indicated by rigors, softness of the pulse, and mitigation of the general symptoms with an increased sense of local weight and throbbing,—may be reabsorbed into the system; and thus a form of resolution may succeed, even after suppuration. Or the abscess may burst and discharge its contents, either externally; through the vagina; into the intestine; into the bladder, or into the cavity of the peritoneum. The discharge of the matter through the vagina is the most favorable of all; whether it be transmitted through the Fallopian tubes and uterus, or, as is more frequently the case, directly into the vagina itself. The discharge of the product of ovarian suppuration through an intestinal or a vesical opening may result favorably or unfavorably, according to the other circumstances of the case. But the effusion of ovarian pus in quantity, as of any other purulent matters, into the peritoneum is almost necessarily fatal. In many milder cases of ovaritis, in which no structural disorganization, as suppuration or tumor appears, the organ may none the less effectually become incapable of ovulation, by the condensation of its tissues;—or adhesions may occur which may indirectly, but no less certainly, occasion sterility.

Causes. Idiopathic ovaritis may result from external injury; and it has been known to follow sudden suppression of the menstruation. It has also supervened on the suppression of gonorrhœa by astringent injections; and it has occasionally occurred in connection with variola, and in pneumonia. "A cold taken during menstruation, the suppression of the courses, coitus during or immediately after this epoch, the use of violent emenagogues, pediluvia or hot baths at the same period, are the principal causes likely to produce ovaritis in the absence of the gravid or puerperal state."—*Scanzoni.*

The *Puerperal Ovaritis* is much more common and is often merely an extension of inflammation from the uterus, or broad ligaments to the ovaries. As this is rather the consequence of another morbid condition of which it forms a complication, we refer the reader to Puerperal peritonitis for a fuller description.

Chronic Inflammation of the Ovaries.

Chronic Ovaritis as already explained, is often but the continuation of the acute in a less active form,—in other instances, it is the result of a corresponding inflammation of the uterus and its appendages; or it may arise, as it were, originally and spontaneously, in the individual follicles. In either case there is

more or less enlargement of these organs; their contour becomes irregular, their surface roughened and their entire substance indurated. This enlargement and induration usually affects but one of the ovaries, in the first instance; the other retaining its natural size, or only becoming affected subsequently. The enlarged ovary remains within the pelvis either freely movable or adherent,—until its increasing size causes it (if movable) to pass into the abdomen entirely,—or to extend its growth in the same direction, where from the formation of false membranes adhesions have bound the original tumor within the pelvic cavity. Having risen up into the abdomen, the enlarged ovary may still remain freely movable;—or become fixed, by means of adhesions to the adjoining viscera, or by completely occupying the cavity of the abdomen itself. In this general manner do what are called ovarian tumors spring from chronic inflammation of the ovaries.

In a similar manner, in other cases, the chronic ovaritis results in dilatations of the Graafian vesicles, forming cysts,—encysted ovarian dropsies. These forms of encysted dropsies of the ovaries are quite common; and there seems to be almost no limit to the size to which they may attain. And although thus separately mentioned, they are not always capable of being so definitely distinguished at the bedside of the patient. For while fluctuation may readily be detected in some instances,—in others, so great is the thickness and induration of the hypertrophied parietes, that it may be almost impossible to determine that any dropsical collection is actually present. An ovarian tumor, properly so called, may contain a single large or smaller cyst situated in its centre; or it may have numbers of such cysts scattered through its substance.

There are other forms of morbid growth in the ovaries, still to be mentioned in their appropriate places. But this general form of tumor or enlargement, whether principally solid, consisting mostly of dropsical accumulations, or composed of both solid and fluid elements combined, may be stated as constituting one of the most common results of chronic ovaritis.

The *symptoms* of chronic inflammation of the ovaries, except in those cases which follow the acute form, are not very strongly marked. The pain, which in acute ovaritis had been very severe, gives place to a sensation rather disagreeable than painful. There are a variety of sufferings within the pelvic region, which, *in default of any other cause,* may be safely attributed to chronic ovaritis. Such are, "frequent need of urinating, painful constrictions of the vagina,

uterine colics, a very painful tenesmus, together with the formation of hæmorrhoidal tumors." The patient complains of an inconvenient weight in the diseased spot, which increases when touched, when walking, by remaining too long standing, by coitus, and especially at the menstrual period. Frequently we meet with various disorders in connection with the menstruation, without our being able always to comprehend why the courses are sometimes nearly or quite suppressed, while at other times they are much too abundant; as the disease very often affects one ovary alone, the courses are not necessarily accompanied every time by dysmenorrhœal phenomena; we even see the catamenial flow occur two or three times without particularly painful sensations, which suggests the inference that the matured ovum at these periods belongs to the healthy ovary. At other times, each menstrual period is accompanied by a violent dysmenorrhœa, and then either both ovaries are diseased,—or the ovulation affects in a high degree the diseased organ.—*Scanzoni.*

The pain which is either limited to the region of the ovaries or radiates from thence, which has continued for some time, and which is aggravated either before or during the menstrual period, will lead to the belief that there may be chronic inflammation of one or both ovaries. And this belief will be strengthened if we find the vaginal cul-de-sac painful to the touch, on the affected side.

Chronic ovaritis, whether it follow acute inflammation of the ovaries, or become imperceptibly developed from some external injury, constitutional dyscrasia, or even from excesses in sexual intercourse or abuse of the sexual organs,—as in females who lead vicious lives or indulge in secret vice,—is at the same time accompanied with enlargement and naturally tends to *induration,* softening or other structural degeneration. And in those cases in which constitutional miasms of a corresponding sort are present, there are developed tubercles, and calculi and even cancerous affections of the ovaries, from what at first may perhaps have appeared but simple forms of chronic inflammation. Thus we have tumors, dropsies, cancers and various other organic changes more or less common,—all of them gravely important in their nature. And all these forms of ovarian disorder must be studied with a careful examination of all the attendant local and general symptoms, both sensational and functional, in order to secure the selection of the remedy which shall reach the seat of the disease in the interior of the system, and so prevent its fuller development and fatal termination.

Irritation; Inflammation of the Ovaries.

Aconite. Will be indicated where the patient has been exposed to dry cold air, and has been so chilled through as to develop a real synochal fever. Or in cases in which this inflammation has resulted from a fright.

Ambra g. Stitches in the ovarian region, when drawing in the abdomen, or pressing upon it. Discharge of bluish-white menses from the vagina. During urination there is a burning, smarting itching and titillation of the vulva and urethra.

Anti. crud. Nausea and vomiting; white tongue; tenderness over the ovarian region.

Apis m. Stinging pains in the ovaries. Aggravation after sexual intercourse. Enlargement of the right ovary, and pain in the left pectoral region with cough. There is evidently a mutual sympathy between the ovaries and the lungs.

Arsen. a. Intense burning or tensive pain in the ovary, with great restlessness,—some relief being afforded by constantly moving the feet. Thirst, with drinking little and very often.

Aurum. Much depression of spirits. Her mind dwells constantly on suicide.

Belladonna. The right ovary is much enlarged. And with every menstrual period, the pressure downwards was so great, as if everything would be forced out of the vulva, that she was compelled to keep her bed for several days. This case was entirely cured in the course of a year with but three doses of Belladonna.

Bryonia. Stitching pains in the ovaries on taking a deep inspiration. The pains are made worse by motion. She can hardly bear the least touch on the affected parts.

Cantharis. Much tenderness and burning in the ovarian regions. Dysuria; cutting burning in passing only a drop or two, which is often bloody, or complete strangury. This remedy is very often indicated in this complaint.

China. In cases where profuse hemorrhages, or too frequent sexual intercourse, have produced the attack of inflammation. She can hardly bear the least touch upon the affected parts.

Colocynth. Intense boring or tensive pain in the ovary, causing her to draw up double, with great restlessness.

Conium. Induration and enlargement of the ovary, attended with nausea, vomiting, eructations of wind and expectoration of phlegm;

lancinating pains; acrid, white and slimy leucorrhœa; labor-like contractions; pains in the iliac regions.

Graphites. The inflammation is aggravated by every cold she takes, or from getting the feet damp. Her menses delay. Morning sickness during the menses. Itching blotches on the skin, here and there, oozing a glutinous fluid.

Hepar. When suppuration is feared, and other remedies have failed, Hepar may prove to be the medicine, if no other is more strongly indicated.

Ignatia. In cases where the disease has seemed to be developed from disappointed affection. There is involuntary sighing, great despondency; and weak, empty feeling at the pit of the stomach.

Lachesis. If pus has already formed, Lachesis may be the most appropriate remedy to promote its escape externally.

Lycopodium. Cutting or shooting pain, extending from the right to left, across the ovary; worse after four P. M., better after eight or nine in the evening.

Nux vom. When the disease appears to have been occasioned by rich living, highly seasoned food, stimulating drinks, or by a too sedentary life.

Phosph. acid. When the disorder is caused by debilitating influences.

Platina. In cases where the sexual passion is altogether too strong, as an attendant condition. The pain in the region of the ovary is of a burning character, occurring in paroxysms, with stitches in the forehead. Hysterical condition strongly marked. Has proved curative after the pus has been discharged under Lachesis.

Ranun. bulb. In chronic cases where rough windy weather excites the symptoms.

Rhus tox. When the pain is relieved by motion.

Staphysagria. In many cases, particularly where the mind has been dwelling too much on sexual subjects, as an exciting cause.

Thuya oc. In cases where the left ovary is more particularly affected. The sufferings are much increased at every menstrual period, they even become almost intolerable. The pain extends all through the left iliac region, into the groin, and sometimes into the left leg; the pain is sometimes burning. Sometimes the pain is excited by walking or riding, and becomes so severe that she must lie down.

Zinc. In chronic cases; boring pain in the left ovary, causing her to press on the part continually; but the pain is entirely relieved only

during the flow of the menses; and it returns with the same violence at the expiration of the menstrual period.

Ovarian Tumors.

Ovarian Tumors.—Enlargements of the ovaries are by no means uncommon; and they may be divided into two general classes: 1. Those which are solid; 2. Those which have cavities more or less large in their interior,—dropsical tumors.

Solid ovarian tumors may be considered as the indurations which occur in chronic inflammation of these organs. These are mostly fibrous tumors; and are either external and attached to the ovary, or imbedded within its substance. They are similar in situation, structure and in variety to tumors of the uterus, and often occur in the ovaries at the same time that they do in the womb,—but are less intensely painful. The solid ovarian tumors of a non-malignant character are comparatively rare; they may be quite small, or vary from the size of a goose's egg to that of a man's head. One of this kind, mentioned by Scanzoni,—which, however, gave some traces of a cancerous nature,—was found to weigh nineteen pounds,—the patient having died of Bright's disease. In their general appearance these tumors are correctly described in the words of Dr. Baillie,—"The ovarium is much enlarged in size, and consists of a very solid substance, intersected by membranes which run in various directions. It resembles in its texture the tumors which grow from the outside of the uterus, and I believe has very little tendency to inflame or suppurate."

In many instances the induration partakes of the nature of an *enchondroma*, in which the sub-peritoneal fibrous membrane of the ovary itself assumes an osseous or cartilaginous hardness. Thus in two examples, mentioned by Kiwisch:* "Once these cartilaginous concretions surrounded the ovary in the form of numerous plates or of rounded protuberances, more or less large, which gave to the entire organ an aspect altogether tuberous. At another time the right ovary was entirely transformed into a tumor of the size of the fist, surrounded with numerous false membranes whose exterior layers contained large, hard, cartilaginous nodules, while the interior of the tumor resembled a cartilaginous hyaline mass of very great hardness."

Very rarely the induration partakes of the *calcareous* or *cretaceous* nature. Or from the presence of a peculiar dyscrasia in the system,

* Scanzoni, p. 418.

which may be termed tuberculous, *tubercles* may be deposited in the substance of the enlarged, hardened and inflamed ovary,—as in pulmonary tuberculosis. In such cases the adjacent organs will also show traces of similar tuberculous deposits. And thus, by almost insensible gradations, the non-malignant may be seen to run into the malignant form of ovarian induration. The reciprocal relation of the constitutional dyscrasia which produces tubercles, to that which results in genuine cancer, has already been explained in a previous chapter, on cancer of the uterus,—to which the reader is here referred.

The *diagnosis* of fibrous, non-malignant tumor of the ovary, will be assisted by examination per rectum,—by which such a tumor can be distinguished from tumor of the uterus; and by the consideration of the general health of the patient, and the less poignant and lancinating character of the pains,—by which such a tumor may be distinguished from fibrous cancer of the ovary. But this is of consequence rather for the comfort and encouragement of the patient, than for our own guidance in prescribing; since the medicine must always be selected from a careful study of the totality of the symptoms and conditions,—never from our pathological theories or conclusions. The symptoms will surely lead us right; while our pathological theories,—*by persuading us to generalize instead of individualizing*,—will assuredly preclude us from the success we might attain.

Apis m. Stinging pains, like bee-stings, occurring occasionally.

Arnica m. If developed from a bruise,—the Arnica symptoms remaining,—a sore, bruised sensation.

Belladonna. The pains coming and going suddenly. Downward pressure, as if all would issue through the genital organs.

Conium. Much nausea and vomiting. Vertigo whilst in a recumbent position, particularly on attempting to turn over. The urine intermits in its flow.

Graphites. She has itching blotches here and there over her person. Getting her feet a little damp aggravates her sufferings. Obstinate constipation of large, knotty feces, with varices.

Lachesis. Especially in cases where the left ovary was first affected, with tendency towards the right. Worse after sleeping. The pain is often relieved by a discharge of blood from the vagina.

Lycopodium. The right ovary is first affected,—and inclines to the left. Aggravation after four P. M. Much borborygmus, particularly in the left hypochondria. An abundance of red sand in the urine.

Much pain in the back before urinating,—which is relieved as soon as the urine flows.

Zinc. The sufferings are entirely relieved during the *catamenial flow.* A sensation of as boring in the tumor, which requires pressure and shaking of the part for relief.

See also *Ovaritis.*

Cancer of the Ovaries.

The malignant and the non-malignant may be stated to comprehend all the varieties of solid ovarian tumors; of these the latter,—principally fibrous tumors,—have just been described: the various forms of scirrhus, cancer, and fungus hæmatodes make up the former.

The *fibrous cancer*, or *true scirrhus*, is the one which more properly belongs to the class of solid tumors of the ovaries. This form of ovarian cancer is usually very moderate in size; very slow in its growth and development; and as a primary affection comparatively rare in its occurrence. The more frequent form of cancer of the ovaries, however, is not the scirrhous, but the cerebriform variety, the cystocarcinoma which appears in connection with encysted rather than with solid ovarian tumors. Both varieties, for the sake of simplicity and conciseness, will be considered in the present section.

Cancer of the ovaries is less common than that of the breasts, and not nearly as frequent as cancer of the uterus It appears to attack principally the unmarried female at the middle period of her life; while cancer of the uterus more frequently occurs in those of a more advanced age.

The fibrous cancer or scirrhus of the ovary, presents the characteristic stony hardness of this affection in general; it is uneven in its surface, and nearly homogeneous in its substance. Its coexistence with cancer of other organs, especially in the breast, greatly aids in determining the nature of the difficulty. In other respects the reader is referred to the symptoms as described under cancer of the uterus. The examination per rectum will enable the tumor to be distinguished from that of the uterus.

The more common form of ovarian cancer is the *cerebriform;* which is also much more rapid in its growth. "We have the ovaries or Graafian vesicles, swelled out into cysts whose walls are like scirrhus, or we have them converted into those bags of gelatiniform substance, which have obtained the name of colloid. We see also here those proliferous cystic growths classed by some authors among

the non-malignant tumors, but which are, I believe, true cancer. It appears from the results of operation, that the diagnosis of these tumors from the simple cystic formations is very difficult; and also, that very unfavorable results have ensued whenever the ovarian tumor which has been removed proved to be cancerous."—*Cooke.* As neither in malignant nor in non-malignant tumors of the ovaries, do the principles of the Homœopathic school approve of operations whose object is the extirpation of such tumors,—so neither will the Homœopathic physician be led into the fatal error of attempting the removal of a cancerous enlargement of the ovary. Still it is desirable as above stated to be able to distinguish at as early a period as possible, a scirrhous growth from an ordinary and comparatively innocuous induration. And so also to distinguish a fibrous from a cerebriform or colloid cancer of the ovary; since while the former may occupy years in its development, and even then attain to but a moderate size, the latter runs a very rapid course and may acquire an enormous volume in a few months.

As fibrous cancer of the ovary may become a softened, ulcerated cancer; so these two forms of the cancerous affection, which arise in connection with encysted dropsy, either present at different periods of their development great differences of consistence, or they combine in one and the same tumor and at the same time the most opposite constituents. An ovarian tumor was dissected by Veter, weighing fifty-six pounds, and of a consistence almost cartilaginous; in three parts, however, it was softened, and resembled the substance of the brain. The encephaloid substance was more distinctly characterized in a case of enormous cancer, of seventy-five pounds' weight, which occupied the left ovarium, and contained within a fibrous and a fleshy mass and a fatty tissue. It is this encephaloid disease which has been termed *cephaloma*, when it is whitish,—and *hæmatoma* when it is vesicular and saturated with blood; the same that by others has been denominated malignant, or fungoid tumor of the ovarium.* A similar, fungous or cancerous *cauliflower excrescence*, has been described, in which, in connection with dropsy, both ovaries were changed into a mass infinitely ramified with vessels in its substance, and granulous at its surface.

Many forms of encysted dropsy of the ovaries are attended with cancerous affections; here we find colloid cancer, medullary cancer, and what for more exact definition are termed *cystosarcomata.* Some

* Boivin and Duges, page 479

description of the mode of formation of these will be given in connection with our account of Dropsy of the Ovaries. And for a more thorough and complete view of all the various structural disorders of these organs, the reader is referred to the work of Scanzoni, on the Diseases of Females.

Symptoms.—Ovarian cancers are less painful than the uterine; but the pain is of the same lancinating character; menstruation may continue so long as the disease is confined to one ovary; but it will necessarily fail when both organs become involved. Conception has been known to take place in persons laboring under malignant disease of one ovary. From their situation in connection with the rectum and bladder, the enlarged ovaries must of course occasion more or less irritation and disturbance of both these organs. And in fact the most painful symptoms which arise in connection with ovarian cancer are those which occur either from its thus involving other and more sensitive organs, or from its escape into the abdomen and subsequent softening, involving all the surrounding peritoneal membranes in this distressing inflammation. "These diseases frequently lead to a rapidly fatal termination, and are accompanied by that extreme sense of debility and bloodless appearance of the body so characteristic of malignant disease." "The malignant form of the disease may be recognized, during life, by the want of nutrition, the broken health of the patient, the unceasing and rapid growth of the tumor, the simultaneous enlargement of glands in other parts of the body, and the occasional recurrence of lancinating pains in the parts. The latter symptom is not constant. The pulse is quick and feeble, and as the disease proceeds, there is hectic fever, and often aphthæ in the mouth, with an inexpressible sense of debility."—*Boivin and Duges.*

Diagnosis.—"*From ovarian dropsy,* both scirrhus and encephaloid may be distinguished by their greater hardness and compactness; by the absence of fluctuation generally, and by their lobulated, tuberose surface.

"From *Pregnancy,* by the hard lobulated surface, and by the absence of the audible signs of pregnancy.

"From *fibrous tumors of the uterus,* by their greater size; by their not being pediculated, but more movable, at least during the early stages; and in an advanced stage, by the lancinating pain and constitutional distress.

"*Scirrhus* is of slow growth, gives rise to mechanical symptoms; and to disturbance or irregularity of the catamenia; but to no pain or constitutional suffering. Encephaloid disease, or fungus hæmatodes,

on the contrary, gives rise to fever, emaciation and other constitutional symptoms."—*Churchill.*

For other constitutional symptoms and affections, see cancer of the uterus; since this malignant disease either in the uterus or in the ovary must affect the system in a very similar manner. For the treatment of cancer of the ovary study the remedies mentioned under Ovarian Tumors and Cancer of the Uterus.

Cancer of the Breast.

In the female the cancerous diathesis usually develops itself in the uterus, in the ovaries or in the breasts. And since the mammæ are intimately connected with the ovaries, constituting important parts of the sexual system, we have thought it best to include in this section all that needs to be said of cancer as affecting the former organs.

There are many forms of tumors occurring in the female breast,—some of which are mild or innocuous; some malignant, apparently from their outset; and some, after remaining stationary and harmless for a long course of years, are capable of suddenly assuming a malignant form and character. This latter circumstance is owing no doubt to the fact that in such cases the tumor becomes the representative of a more depraved, or of a cachectic condition of the system. And as in a former chapter we have seen the reciprocal relation of the tuberculous to the cancerous diathesis, in different members of the same family, so here we see how at different stages of the same life the constitutional miasm may assume a more malignant form.

Of the actual cancerous affections of the female system, the breast becomes the seat of development of by far the larger number. And the cancers of the breast,—either those originally so appearing, or those subsequently so becoming,—are almost all of the scirrhous variety; and they all occur after the accession of the period of puberty. But before proceeding to the description of mammary cancers, it will be proper to mention two or three forms of tumors which resemble such cancers, especially in their initial stages.

These are glandular engorgements, "which have received the name of *adenoid tumors*, or *adenocele*. Commencing as a small almond-shaped tumor, very loosely attached to the surrounding tissue and gliding with great freedom under the skin when pressed by the fingers, it may grow to the size of a duck's egg or even larger. It is seldom solitary, never attaches itself to the skin, and within my

experience never suppurates, so long as it remains simply an adenocele. This tumor is observed more generally in the mammæ of unmarried females."—*Cooke.* These tumors, or glandular enlargements and indurations, are supposed to be of a scrofulous (tuberculous) nature; an external development of what might have become pulmonary tuberculosis. Some cases of tumors of this form are believed to depend upon uterine irritation or sexual excitement; and to be only capable of being removed by the removal of the exciting cause. Other cases of adenoid tumors of the mammæ are those which may remain for many years painless and innocent and finally assume a cancerous form. "It need not be denied that cancerous growths may occur in tumors that were previously of an innocent kind."—*Paget.* This is to be accounted for from the fact that phthisical parents beget cancerous offspring, and cancerous parents have phthisical children;—hence tumors of long standing, having none of the characteristics pertaining to cancer, may suddenly assume an active, cancerous condition. These statements are made particularly to show the importance of being guided in all our prescriptions for such tumors,—*not by our diagnosis* as to their being cancerous or otherwise,—but by the symptoms present.

Still another class of tumors of the female breast is to be found in those which arise from external injury. "A blow upon the soft tissues of the female breast may result in a diffused hypertrophy of the gland and neighboring structures; or in a circumscribed tumor which obtains considerable hardness, and is attended with great pain; or in the development of cancer." The result in either case being determined by the *internal condition* of the various systems, which are all alike externally affected by the same exciting cause. Thus unless one has in her constitution either the cancerous dyscrasia itself, or its complement, the tuberculous diathesis, no cancer can result from an external injury, however severe.

The various forms of non-malignant tumors of the mammæ hitherto mentioned, are indurated, solid. But there are others, which may become cancerous or not, which are properly termed *cysts in the mammæ.* These arise from the distension of one of the lactiferous tubes of which the gland is composed. "When fully developed this cystic tumor is so tense as to give rise to some doubt whether it be a solid or a fluid body." They may occur singly, or in numerous clusters. In the former case, they are declared by *Cooke,*—a high allopathic authority, from whom in this section we have borrowed

freely,—to be innocent and curable; in the latter they may be either innocent or malignant.

The cancers of the female breast have already been stated to be almost entirely of the scirrhous variety. The medullary form of mammary cancer is so rare, that it is sufficient to state that it sometimes does occur. Scirrhus of the breast has been divided into three general classes.

I. *Scirrhus proper:* a hard tumor which is felt beneath the skin, generally movable, but in an advanced stage attached to the pectoral muscle as well as to the skin, very heavy and incompressible, and attended with severe stabbing pain. These tumors may be reabsorbed; or become open ulcerated cancers.

II. *Scirrhus with cysts, cysto-scirrhus:* a cancerous tumor having an indurated base, in which cysts have been developed. This variety in some instances appears to be but a further development of the former.

III. *Cuirass-form scirrhus:* tegumentary scirrhus, which involves both the skin and the gland, binding the whole down by a hard, brawny, almost iron clasp to the ribs themselves. This peculiar induration of the skin frequently extends over the thorax, creeping gradually round to the back, and anteriorly across the sternum to the other breast. It is the least manageable of all the forms of scirrhus and never at any time admits of operation with the slightest prospect of delaying its progress. It is in this form of scirrhus principally that we have those nodules or tubercles which are sometimes seen upon the surface of the breast, and indicate generally the hopeless nature of the case; but these tubercles do also appear in the advanced stages of the other forms of scirrhus, and especially when the disease returns after an operation.—*Cooke.*

The history of the case; the relation of the tumor to the adjacent parts as first movable, then fixed; the extreme, stony hardness of the tumor itself; and the stabbing, lancinating character of the pains, will enable the physician to give a qualified, guarded diagnosis, even in the earlier stages of the disease; and to express the hope that the tumor may be prevented from assuming the form of ulcerated cancer; and that if it is not entirely dissipated by the exhibition of the appropriate remedy, homœopathic to the whole case,—it may at least be arrested in its progress and its further development finally prevented.

With regard to the operation for the removal of cancer, we may now state that the results of allopathic surgery go far to confirm the principles adopted in this book and which are common to the

Homœopathic school. The extirpation of the tumor so far from removing the disease, does but result, in most cases, in its more rapidly fatal development. All those cases in which the allopathic surgeon would dare to operate, afford still greater prospect of a radical cure from the use of the Homœopathic remedies. And finally, if these remedies fail to arrest the progress of the disease entirely, they can greatly retard its advance; and at the same time do much towards relieving the intense pains which characterize almost every form of cancerous affection.

Treatment.— Study the following remedies; and also the others mentioned under Uterine Cancer and Ovarian Tumors.

Apis m. Indurations; Scirrhus, or open cancers, attended with "*stinging burning*" pains.

Arnica m. Should be employed immediately after a contusion, or should this not be found sufficient, *Conium* will most probably be found to be the remedy.

Arsen. a. Burning like fire. Putrid exhalations. Waxy paleness, and great debility from the cancerous affection. Great loss of flesh. The pains are relieved by motion.

Asterias rubens. Cures cancers, particularly of the left breast. "Feeling as if the left breast were drawn inwards." "Drawing pain in the breast." "Swelling and distention of the breasts, as if before the menses."

Belladonna. Red streaks, like radii, extend from the scirrhus, induration, or ulcer. The pains come on suddenly and finally disappear with equal suddenness. They are aggravated by motion or the least jar.

Bryonia. Where there is a tensive burning and tearing pain, aggravated by moving the limb of the affected side. She feels generally better on keeping still.

Calcarea carb. In leucophlegmatic constitutions. The cancer is very sensitive and painful to the touch.

Calcarea oxalata. Cancer of the left breast, with intense agonizing pain.

Carbo ani. Burning and tearing pains; dyspnœa and anxiety; low-spirited and desponding. Faint, empty sensation at the pit of the stomach.

Cham. Induration, with drawing tearing; painful to the touch,— she feels as though she could not possibly bear the least touch. She becomes almost furious about the pain; she cannot bear her clothes

to touch the part affected. The pains are aggravated in the open air and at night.

Clematis e. Cancer in the mammæ, painful only on being touched.

Colocynth. Will be found indicated in some cases of very painful cancer.

Conium m. Is particularly indicated in cases developed by means of an injury. Or if aggravated at every menstrual period. Pricking, stinging pains. She is roused from her sleep with pain.

Creasote. The whole mammary gland is hard, bluish-red and covered with little scurfy protuberances, from which blood oozes out whenever the scurf is removed.

Graphites. If developed from old cicatrices formed from repeated abscesses in the mammæ.

Hepar s. c. Cancer of the breast with stinging, burning of the edges, and smell of old cheese. Little pimples or smooth ulcers surrounding the scirrhus or principal ulceration.

Lachesis. The cancer has a bluish or dark red base, interspersed with black streaks of coagulated or decomposed blood.

Lycopodium. Hard, burning nodosities in the mammæ. Study the constitutional symptoms of this important remedy.

Mercurius. The cancer has a sore pain, a sort of raw feeling.

Nitric acid. Hard knots in the mammæ, particularly of mercurialized women.

Phosphorus. Inflamed indurations, very painful, much aggravated by exposure to the air. Stitching pains striking through the part affected. Tall, slim, phthisical females.

Pulsatilla. May be indicated in all lumps occurring in the breasts of young girls. They are sometimes very painful; and often affect the arm of the corresponding side.

Sepia. Is a powerful remedy in these affections. The urine is putrid and deposits a sediment like clay burnt on the chamber. Painful sensation of emptiness in the pit of the stomach; yellow spots in the face; burning pain in the cancer.

Sulphur. The constitutional symptoms are strong in this direction; flushes of heat; burning in the soles of the feet; heat on the crown of the head; weak, faint spells. Weak and unusually hungry from eleven to twelve A. M.

Ovarian Dropsy.

The greater number of the tumors of the ovaries are dropsical in their nature. And although in all cases of ovarian dropsy, the contained fluids are encysted, not diffused, there are several distinct forms of such tumors. Thus there are simple *serous cysts* which are merely attached to the surface of the ovary; tumors which consist in *dilatations* and *dropsies of the Fallopian tubes;* dropsies of the ovaries which consist of *single cysts;* and *multilocular cystic dropsy* of the ovaries. It is well to understand these various forms,—although it may not always be necessary or possible to distinguish them in the living subject; and also to know that they may be complicated with or developed into more malignant forms of disease.

The encysted dropsy of the ovary,—either consisting of a single greatly enlarged cyst, or of several smaller ones,—is by far the most common form of ovarian tumor. "This consists of an enlargement of one or more of the vesicles of De Graaf, the coats of which are thickened, greatly dilated, and become filled with a fluid, while the intermediate structure becomes atrophied, as the vesicle or vesicles enlarge, until the fibrous tunic of the ovarium, covered by the peritoneum, forms the boundary of the tumor. When the principal cyst is formed of the entire ovarium, it often happens that the vesicles having partaken of the morbid disposition, form a series of smaller cysts or cells, which are developed within the parent cyst, and occasionally communicate with each other by considerable openings, the tumor obtaining an immense size, so as to occupy almost the whole abdomen. The thickness of the parietes of the cysts differs much; they are often as thin as a bladder, but, at other times, of a substance as thick as the hand."—*Leadam.* "If there be a great variety in the size of ovarian tumors, in the density of their external coverings, and in the nature of their contents; there is scarcely less diversity in the number of the cells, and in the thickness of the septa which separate them. In most of these compound ovarian dropsies, the number of cysts is very considerable; as the larger cells have series of smaller ones developed and in the course of growth on their internal surface, so that when the disease has attained great bulk, this creation of subordinate cysts is almost interminable."—*Ashwell.*

These tumors may vary from the size of a fist to that of a mass weighing an hundred pounds. "The fluid secreted within the cysts may be serous, like that of ordinary dropsy, or mixed with slimy matter, or it may be a thick, ropy fluid, or gelatinous; different cysts

in the same tumor will sometimes contain different sorts of fluid. Pus is occasionally found in one or more of the cysts, mingled with the other fluid, a consequence of inflammation having occurred in the cyst."

The multiple cysts, as in multilocular cystic dropsy, are said by a late authority to depend on a particular specific alteration of the tissue which constitutes the normal parenchyma of the ovary. Some of them are filled with similar, some with different substances. Thus there may be a purely serous liquid,—or one mingled with blood, resulting from the rupture of interior vessels. In what are called composite cysts, in some rare cases, but usually in a few isolated cavities only, we find a mass of fat, of hairs, of cartilage, bones or teeth.—*Scanzoni.*

Ovarian dropsies occur more frequently in single than in married females; and in the sterile rather than in the parturient of the latter class. This form of disease never appears before puberty; it is most apt to occur in the middle age,—when the generative organs are in full activity. Usually but one ovary is at first or at all affected, even in cases in which the tumor occupies the entire cavity of the abdomen. The other ovary may have become atrophied by compression, or the superior influence of the morbid processes going on around it.

Symptoms.—During the first few months, or while the dropsical tumor continues in the cavity of the pelvis, the symptoms and sensations are not to be distinguished from those occasioned by a mere solid ovarian tumor. Its weight and size occasion uneasy, dragging, bearing-down sensations in the pelvis; or more or less positively painful affections of the bladder and rectum. Upon vaginal examination, the tumor may be discovered between the vagina and rectum; and if the parietes be thin, fluctuations may be detected. A similar exploration *per rectum* may be requisite fully to determine the nature and relations of the tumor and to distinguish it from retroversion of the womb. After the tumor has passed up from within the pelvic cavity, the bearing down sensation, the pressure upon the rectum and bladder, and consequent retention of feces and urine will be relieved. The disturbance of the organic action of the system will be shown higher up. The position and free movement of the intestines, stomach, diaphragm and other organs will be so interfered with, as the tumor increases in size, as to cause a great variety of nervous sufferings and functional derangements, such as palpitation of the heart, dyspnœa, dyspepsia, heart-burn, &c. The gradual but con-

stant advance of the tumor, its slow but steady growth, even when apparently the normal quantity of urine is discharged, indicate the nature of the case,—independent of the fluctuation,—which if present is of course a positive indication, while its absence may arise from the excessive thickness both of the external parietes of the tumor and of the intermediate septa. There may be considerable fever, especially in the evening, with much thirst; or both fever and thirst may be comparatively slight. "In the course of the disease, the patient may have pains in the belly, with fever, indicating inflammation of part of the tumor, which may terminate in suppuration, and produce hectic fever; or the attack may be more acute, causing vomiting, tenderness of the belly, and high fever, proving fatal in a short time; or there may be severe pain, lasting for a shorter period, with or without temporary exhaustion, and these paroxysms may be frequently repeated; but in many cases these acute symptoms are absent, and little distress is felt until the tumor acquire a size so great, as to obstruct respiration, and cause a painful sense of distention. By this time the constitution becomes broken, and dropsical effusions are (elsewhere) produced. Then the abdominal coverings are sometimes so tender, that they cannot bear pressure; and the emaciated patient, worn out with restless nights, feverishness and want of appetite, pain and dyspnœa, expires."—*Burns.*

The *causes* of ovarian dropsy are not to be very definitely stated; except that they may arise from a great variety of influences *in persons of a general dropsical diathesis.* These are stated by Leadam to be injury during parturition, blows, falls, strains, fright, sudden applications of cold, undue excitement, &c. Hence in general, next to a careful consideration of the constitution, symptoms, and indications, it may be important to bear in mind those things which may have resulted in such abnormal developments. For so powerful is the influence of the mind over the body, that even in structural disorders which have thus resulted from such influences as terror, fright, but little progress will be made towards a cure so long as we neglect to take such circumstances into consideration.

Ovarian dropsies may also arise in connection with suppression of the menses,—as is the case with all forms of ovarian tumors. And in the former, as in the latter case, it may not always be possible to determine which is the primary and which the secondary affection; at least where both ovaries are at the same time affected,—which however is not common. In ordinary instances one ovary will become diseased, and the other still perform its function of ovulation,

and conception itself may result. This may be the case until the larger size of the ovarian tumor interferes with the proper action of the other ovary.

Complications.—Dropsies of the ovaries are very often complicated with malignant disease, either of the scirrhous or of the medullary or colloid variety; and during life it is sometimes impossible to distinguish between those which are simple and those which are thus seriously complicated. In some such obscure cases nothing but a careful attention to the constitutional indications and symptoms will guide the physician aright. He may know of no remedies capable of curing the form of dropsical tumor before him, but he may be able to select remedies which shall greatly benefit, and even finally cure his patient. Ascites or even hydrothorax and general anasarca may become complications of ovarian dropsy, especially in its advanced stages,—thus greatly aggravating the sufferings of the patient, and hastening the fatal result. Inflammation may arise in the dropsical tumor which may lead to suppuration and a fatal termination,—especially after the operation of paracentesis has been performed.

Diagnosis.—It is important, though not always easy, to be able to distinguish dropsical from other ovarian tumors; particularly with reference to prognosis.

From pregnancy, inter-pelvic, ovarian dropsy may be distinguished by internal examination,—by means of which this tumor may be separately felt apart from the fundus uteri. And in a similar manner, by examination per rectum, as well as per vaginam, this dropsy, while yet within the pelvic cavity, may be distinguished from dropsy of the Fallopian tubes. From retroversion of the uterus it may be distinguished by its slow growth, as compared with the frequent suddenly formed tumor which arises from this displacement of the uterus; by the greater mildness of the symptoms,—the bowel not being at once affected; and by examination per rectum.

After the dropsical tumor has so increased in size as to have ascended into the abdomen, it may be distinguished from pregnancy by auscultation; by its being one-sided sometimes; by examination per rectum and per vaginam showing the uterus not to be enlarged. In those instances in which pregnancy does exist in connection with ovarian dropsy, it may not be possible to determine the facts of the case until the ear can catch the sound of the fœtal circulation; and even then, there may be some obscurity. Still, even here, the constitutional affections, the sensational symptoms, will lead infallibly to the right remedies, and thus the very best that can be done will

be done. From ascites, ovarian dropsy may be distinguished by the well-defined form of the tumor; by its original or permanent inclination to one side; by its maintaining its situation, even while the patient is in the recumbent position; by the more obscure fluctuations; by examinations per rectum and per vaginam,—which will also enable it to be distinguished from dropsy of the uterus;—and by the absence of œdema of the feet and ankles which almost invariably attend ascites, but which are less apt to accompany encysted dropsy, except in the last stages. The constitutional symptoms are less strongly marked in this encysted form of dropsy, than in ascites. From solid ovarian tumors, ovarian dropsies are to be distinguished by the fluctuation, and by their more rapid growth. It must be borne in mind, however, that there are cases of true ovarian dropsy, which come on very slowly; which may remain dormant and stationary for a number of years.

The *Prognosis* in a case of ovarian dropsy will be favorable or the reverse, according to the rapidity of its growth, the severity of the attendant symptoms, the period of life, and the conclusion we can form as to the mild or malignant character of the affection itself. In almost all cases of confirmed, encysted dropsy, even if uncomplicated with scirrhus, it is merely a question of time. But that time may not necessarily be short. For cases have been recorded, even under Old School treatment, in which the patients have lived for many years with ovarian dropsy of considerable size, without being tapped. While under the Homœopathic regime, there is reason to hope that the progress of the disease may be entirely arrested, in many cases,—and the patient may be considered cured, even if the enlargement remain. But those dropsies which occur towards the change of life; which are accompanied by total loss of menstruation; which appear to give rise to severe constitutional symptoms, to great debility or to a general cachectic condition, may well occasion serious anxiety.

Treatment.—Under this head may be considered both the internal medication and operative interference. The latter may be more readily disposed of first.

Operations for dropsical tumors are of two kinds; those which are intended to entirely remove the disease by extirpation of the tumor itself, and, those which attempt merely to relieve the patient by drawing off the accumulated fluids. The removal of ovarian tumors, of all kinds, was formerly far more generally practiced than now, in the ranks of allopathic surgery. The well-known fact that persons may live a long time with such incumbrances; and *that they are very apt to*

die within a few months, if not within a few days or hours, after suffering their removal, renders people less willing to submit to the operation. Out of a considerable number of cases of ovarian tumors removed by a celebrated surgeon of this city, and by him reported as illustrations of successful operations, not a single patient survived more than nine months! And even so long ago as 1844, Ashwell very earnestly cautioned against the operation. And partly from the great uncertainty of determining that there is no *scirrhous complication,* partly from the impossibility of ascertaining in advance that there are no such adhesions as would, by giving rise to subsequent peritonitis, render the operation almost necessarily a fatal one,—and partly from a consciousness of the existence of important "organic disease," of which the dropsical affection may be but an outgrowth,—many eminent allopathic authorities, such as Hamilton, Churchill, and Lea, caution against performing this operation. Professor Hodge says: "The terrible operation of gastrotomy for the removal of such solid tumors (enlarged ovaries) is, we think indefensible: inasmuch as in itself it is very dangerous and often fatal." But in cases where there are collections of watery, gelatinous, purulent or other fluids in the ovaries, he considers the question of ovariotomy to be different, since such cases, after the lapse of months or years, are generally fatal. And he thinks that the decision may occasionally be in favor of the operation. But with the experience of many able allopathic surgeons before us, and remembering the excellent results which have been obtained by the use of Homœopathic remedies, we think the cases are few indeed in which the operation for the extirpation of cystic tumors of the ovaries would be justifiable. And this conclusion,—which coincides with Homœopathic principles,—is confirmed by the very great danger that the dropsical tumor may prove complicated with scirrhus, and so become all the more rapidly fatal for being interfered with; by the danger of death from the extension of the original disease,—even where it was not malignant,—which, disturbed in its primary and preferred form of development, is apt to find another and less salutary one; and by the imminent danger from peritoneal and general inflammation, inseparable from such extensive openings into the abdomen.

Paracentesis.—Tapping is the operation resorted to in some instances for relief of the patient, but not with the expectation of obtaining a radical cure of the disease. And it will be recommended by the Homœopathic physician, principally in those cases of the *unilocular* form of ovarian dropsy, in which fluctuation can be distinctly felt;

and in which the patient experiences a great deal of suffering, in locomotion and respiration, from the large quantity of water accumulated in the tumor. "It should not, as a general rule, be performed so long as the patient is comparatively comfortable, experience having shown that when it has once been done, it will usually have to be done soon again."

Although comparatively simple, this operation should only be undertaken with the proper precautions. The bladder should previously be evacuated, in order as much as possible to avoid the danger of puncturing this organ. The patient may be placed on her side, near the edge of the bed; or more conveniently, in some cases where it is possible, sitting on the edge of the bed. The abdomen should be supported by a bandage broad enough to cover the space between the superior border of the mons veneris and the inferior margin of the epigastrium; but not too broad, since it might thus impede the respiration. The bandage should be divided at each end, to within a few inches of its centre, into three or four strips, which are to be interlaced as they cross each other behind. An assistant is to be placed on each side of the patient; the one on the left side holding in his hands the extremities of the bandage, which passed from the right side (behind) to the left; the one on the right side holding in his hands the extremities, which passed from the left side (behind) to the right. In this manner firm and uniform pressure may be exerted upon the abdomen, which will at the same time promote the discharge of the fluid and sustain the patient; preventing the feeling of faintness, which would otherwise follow from the sudden deprivation of the accustomed pressure of the tumor on the internal organs.

Preparation having thus been made to protect and sustain the patient, a couple of basins should be at hand to receive the fluid as it flows from the opening; and buckets or even a tub should be placed convenient for emptying the basins. It will be found best to have two basins, one to replace the other as it is being emptied. A third assistant will be useful to attend to these. Should the patient show signs of faintness or dyspnœa, the flow may be checked, by placing the finger upon the canula, until she feels better.

All things being ready, the exact point for introducing the instrument is determined and marked by a slit in the bandage. The instrument is the trocar; "holding this firmly in the right hand, with the thumb and index finger resting upon the canula, the surgeon plunges it into the linea alba, about three inches above the pubis, and by a steady forcible pressure, pushes it through the abdominal walls."

"When the tumor occupies the side of the abdomen, care must be taken to puncture it external to the course of the epigastric artery, otherwise this vessel might be wounded, and the patient die of hemorrhage. When the tapping is performed in the *multilocular* variety of dropsy, the puncture should be made in the most prominent and fluctuating part of the tumor. If one cyst does not yield the requisite supply, another is opened, an eye being always had to the situation of the epigastric artery."—*Gross.*

It is well to introduce the trocar with the handle a little depressed, and the point looking upward; thus the superior integument will form a sort of valvular covering over the wound, and tend to prevent the intrusion of air.

The subsequent treatment requires that the patient remain quiet to prevent peritoneal inflammation; the abdomen being firmly compressed by means of a thickly-folded cloth and a broad bandage. Some cases are reported in which this operation has been repeatedly performed; on each occasion drawing off as much of the fluid as would readily flow; sometimes three or four pails full; and this during a course of years. But this constant drain upon the system sooner or later wears it out, and the patient finally perishes of exhaustion.

Apis m. Stinging pains, like bee-stings; sometimes lancinating pains. Absence of thirst. Scanty urine. The dropsical effusion may be trifling and merely local; or the patient may be completely anasarcous and enormously swollen; the skin is usually white and almost transparent. The bowels are often very costive; with large, hard, difficult passages,—which Apis also cures.

Arsen. a. The swelling may be small or enormous, and the patient completely anasarcous. The pains are burning, as a characteristic indication. Thirst, for but little water and often. Water is apt to disagree.

China. If the dropsy is developed from the loss of fluids.

Iodium. In strumous habits, if the expectoration or leucorrhœa corrode the linen,—both of which phenomena sometimes actually take place.

See also, Dropsy of the Uterus.

CALCULI OF THE OVARIES. See Inflammation of the Ovaries.

CYSTS OF THE OVARIES. See Ovarian Dropsy.

HERNIA OF THE OVARIES. See Prolapsus Uteri.

TUBERCLES OF THE OVARIES. See Inflammation.

CHAPTER NINETEENTH.

OVULATION AND MENSTRUATION.

THE ovaries constitute the central head of the female sexual system. This is true of all grades of animal life; throughout the entire scale of creation the ovaries form the *ultima ratio* of generation. The uterus derives its stimulus from the excitation of the external organs of generation; but the *final cause*, the true physiological and vital reason of its existence and action, is to be found in the ovaries. It has been amply shown by the successful experiments of modern observers, that the ovaria are the essential organs of reproduction, and that in them originate the greater proportion of those sympathies which have been so long generalized as uterine;—and furthermore that the development of the pelvis, of the uterine system and of the mammæ, the function of menstruation and all the peculiarities of the human female, depend upon the ovaries. These supply the ova or seminal vesicles, which, by the stimulus of the seminal virus of the male, may be developed into an individual similar to its progenitors. In fulfilling their appropriate and primary function of ovulation, the ovaries determine also that of menstruation, which is secondary and consequent.

The ovaries have already been described as containing at puberty the seminal vesicles in different states of development. But these ova are discoverable long before the accession of the period of puberty. They may be seen in the ovaries of the new-born babe, and even in those of the fœtus *in utero*. They form therefore an integral part of the ovarian tissue. The ante-pubertal life of the female is one of preparation, of growth in stature and in strength, with especial reference to the perfect fulfillment of the function of the ovaries. Many of the lower orders of the animal creation arrive at maturity much earlier than man. The human female is longer in arriving at the full measure of her development, as her being and destiny are higher. And the same general principle of greater length of preparation and greater results, is seen in the more particular instances of those individuals who commence to menstruate at a period later than the average. Those later in assuming the evidences of maturity are said

to be more steadfastly regular in menstruation, and to continue it longer. And the converse is still more evidently true. For as in general all those whose precocious growth, even of the intellectual faculties, attracts so much attention, are seen to become exhausted, almost before they enter upon the race of life; so in the particular instance under consideration of premature development of the sexual system, the earlier young people arrive at puberty, so much the earlier do they grow old. And this is as manifestly true of nations as of individuals. Those races in which, like the Hindoo, the women arrive at sexual maturity at the earlier periods, as in the twelfth year, are effete, emasculate, and doomed to be conquered by those in which the period of puberty is longer delayed. And this is true independently of those influences of climate or temperature, which may apparently seem to have conduced to such premature development. Thus the female, after a preparatory period of constitutional incubation, becomes so highly developed in her entire system in general, especially in her sexual organization, and more particularly still in her ovaries, that these minute seminal vesicles, these ova or eggs, mature and begin to burst through the outer covering of the ovary itself. Previous to the final accession of the period of puberty, the ova have been but imperfectly developed; and have in consequence remained comparatively dormant. But at this time a new life and vigor spring up in the ovaries, which rapidly develop the external form of the female herself in general, and all the organs of her sexual system in particular. For, as the soul animates the body, so by the interior, vital change and new life and vigor of the ovaries, the lank and lean, homely, awkward and boyish form of the school-girl is transformed into that full development of neck and bust, that rounded contour of the hips and perfect loveliness of the features, which the poet so aptly terms "beautiful exceedingly." And with advancing years, the beauty of "sweet sixteen" is still further developed under the unconscious influence of the higher life, which still more abundantly flows into and animates her whole system through the perfect action of her ovaries. For all the wondrous beauty of the woman,—inward beauty, which may light up the plainest features with a most surpassing loveliness,—all that fascinating influence which the purest-minded young woman most powerfully and unconsciously exerts upon all of the opposite sex around her, making them admire and even love her,—is but the natural and inevitable expression of her capacity for receiving and reciprocating the highest affections of the human nature and of fulfilling, in the reproduction of the species, the highest uses of her being.

The period of the accession of puberty varies, according to climate and race and hereditary and social circumstances, from the thirteenth to the sixteenth year. But if we take the fourteenth year for the average, as is probably the case in this country, half as many more years must be spent before the young woman's constitution and sexual organization will have acquired its fullest development,—that is, become capable of bearing the most healthy children, in the easiest and most healthy manner. Some young women indeed arrive earlier at their highest maturity; as some also do at a still later period; but in general the average age of the first ovulation being at fourteen, we may assume the period of the most perfect and complete development of this function to be at about the twenty-first year.

OVULATION, or the functional action of the ovaries, consists in the maturation of the ova and in their extrusion through the ovarian surfaces. This functional activity occurs in the normal state, at regularly recurring periods, usually once in twenty-eight days. And in many women this period returns with great exactness, at the same day of the week,—or even in some instances at the same time of the day. This increased activity of the ovaries is not far removed from a congestion of these organs; and in many cases the entire system sympathizes in this disturbance of the ordinary sanguineous and nervous circulations. And this disturbance of the whole system is no less intimately connected with the other function of menstruation, as it is seen to be very greatly and immediately relieved by the accession of the menstrual flux.

The manner in which the process of ovulation takes place is so admirably described by Dalton,* that we quote it in full, and copy the accompanying very elegant illustrations. "In the earlier periods of life, in man and the higher animals, the egg is contained in a Graafian follicle which closely embraces its exterior, and is consequently hardly larger than the egg itself. As puberty approaches, those follicles which are situated near the free surface of the ovary become enlarged by the accumulation of a colorless, serous fluid in their cavity. We then find that the ovary, when cut open, shows a considerable number of globular, transparent vesicles, readily perceptible by the eye, the smaller of which are deep-seated, but which increase in size as they approach the free surface of the organ. These vesicles are the Graafian follicles, which, in consequence of

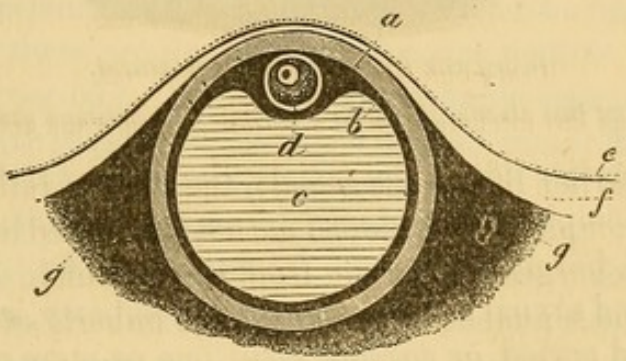
* Physiology, p. 567.

the advancing maturity of the eggs contained in them, gradually enlarge as the period of generation approaches.

The Graafian follicle at this time consists of a closed globular sac or vesicle, the external wall of which, though quite translucent, has a fibrous texture under the microscope, and is well supplied with blood-vessels. This fibrous and vascular wall is distinguished by the name of the "membrane of the vesicle." It is not very firm in texture, and if roughly handled is easily ruptured.

The membrane of the vesicle is lined throughout by a thin layer of minute granular cells, which form for it a kind of epithelium, similar to the epithelium of the pleura, pericardium and other serous membranes. This layer is termed the *membrana granulosa*. It adheres but slightly to the membrane of the vesicle, and may easily be detached by careless manipulation before the vesicle is opened, being then mingled, in the form of light flakes and shreds, with the serous fluid contained in the vesicle.

At the most superficial part of the Graafian follicle, or that which is nearest the surface of the ovary, the membrana granulosa is thicker than elsewhere. Its cells are here accumulated in a kind of mound or "heap," which has received the name *cumulus proligerus*. It is some-



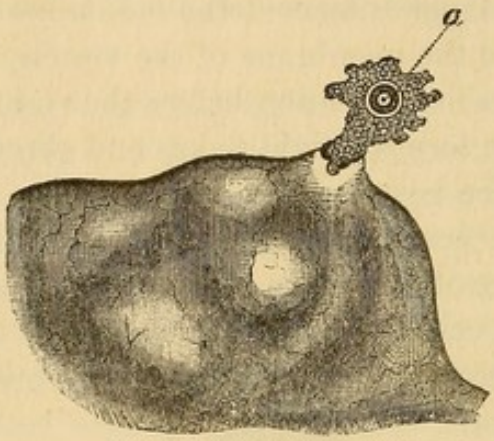
Graafian Follicle near the period of rupture.

a. Membrane of the vesicle. *b*. Membrana granulosa. *c*. Cavity of follicle. *d*. Egg. *e*. Peritoneum. *f*. Tunica albuginea. *gg*. Tissue of the ovary.

times called the *discus proligerus*, because the thickened mass, when viewed from above, has a somewhat circular or disk-like form. In the centre of this thickened portion of the membrana granulosa the egg is embedded. It is accordingly always situated at the most superficial portion of the follicle, and advances in this way toward the surface of the ovary.

As the period approaches at which the egg is destined to be discharged, the Graafian follicle becomes more vascular, and enlarges by an increased exudation of serum into its cavity. It then begins to project from the surface of the ovary, still covered by the albu-

gineous tunic and the peritoneum. The constant accumulation of fluid, however, in the follicle, exerts such a steady and increasing pressure from within outward, that the albugineous tunic and the peritoneum successively yield before it; until the Graafian follicle protrudes from the ovary as a tense, rounded translucent vesicle, in which the sense of fluctuation can be readily perceived on applying the fingers to its surface. Finally, the process of effusion and distention still going on, the wall of the vesicle yields at its most prominent portion, and the contained fluid is driven out with a gush by the reaction and elasticity of the neighboring ovarian tissues, carrying with it the egg, still entangled in the cells of the proligerous disk."



Ovary with Graafian Follicle Ruptured.

At *a*. Egg just discharged, with a portion of membrana granulosa.

During the earlier life of the female, the ova, or rather their rudimentary and incompletely developed germs, are formed in the ovaries,—and perhaps discharged from them from time to time. But at the full constitutional and sexual development called puberty, with each return of the menstrual period, or *ovarian nisus*, one or more of the complete ovules bursts through the enveloping membranes of each ovary, in the manner just described, and is received into the upper portion of one of the oviducts called the Fallopian tubes. The fimbriated extremities of these tubes are applied to the ovaries,—not, as is supposed by some, under the stimulus of sexual intercourse,—but under the wonderful reflex influence of the process of ovulation itself,—by which these extremities are led to apply themselves firmly over the exact portion of the ovaries from which the ova are about making their appearance. This must necessarily be the case, since the ova are conveyed to the uterus whether impregnated or not.

At each menstrual period, it is believed that one ovum is transmitted through the Fallopian tubes; this passes off and is lost. At the

same time those remaining in the ovaries are advanced in their development. Of the particular manner and time of the transmission of the impregnated ova, we shall speak in treating of conception. Suffice it to say here in general, that the ripening and discharge of the ovum in menstruation is called *œstruation*, which is analogous to the orgasm of sexual intercourse, although more protracted.

MENSTRUATION requires to be particularly studied in this connection, since it usually forms an important attendant and consequent portion of the process of ovulation,—although it is not always present, even in apparently perfect health.

Ovulation we have found to consist in the maturation of the ova, and in their extrusion from the ovaries. By the Fallopian tubes these ova are taken up and transmitted to the womb. The uterus becomes then immediately and directly connected with the *ovarian nisus;* and at the same time it partakes in a most remarkable manner in the ovarian congestion. And, in fact, all the other parts of the generative apparatus, the vagina and the external organs, and even the entire sanguineous and nervous circulations, sympathize in this congestion and excitement. But although thus involving the whole system, the menstrual orgasm is entirely dependent upon the ovarian nisus. Where there are no ovaries, there are neither sexual desires nor menstrual periods. And in a remarkable case, in which both ovaries were extirpated in removing a painful tumor from each groin, a woman who before had always menstruated with great regularity, immediately and permanently ceased to menstruate. While in some other cases in which the womb was either wanting naturally or had been removed on account of disease, the mammary development and sexual desires remained unabated, and the menstrual discharges took place from the vagina. As long as the ovaries remain intact the woman is a woman still, in external form and inward desires; although from absence of the uterus or vagina, she may be incapable of conception or even of sexual intercourse. But let the ovaries be removed, and the woman loses at once all the distinguishing traits of the female character; her breasts diminish in size and she becomes masculine in features, form and voice.

Relation of Menstruation to Ovulation.—Thus far we have shown that menstruation is essentially dependent upon the functional action of the ovaries; that it is not an original action of the uterus, since it always fails where the ovaries are wanting; but does not necessarily fail where the uterus is absent; and that although there can be no

menstruation except in connection with ovulation, *there may be ovulation without menstruation.* This may be the result of imperfect development of the uterus and its inferior appendages; or it may occur without any such structural cause,—as many cases are recorded of persons who have repeatedly conceived and become mothers, but who have never once menstruated. Let us now examine the physiological relation which menstruation or the quasi function of the womb bears to ovulation or the primary function of the ovaries.

The orgasm of the ovaries at the period of the maturation and extrusion of the ova, and the consequent congestion of the womb and other dependent parts of the sexual apparatus, have already been described as very intense and as involving the entire system. This intense orgasm having accomplished its primary purpose in the maturation and extrusion of the riper ova, and having at the same time also advanced others to a proportionate degree of development, requires a larger basis for its own critical ultimation. The intense congestion of the blood-vessels and the no less intense excitement of the nervous centres must be relieved; and this relief is obtained through the menstrual discharge.

The *first menstruation* usually makes its appearance about the fourteenth year. In some individual cases it comes earlier; and in others much later. Delicate and luxurious habits of living, especially in large cities, tend to render the menstrual period earlier in its first occurrence, but less constant and regular in its subsequent appearance. Hereditary constitution exerts a powerful influence in determining the time of the first menstruation. For while in Calcutta, India, the native females usually begin to menstruate between the twelfth and thirteenth years, the children of British residents, although born in the city, average about the sixteenth year. And different conditions in life, and residence in the country rather than in the city, exert an important influence in determining the period of first menstruation. Thus in Denmark, in the women born in the country, the average period of first menstruation will be found to be at sixteen years and five months; those in the larger towns, fifteen years and four months; those in Copenhagen, the largest city, fifteen years and seven months. So in Russia, in fifty-three cases of the noble and rich, the average was found by De Boismouth, to be thirteen years and eight months. In one hundred and thirty-five women of the well-to-do classes, the average was fourteen years and five months. And in one hundred and seventy-one of the poor, the average was set down at fourteen years and ten months. In London, of sixty-

seven women of the opulent class, the average was thirteen years and about six months; while in seven hundred and seventy-five women of the well-to-do working class, the average was fourteen years and four months.

The *cessation of the menses* usually takes place between the fortieth and the fiftieth years; at about forty-five, being considered to be the average time of the change of life. But this may and often does vary in individual cases to a considerable extent. Some women cease to menstruate soon after thirty, especially those who began early; while others have borne children after they were fifty years of age, and regularly menstruated to their sixty-second year. Others again cease to menstruate at the usual period, but experience a return of the periodic flow after some years. In some instances this protracted menstruation or return of the flow may be dependent upon ulceration or other disease of the womb. But in most cases late menstruation, especially if unattended with much suffering or other morbid symptoms, may usually be regarded as evidence of remarkable constitutional strength and longevity. Since, in general, life is longest and the health most assured in those females who commence to menstruate later, and who continue in the exercise of this function later than the ordinary term. In many cases the cessation of the menses does not occur at once, but is arrived at gradually through from one to three or even more years of menstrual irregularities, called by some, "the dodging time." And the cessation may be by a gradual diminution of the flow; by alternate copious and scanty menstruation, or by changes in the character of the discharge itself. The general average duration of the function of menstruation may be stated at about thirty-two years. For the morbid conditions which occur in connection with cessation of the menses, see subsequent chapter on the Change of Life.

Symptoms.—"The menstrual discharge consists of an abundant secretion of mucus mingled with blood. When the expected period is about to come on, the female is affected with a certain degree of discomfort and lassitude, and sense of weight in the pelvis and more or less disinclination to society. These symptoms are in some instances slightly pronounced, in others more troublesome. An unusual discharge of vaginal mucus then begins to take place, which soon becomes yellowish or nearly brown in color, from the admixture of a certain proportion of blood; and by the second or third day the discharge has the appearance of nearly pure blood. The unpleasant sensations which were at first manifested, then usually subside; and

the discharge, after continuing for a certain period, begins to grow more scanty. Its color changes from a pure red to a brownish or rusty tinge, until it finally disappears altogether, and the female returns to her ordinary condition."—*Dalton.*

The original menstrual flux, as it issues from the uterus, is nearly pure blood; but in its passage through the vagina it becomes mingled with the acid, mucous secretion from the vaginal surface, which changes its quality and appearance. The menstrual discharge returns with great regularity in perfectly healthy females; but varies in quantity in different individuals, being quite free in some and scanty in others. Each menstrual period occupies from two or three to five or six days; and the whole amount of the flow may vary from three ounces to eight, according to the temperament and idiosyncrasy of the individual. Some plethoric persons having a very scanty flow; while in others, who seem to have no blood to spare, the discharge is much more free. And in some exceptional cases of persons apparently enjoying good health, the catamenia may differ from the normal standard in every respect. Those irregularities which are properly termed morbid will be considered in a separate chapter. During utero-gestation and lactation the menses are usually wanting; there are however exceptions, some women menstruating with their usual regularity, while *enciente*, and while nursing: in many others, the menses return after the first few months of lactation.

The *causes of menstruation*, must be identical with those of ovulation--from the intimate connection of these two functions, and from the essential dependence of the former upon the latter. The causes of ovulation must be found in the nerves which supply the ovaries. These form part of the ganglionic system, and are immediately derived from the solar plexus, which is the great centre of vegetative life.

All the actions of the human body may be considered as voluntary, as involuntary, or as partaking of the nature of both these conditions. Thus the bodily actions may be distinctly referred either to the cerebral or voluntary nervous system,—to the ganglionic or involuntary nervous system, or to the spinal nervous centre, which is more or less influenced and controlled by each of the others. The involuntary functions, with which alone we are at present concerned, may all be classified as belonging either to the *nutrition* of the individual, or to the *reproduction* of the species. Thus the ante-pubertal period is almost exclusively devoted to the nutrition of the individual, but not without reference to future reproduction,—as is seen in the existence and even extrusion of the premature ova during all this

period. During the child-bearing period, the nutrition of the individual is rendered unusually active and vigorous in order that it may subserve the reproduction of the species; and when both cannot be at the same time provided for, it is the former which gives way to the latter. This is seen in cases of consumptive women who become *enciente;* the child flourishes at the expense of the mother, and is born comparatively healthy, while the mother dies from inanition.

Thus menstruation, as dependent upon the action of the ovaries, must find its immediate cause in the ganglionic nerves which supply these organs. And as forming, with ovulation, one of the important processes preparatory to conception, menstruation must find its *final cause* in that grand function of reproduction of the species, to the perfect accomplishment of which all the energies of the individual life are devoted.

As we have already explained, menstruation is a function of health, which appears in the order of nature. And in those cases in which it does not take place so easily and so effectually as above described, it is because the young woman herself is not well. From ill-health arise then all the various forms of menstrual disorders; and it is merely as a matter of convenience that we arrange these disorders under the heads of Amenorrhœa, Dysmenorrhœa, and Menorrhagia. And in treating such cases we seek but to obey the call of nature; throw in the proper remedy and the function becomes established or re-established, as the case may be; because we thus cure the patient of some constitutional or other malady, under which her system is laboring. And in this connection, in the following chapter, we shall describe also those forms of actual Uterine Hemorrhage which are understood by the term Metrorrhagia.

CHAPTER TWENTIETH.

AMENORRHŒA. DYSMENORRHŒA. MENORRHAGIA. METRORRHAGIA.

AMENORRHŒA, or absent menstruation, may result from very different causes; and may occur, under one or the other of its various forms, at any period of the pubertal life of the female. These various forms of amenorrhœa may be arranged in three distinct classes. First, *emansio mensium*, in which the menses have never made their appearance. Second, *suppressio mensium*, in which the menses, having made their appearance, have subsequently ceased. And third, *partial amenorrhœa*, in which the menses are wanting, perhaps for months in succession, but may appear occasionally and at irregular intervals.

Each of these classes of amenorrhœa will need to be more particularly considered, with reference to its nature, causes, symptoms, consequences and treatment.

The *emansio mensium*, or entire absence of the menses, in females who have so long passed the first age of puberty that the case cannot be regarded as one of simple delayed menstruation, depends upon a very great variety of conditions of the system,—of which some are entirely beyond the control of art, some do not need to be interfered with, the remainder only being amenable to medication.

I. The first of these conditions, is that which may be called *congenital malformation;* in which the ovaries are either entirely wanting, or have remained imperfectly developed, or become atrophied. Similar to these are the cases in which these organs have been destroyed before puberty by accident or disease. The patients in whom this condition exists "may have the body generally well developed and healthy, the circulation active and regular, and the organic functions (save one) fully performed. But the breasts are not prominent; the genital characteristics and sexual propensities are not developed; the voice is deeper than usual; a slight beard appears on the upper lip; and there is a mixture of masculine with feminine peculiarities." Such cases are evidently beyond the reach of art.

There are other cases of amenorrhœa from malformation of less

serious nature, which may be relieved by suitable treatment. These are instances in which the menstrual flow occurs internally, but cannot appear externally by reason of an imperforate hymen, absence of the vagina, adherence of its sides, or an impervious os uteri. The periodical efforts at menstruation enable us to determine in such cases that the ovaries are not wanting. And where the menstrual nisus appears without corresponding discharge, a careful examination should be made, till the nature of the difficulty is satisfactorily ascertained. The retention of the menses by an imperforate hymen is by no means dangerous; and admits of ready relief, by a slight operation, when the diagnosis is satisfactorily established. The retention which results from adhesion of the parietes of the vagina or occlusion of the os uteri, is far more serious; since, if not relieved by an operation of greater severity, it must lead to fatal results. Inspection alone, or the touch upon the vulva, will discover the tumor which indicates menses retained by imperforate hymen. But the introduction of the finger within the vagina,—or even the exploration by the rectum,—will be requisite to determine whether the uterus is wanting; its mouth sealed up; or whether obliteration of the vagina be not the cause of the retention. Congenital atræsia of the uterus, complicated by retention of the menstrual blood, may be suspected in those cases in which the hymen and vagina are pervious, but where at each menstrual epoch the sufferings increase in intensity, where the menstrual molimen is most violent, but no external discharge appears. There may be a gradually increasing tumefaction of the abdomen; and with the menstrual periods, real uterine colics, sometimes accompanied with chills, with frequent vomiting, syncope, and convulsions. And if no artificial opening is made for the exit of the blood, the difficulty must, sooner or later, become fatal, either by the rupture of the walls of the uterus; by an inflammation of the peritoneum, which is being continually irritated and distended; or by an attack of general marasmus, exhausting the patient weakened by such severe and prolonged sufferings.

II. A second class of cases of amenorrhœa, consists of those which need no treatment. And it is important to discriminate these cases aright; since the female will perhaps suffer more from medication where none is required, than from want of it where it really may be needed. And these cases, now stated to be such as do not need treatment, are the exact opposites of those already described as being beyond all treatment. For as those were cases of amenorrhœa

from total absence of the ovaries and of ovulation; so these are cases of amenorrhœa in which the ovaries are present,—but in which their functional action is so performed as to produce no menstrual flow. And to all appearance, and in fact, so far as the present light of science and of experience shows, these cases are perfectly healthy. Since many women have been known to conceive and bear healthy children and rear families, who never menstruated. And in all those cases in which young women have entered upon the age of puberty, without having experienced the menstrual flow, but still remain to all appearance in perfect health,—whether we regard them as cases of amenorrhœa from incomplete development, that is retarded menstruation, or of ovulation without corresponding menstrual flow,—*all these need no medical treatment so long as they present no positive morbid symptoms.*

As we have already shown, those whose sexual development, and consequent ovulation and menstruation, occur late, may prove to be endowed with a corresponding longevity, and power of bearing children long after the usual period of the change of life. This point should be well understood in order that the physician, planting himself on the ground of true physiology, may be able to allay the fears of anxious mothers,—who are alarmed if their daughters fail to menstruate in their fourteenth year. It may be sufficient to state here, that there must be other morbid symptoms and conditions than mere non-appearance of the menstrual flow, to justify medical interference in the case of young women.

III. The third class of cases of amenorrhœa consists of those which are amenable to and which require medical treatment.

The first class was composed of those malformations in which ovulation, and of course menstruation, was simply impossible, by reason of the absence of the requisite organs. These cases admit of no treatment. The second class, in which the amenorrhœa is the result of some peculiarity of the system by which perfect ovulation may be unaccompanied with menstruation, or in which the amenorrhœa is simply the result of incomplete development without morbid symptoms (retarded menstruation), requires no medical treatment. But in the third class, the amenorrhœa,—whether accompanying complete or incomplete sexual development,—is a truly morbid condition, as shown by the attendant constitutional disturbances of the entire system. This class of cases is not only amenable to medical treatment, but affords some of the most brilliant illustrations of the truth

of the Homœopathic principles and of the action of the Homœopathic remedies.

We have been thus particular in recapitulating, because it seems of the first importance to understand the difference between that form of late development which may be the result of constitutional strength and which is unaccompanied by morbid symptoms; and that which is the consequence of constitutional dyscrasia, and which is always evidenced by symptoms indicating the anæmic, or chlorotic condition, or by painful and ineffectual attempts at menstruation, or rather ovulation. For as we have shown that ovulation is the primary and menstruation the secondary function; so amenorrhœa is mostly to be considered to be the result of absence of ovulation, as in those cases in which the ovaries are entirely wanting; or identical with or the consequence of imperfect ovulation, where these organs are present.

Symptoms.—Those cases of amenorrhœa in young persons, which are unaccompanied by any pain, or other morbid symptoms,—and for which therefore we are not called upon to prescribe,—are doubtless due to incomplete development of the ovaries. While those cases of amenorrhœa which are accompanied with periodical but futile and painful attempts at menstruation, and in which the general health evidently suffers, are in like manner to be attributed to failure of functional action on the part of organs already sufficiently developed.

And this will appear the more evident from the consideration of the fact that the very late development of the ovaries and consequently late menstruation, is not only entirely painless, but may be an attendant of more than usual health and strength. And this will still further appear from the nature of the two entirely opposite classes of sufferers from amenorrhœa.

Those comprising the first of these two classes are weak, pale, delicate young women; spare and thin, or fleshy and leucophlegmatic; in either case, having feeble circulation, as evidenced by general chilliness and sensitiveness to the cold; imperfect nutrition, as shown by their indifference to or disgust for food,—or still worse, imperfect assimilation, as shown by their insatiable appetite. Those composing the second class, on the contrary, show all the appearance of perfect and robust health; they are plump; their cheeks red, their complexion florid, and their habit plethoric. In the former of these classes of amenorrhœa, the sufferings are more chronic, and more generally diffused over the entire system; in the latter they are more acute and severe, and more concentrated in the form of local congestions. "In

both, the attempt at menstruation may be made each month, accompanied by shiverings, pain in the back and loins, weight at the lower part of the abdomen, aching down along the thighs, general lassitude and uneasiness, and sometimes pain in the thyroid gland." These symptoms, after continuing a few hours or a day or two, pass away without any menstrual secretion,—to be repeated each succeeding month. "But the effects of this abortive effort are not so temporary; severe headaches occur occasionally, sometimes with intolerance of light and sound, the patient complains of throbbing and a sense of fulness in the head, pain is felt in the side, the stomach and bowels become irregular in their functions, the countenance pale and the strength much reduced." Paroxysms of dyspnœa and hysteria, and hysteralgia come on; and the patient has the appearance of confirmed ill-health; is sometimes said to be going into decline. There is general chilliness, or disposition to attacks of fever,—according to the plethoric or lymphatic temperament of the patient; pain in the chest; and if the patient be of the florid constitution, her case may easily terminate in quick consumption; while if leucophlegmatic, the same fatal termination may be reached by a somewhat more tedious course.

A careful study of the different remedies mentioned at the close of this section will enable the physician to determine upon the medicine to be administered. And in most of the cases of the *emansio mensium* form of amenorrhœa, which we have described as amenable to and requiring medical treatment, a single dose only should be given,—waiting until after the return of the next menstrual period; or even longer, if signs of improvement should appear.

Suppressio Mensium constitutes the second form of amenorrhœa,—in which the menses having made their appearance have subsequently ceased.

This may be sudden in its onset,—violent, accidental suppression; or it may come on in a gradual manner. In the former case it may lead immediately to severe and dangerous forms of disease; in the latter, it may precede the development of some profound constitutional disorder, such as phthisis; or it may result from organic derangement of the uterus, or of the ovaries themselves.

Causes.—Acute Suppression of the menses may result from exposure to cold, and wet, or both, immediately preceding the appearance of the menses or during their flow; from violent shock to the nervous system, as in cases of fright; from sudden and severe mental dis-

tress; or from any profound disturbing influences, whether physical or moral, received during the menstrual period.

Chronic Suppression of the menses may result from any slowly operating, debilitating influences,—from too close sedentary confinement, as in young girls at school; from too severe mental application; from lack of sufficient nourishment; from leucorrhœa; and, as already stated, from the development of some constitutional dyscrasia, such as consumption, &c.,—or from scrofulous or other affections developed in the ovaries and other organs of the sexual system.

Symptoms.—The more sudden the suppression and the more severe and profound the causes which produce it,—so much the more violent will be the resulting symptoms. In most cases there is more or less fever; headache, hot skin, quick pulse, thirst, nausea,—and other indications of general constitutional disorder. Or the ill effects of the suppression may be developed in local inflammation, as in inflammation of the lungs, uterus and ovaries. And in cases of nervous temperament, and scrofulous diathesis, there is often a remarkable disposition to be attacked with inflammation of the brain, from the menstrual suppression. In such cases the return of the menses would usually be followed by a subsidence of the cerebral symptoms. The appearance of the menstrual flux in other severe illnesses,—where there had been no previous suppression,—is regarded as constituting a very grave complication.

Hysterical affections, or even neuralgic sufferings, in other instances, may result from suppression of the menses; and these may successively attack the head, lungs and stomach. Sometimes the more profound consequences of nervous debility and disorder,—such as fainting, loss of vision, amaurosis, apoplexy and even paralysis,—make their appearance in connection with such suppression. And the more violent disorders that follow acute, sudden suppression of the menses, are very apt to terminate fatally.

"Suppressed menstruation, either sudden or gradual, is not unfrequently followed, even when uterine inflammation is not developed, by serious general symptoms, obstinate vomiting, severe hysteria, and sometimes by the establishment in the economy of a supplementary hemorrhage, to which the name of vicarious menstruation has been given. The mucous membrane of the nasal fossæ, of the lungs, stomach, and bowels, are the most ordinary seat of this hemorrhage, which takes place in some instances with the regularity of normal menstruation, and in others at irregular periods. All the other mucous membranes, and also the skin itself in various regions,

have been the seat of vicarious menstruation. It has not unfrequently been observed from the surface of wounds or sores."—*Bennet.*

This so-called, vicarious menstruation constitutes a form of hemorrhage in general less grave than that from other sources. Where it attacks the lungs, for instance, it does not, like other hæmoptysis, indicate the presence of tubercles, but rather a state of the system which may sooner or later lead to them,—if not remedied. The manner in which the chronic or gradual form of suppression takes place, should also receive consideration. The suppression may not occur all at once; but be first preceded by more or less irregularity of menstruation in respect to time. One or more periods may be passed over,—the menstrual flow returning again in a diminished quantity,—and then finally ceasing. Or the irregularity may be more with regard to quantity alone,—the menses with each preceding month becoming less,—until they disappear altogether. Or the discharge for some time before its total suppression may have been growing more and more light colored,—this is said to be the most frequent manner in which chronic suppression occurs. The menses being supplanted by a perfectly white discharge; or they diminish in quantity, become of a paler color and with shorter intervals;—then a menstrual period arrives in which the fluid excreted is perfectly colorless,—while the next period may be characterized by discharge of the natural color. Or again, as mentioned in a preceding chapter, the leucorrhœa, which so often causes amenorrhœa, encroaches more and more upon the menses, both in the time and in the quality of the discharge, until it finally completely replaces the menstrual flow.

The same gradual diminution of the menses may lead to their *premature cessation,*—and this may be in reality the period of the change of life. In such cases, nature, after a few years of rest of the sexual organs, sometimes restores their activity; and women who had supposed themselves to have finally passed the critical age, are surprised to find a full and complete return of the menstrual flow. All this but serves to show that the amenorrhœa, from whatever cause, or combination of causes it arises, is not in itself a disease or even necessarily a morbid condition; as during pregnancy and after the change of life, the menses are wanting from causes which although perfectly natural are entirely opposite,—the person remaining in perfect health. In other cases, however, the disappearance of the menses indicates a disordered state of the whole system, which may be unimportant and temporary, or deep-seated and severe, according to the nature of the influences which produced it. There

are, however, cases of suppression of the menses, which, arising from influences comparatively slight, do not so profoundly affect the system; and in which, even without particular treatment, the menses may spontaneously return after missing but one or two periods.

And in all cases, the treatment must be governed by the causes,—as in cases of suppression from wet, from fright, &c.,—and by the totality of the symptoms. In the acute form of the suppression, the appropriate remedy may be repeated oftener, according to the violence of the symptoms and the severity of the suffering,—taking care to allow the first dose to exhaust its action before giving the second. While in the chronic form, the remedy, chosen for its adaptability to the whole case, must be allowed to act for weeks, or even months, undisturbed in its action by a second dose, so long as improvement can be traced. If no improvement appears, the dose may be repeated, or a new prescription made, according to the circumstances of the case. The proper treatment of the gradual, chronic form will result not only in the restoration of the menstrual flow itself, but also in the removal of the constitutional disorder, of which the suppression was but the forerunner; and in the radical cure of the local, organic affections of the sexual organs by which, in other instances, the suppression may have been produced. And the same will be found true of the complications, such as leucorrhœa hæmoptysis, or other severe affections which may arise in connection with the amenorrhœa. Let the diet and hygiene of the patient be properly attended to; and then the less the attention paid to external treatment, the sooner will the recovery be complete. Give the proper Homœopathic remedies, in the proper manner, in these cases, and all the paraphernalia of hip-baths, foot-baths, tonics, stimulants and misnamed emmenagogues may be dispensed with as worse than useless. The real object being not so much to compel the return of the menstrual flow, as to cure the patient of that disordered condition of her system which led to its suppression.

Partial amenorrhœa, in which the menses are wanting, perhaps for months in succession, but may appear occasionally and at irregular intervals, constitutes our third form of amenorrhœa. This may also be termed *irregular menstruation*, in which the catamenia are not suppressed, but occur irregularly as to quantity and quality,—and especially as to time.

In some cases of this form of amenorrhœa, the health appears to suffer very little if any from the exceedingly irregular and uncertain manner in which the menses recur. In other instances

the irregularity is complicated with more or less severe dysmenorrhœa.

The irregularity may consist in the shortening of the intervals between the menses; and in such cases the flow may also be too profuse, allied to menorrhagia. Or the irregularity may consist in the lengthening of the intervals,—the menses returning with great regularity, and perhaps in normal quantity.

The causes of such partial amenorrhœa must be similar to those constitutional influences which result in gradual suppression of the menses,—to which, in fact, many cases of irregular menstruation finally lead. And where the protracted amenorrhœa is complicated with pale, colorless menses,—with too profuse menses,—or with painful menstruation, it will be seen that all the morbid influences which may be brought to bear upon the constitution of the young or elderly woman, may tend to produce a more or less complete cessation of the catamenia.

The *treatment* of such cases requires a careful examination of the patient,—an elaborate collection of all her symptoms,—and a faithful comparison of them with the pathogenetic effects of our remedies. In this manner, and in this manner only, the physician may make such prescriptions as shall result in cures alike honorable to Homœopathy and profitable to himself. The partial amenorrhœa is but a single one among other indications of the poor health of the patient; —this and other indications being met by the corresponding remedy, there will result, in time, such complete restoration to health as will at once surprise and delight the patient and her friends.

Aconite. In young girls, of sanguine temperament, who lead a sedentary life. Tendency of blood to the head or chest. Vertigo or fainting on rising from a recumbent position.

Alumina. Abundant leucorrhœa of transparent mucus, flowing only in the day-time, with weakness. Much straining is necessary to evacuate even a soft stool. Restless sleep,—always awaking with palpitation of the heart.

Ammo. carb. Colic, and pain between the scapulæ. Violent pain in the small of the back, with great coldness.

Arsenicum. White, waxy paleness of the face, and great debility,—the least exertion fatigues her. Painful lienteria; cold water lies like a load in her stomach. Her sleep is full of tiresome dreams. She is very chilly; she wants more clothes on her, or to be near the fire. Thirstlessness, or she wants little and often.

Aurum. In amenorrhœa and prolapsus uteri, with the mind in a suicidal condition.

Belladonna. Throbbing headache, and throbbing of the carotid arteries. Red face and eyes. She cannot bear light or noise. Much heat in the head.

Borax v. She cannot bear a downward motion, as in a swing, in a rocking-chair; or in running down stairs. Pain in the right pectoral region. She is very nervous; she does not sleep well.

Bryonia. Frequent bleeding of the nose; dry lips; thirsty; hard dry stools, as if burnt. She wishes to keep quiet.

Calc. carb. Leucophlegmatic temperament. Vertigo on going up stairs. Her feet feel cold and damp. Swelling at the pit of the stomach. Spasmodic affections.

Carbo veg. At the time the menses should appear, violent itching of old tettery eruptions.

Causticum. A yellowish complexion; weakly; scrofulous. Melancholy; she looks on the dark side of everything. Hysterical spasms and pinching pain in the sacrum. Leucorrhœa only at night; or worse then.

Cham. She suffers on account of a checked perspiration; or on account of a fit of anger. She is very irritable and disposed to be quarrelsome; she can hardly keep her temper. One cheek is red, the other pale. Pressing towards the genital organs; passing of large quantities of colorless urine.

Chelidonium. Constant pain under the inner and lower angle of the right shoulder-blade.

China. Sensation of fulness and distention of the abdomen, particularly after eating; with desire to eructate, which affords no relief.

Cocculus. Much paralytic pain in the small of the back. Leucorrhœa in place of the menses. Discharge of a few drops of black blood. Whilst the effort is being made to menstruate, she is so weak that she is scarcely able to speak. Hysterical symptoms very strongly marked.

Colocynth. In cases where severe chagrin has been the cause of the suppression. Colicky pains, causing her to draw up double with great anguish and restlessness.

Conium. At every menstrual effort the breasts enlarge, become sore and painful. Much vertigo, particularly when in a recumbent position an attempt is made to turn over. The urine intermits in its flow.

Crocus. A sensation of motion, like that of a child in the abdo-

men. A similar sensation is sometimes felt in the stomach. Epistaxis of black, stringy blood.

Cuprum. Particularly in cases arising in consequence of suppression of foot-sweat. A strange, tingling pain in the crown of the head. Frequent nausea and fearful vomiting. Convulsions with fearful cries.

Dulcamara. Suppression in consequence of exposure to cold and damp. She has urticaria, or some other cutaneous affection, every time she takes cold. Warts on her hands; her breasts are engorged and hard.

Euphrasia. Ophthalmia, the eyes being suffused with tears; and a painful, dry ulcer on the right side of the bridge of the nose, which has been developed since the accession of the amenorrhœa.

Ferrum. In weakly, chlorotic persons; with fiery redness of the face.

Graphites. Occasional show of the menses; which are very pale, and very scanty; with abdominal pains and pains in the limbs. Swelling in the hands and feet. Itching blotches here and there, on various parts of the body, from which oozes a gelatinous fluid.

Helleborus. In cases accompanied with ascites; the urine being scanty and dark, depositing a sediment looking like coffee grounds.

Hyoscyamus. Much loud and boisterous laughing at every menstrual effort. Hysterical jerking and twitching; disposed to nakedness.

Ignatia. Much involuntary sighing and sobbing. Full of suppressed grief. The suppression itself may have been caused by some suppressed grief. Weak, empty feeling at the pit of the stomach.

Iodium. Very, very much out of breath on going up stairs. Paleness alternating with redness of the face. Frequent palpitation of the heart.

Kali carb. At every menstrual effort sour eructations and swelling of the cheeks; often times there are shooting pains all over the abdomen. Organic disease of the heart. Erysipelatous eruptions. Disposition to phlebitis.

Lachesis. At every menstrual effort there are cardialgia, oppression of the chest and eructations. Vertigo with headache. Discharge of a few drops of blood from the nose.

Lycopodium. A fright may have caused the suppression. Sour taste. Sour eructations and sour vomiting. A constant sense of satiety, so that the least quantity of food causes a sensation of fulness

up to the throat. Much borborygmus, particularly in the left hypochondrium. Sense of dryness in the vagina; wind from the vagina.

Magnesia carb. Every effort to menstruate is attended with a sore throat, which only subsides with the other symptoms, or on the appearance of the menstrual flow.

Magnesia mur. She becomes very much excited at every menstrual nisus. There is a pressing down in the iliac regions at every menstrual nisus. She is very hysterical; and has constipation, with large, difficult stools which crumble as they escape from the verge of the anus. A great deal of sleeplessness.

Mercurius. Prolapsus of the vagina at every menstrual nisus. She has dry heat, and rush of blood to the head and congestion to the head at every menstrual nisus. Pain in the mammæ as if they would ulcerate, at every menstrual period. Œdematous swelling of the hands, feet and face.

Nat. mur. At every menstrual nisus she feels anxious, melancholy and qualmish, early in the morning for a few hours, with sweet risings from the stomach, and spitting of blood with the saliva. She awakens every morning with headache, which lasts a long time. Constipation of large, difficult stools, the anus being contracted,—it becomes fissured and discharges a quantity of blood.

Nux mos. At every menstrual nisus, the throat, mouth and tongue become intolerably dry, particularly when sleeping.

Petroleum. In cases complicated with diarrhœa only in the daytime.

Phosphorus. Particularly in tall, slender, phthisical females. Spitting and vomiting of blood at the menstrual nisus; sometimes the hæmoptysis is profuse,—or hemorrhage from the anus or urethra. Stools small, dry and difficult. Great sense of weakness across the abdomen. The feet and legs are cold, and sometimes they are paralyzed.

Phosph. acid. In cases with meteoristic distention of the uterus.

Platina. Particularly in Irish emigrants. Painful pressing, as if the menses would appear, with desire for stool and pain in the small of the back. Constipation with scanty, difficult stool; the stool often adhering to the rectum and anus like soft clay.

Pulsatilla. Particularly suitable in mild, tearful, yielding dispositions. Pale face; difficulty in breathing after slight emotions. Constant chilliness, even in summer when warmly clad. Leucorrhœa; vertigo; throbbing headache; pressure in the stomach; pain in the uterus and dysuria. In cases which come on in consequence of wet feet. With ophthalmia. From nervous debility. With morning sick-

ness, and bad taste in the mouth in the morning; no appetite, nothing tastes good.

Rhododendron. Her sufferings are particularly aggravated during rough and windy weather; or at the coming on of a thunder-storm. Every menstrual nisus is attended with fever and headache.

Rhus tox. In consequence of a severe wetting, as in a rain-storm.

Ruta g. A corrosive leucorrhœa attendant, which is the consequence of the suppression.

Sabadilla. The menses are suppressed immediately on their appearance, when they appear again, sooner or later; but are again suppressed, and so on.

Sabina. The sudden suppression is followed by a thick, fetid leucorrhœa.

Secale corn. Suppression of the menses in thin, scrawny, married females, who suffer much at the menstrual nisus with a continual, long-lasting, forcing pain in the uterus.

Sepia. In feeble constitutions, with delicate skin. Acrid leucorrhœa, with soreness of the vulva. A yellow saddle appears across the bridge of the nose. Sensation as though the vulva were very large. Pressure in the abdomen at the menstrual nisus,—then soreness of the perineum and swelling of the vulva. Repeated shuddering, the whole day during the menstrual nisus. Coldness of the hands and feet and frequent flashing of heat to the head and face. Constipation and sense of weight at the anus. Painful sensation of emptiness at the pit of the stomach.

Silicea. Great costiveness at the approach of the menstrual epoch. Smarting, acrid and corrosive leucorrhœa with the suppression. Discharge of a quantity of white water from the uterus, instead of the menses. Frequent attacks of momentary blindness, or obscuration of vision.

Staphysagria. When the amenorrhœa is the consequence of chagrin with severe indignation. Much pain in the teeth at the menstrual molimina. She is extremely sensitive to mental and physical impressions.

Stramonium. Extreme loquaciousness at the menstrual molimina; tears and prayers and earnest supplications. Her face is puffed up with blood, and she is very fearful; and shrinks back with fear of objects on awaking from sleep. She desires light and society.

Sulphur. Stitching headache; vivid redness of the face; violent pains in the uterine region and itching pimples on the chest at every menstrual molimina. Hæmorrhoids; flashes of heat; stitches in the

side; and heat in the top of the head. Coldness of the feet; or burning in the soles of the feet at night in bed. Weak, fainting spells. Very short naps at night; or very heavy, dead sleep the whole night. She feels unusually hungry from eleven till twelve o'clock; she cannot wait for her dinner.

Valerian. Especially suitable for hysterical females who have taken too much Chamomile tea. Nausea with desire to vomit, as if a thread or something were hanging in the throat,—coming from low down in the abdomen.

Veratrum. Nervous headache at every menstrual nisus, with cold sweat upon the forehead; leaden color of the face; with frequent nausea and vomiting.

Zinc. In those cases of amenorrhœa, where alternate paleness and redness of the face is a strongly marked symptom.

DYSMENORRHŒA.—*Difficult, painful menstruation,* may be attended with profuse, or with scanty flow,—the latter in the greater number of cases. This affection is seldom confined to one or two menstrual periods; when it occurs, it usually forms the principal characteristic feature of the entire menstrual life. The distress may be moderate and last but a few hours; in these cases it is usually relieved by a tolerably free catamenial flow. Or it may be intensely severe, and continue in the form of a menstrual colic for several days; in such cases the flow is almost always very scanty.

Dysmenorrhœa is capable of being divided into four distinct classes, according to the temperament and constitution of the individual, or to the causes from which it originates. These are the neuralgic, the congestive, the membranous, and the mechanical forms of dysmenorrhœa.

Neuralgic Dysmenorrhœa is usually seen in persons of a nervous temperament; and is considered to be strictly a symptom of irritable uterus. "The sensations of fulness and weight, the bearing-down sensations felt at the vulva, the perineum, the rectum, and the coccyx, the frequent inclination to urinate, the fulness at the hypogastric region, the pain in the 'small of the back,' down the limbs, in the hips, around to the iliac and hypogastric regions, are all of the same type. At the period, these symptoms of pain and distress become much aggravated, and often intense; the irritation extends from the nerves to the muscles,—hence the spasmodic pains, violent cramps, of the uterus, of the vagina, and of the sphincters. These spasmodic pains are often of the most severe character, usually occurring in

paroxysms, for hours, or even for days; and sometimes, although then more moderately, during the whole period. They simulate the pains and agony of labor; and they are equally, if not more agonizing, for they are more protracted, and the intervals are less decided; sometimes indeed, the pain is almost continuous. Usually, after the first twelve or twenty-four hours, when the secretion of the menses is fully established, the pain and spasms moderate or cease. Frequently, two or three days elapse before the poor woman returns to her usual state; and often the suffering is so severe and so prolonged, that the whole interval does not afford her sufficient time for recruiting her prostrate energies. The succeeding catamenial period brings renewed neuralgia and spasms; and so on, even for successive years, depriving the sufferer of all social and intellectual happiness."—*Hodge.*

This melancholy picture of the sufferings of those afflicted with dysmenorrhœa, in the allopathic practice, is, we trust, but seldom verified under Homœopathic treatment.

Congestive or Inflammatory Dysmenorrhœa is more nearly allied to inflammation of the ovaries, and is seen in females of a full habit and of a sanguine temperament,—both the unmarried, and those who have borne children are very liable to it. Young girls of florid complexion and plethoric habit, suffer terribly in many cases before their menstruation is regularly established; and often in such cases the same congestive attacks follow them in after life. "For some time before and after the catamenia appear, the suffering is very great; the patient complains of pain across the back, aching of the limbs, weariness, intolerance of light and sound, the face is flushed, the skin hot, the pulse full, bounding and quick, often upwards of one hundred." These sufferings are relieved by the menstrual flow,—which although sometimes scanty, is often very profuse. For this form of dysmenorrhœa, *Churchill,* a standard allopathic authority, advises to take twelve or fourteen ounces of blood from the arm, or as much by cupping, from the loins,—but, "scarification of the cervix uteri, or leeches applied to this part (he thinks), will often be very useful, and in some cases supersede the more general blood-letting"!

Membranous Dysmenorrhœa may appear in connection with the neuralgic, or with the congestive dysmenorrhœa. This appears to be a complication of simple dysmenorrhœa, occurring in persons of some peculiar constitution,—and consists in the formation of a false membrane upon the interior surface of the uterus, and its expulsion at the menstrual period. These cases, not very common, are extremely painful, and the expelled product, especially where, as is sometimes

the case, the membrane is discharged whole in the form of a sac, is liable to be mistaken for the product of conception. A mistake that it might be very unpleasant for the physician to make with reference to an unmarried patient. In some instances this formation appears to hold over, passing the regular menstrual period, the menses intermitting, and the female deeming herself *enciente*. But when thrown off, in what was supposed to be an abortion, nothing appears but membranes.

The peculiarity of constitution which gives rise to such false membranous growths is not definitely known. In general, false membranes appear only in conditions of the organism in which the nervous system is remarkably affected; such is the case in croup, in diphtheria, and in dysmenorrhœa. The diagnosis of this rather rare form of dysmenorrhœa, is by no means easy or certain, especially in the case of married women, where it may be apt to be confounded with conception and impending abortion. But an attentive study and comparison of all the symptoms, will lead to a proper prescription; indications for such membranous dysmenorrhœa, will be found among the remedies at the close of this section.

Mechanical Dysmenorrhœa is the name given to a class of cases in which the difficulty and consequent painfulness of the menstrual discharge, arises from some mechanical obstruction, such as the partial closure, from stricture or narrowing, of some portion of the cervix uteri. Or there may be actual obstructions lodged in the canal,—such as coagula, thickened and hardened mucus, the formation of false membrane in the cavity of the body or neck of the uterus;—or finally the obstruction may arise from flexion of the cervix uteri,—as in retroversion of the uterus,—and this is no doubt the most frequent and efficient cause of mechanical dysmenorrhœa. These various obstructions occasion painful spasmodic efforts for their removal.

In the treatment of this form of dysmenorrhœa, as in that of others, we must be governed by the symptoms; and if the cause can be removed entirely, the cure may be complete,—as in the case of flexion of the cervix. The other mechanical causes of dysmenorrhœa, such as thickening and turgescence of the lining membrane of the cervix, may also be removed by the remedies selected in accordance with the indications present. Nor do we believe that even "the cautious introduction of elastic bougies," as advised by allopathic authorities, can ever be necessary or useful in order to remove stricture of the cervix uteri. This stricture, whether spasmodic or otherwise, is the result

of inflammation, nervous irritation or some other morbid condition, amenable to medication; and is capable of being completely removed, in time, by the exhibition of the properly selected and truly Homœopathic remedy to the case. Such at least has been our own experience; as well as that of others.

Dysmenorrhœa from displacements, will be relieved under the proper treatment for displacements, which see; that from constriction, contraction, etc., of the cervix or os uteri, will also be cured by such constitutional treatment as is indicated by the prevailing symptoms and conditions. All topical treatment, such as is recommended by the Old School, with bougies, etc., is worse than useless.

Alumina. The menses delay, but finally appear, being too pale and too scanty. Before the menses, she has many dreams, awaking from which she has heat in the face, headache and palpitation of the heart. Abundant discharge of mucus before the menses. During an evacuation of the bowels, before the menses, she has pinching, writhing and pressing like labor pains. Pressing to stool aggravates her symptoms. During her menses, corroding urine is frequently passed day and night. After the menses, she is so much exhausted in body and mind that a little exercise prostrates her.

Ammonium carb. Menses are premature and abundant, preceded by griping, colic and want of appetite; or the discharge is blackish, in clots; and passes off with pain in the abdomen, constipation, tenesmus, paleness of the face, sadness and toothache. Also, colic and pain between the scapulæ.

Ammonium mur. Menses premature, with pain in the abdomen and small of the back, the flow being more profuse at night. Passing of large quantities of blood at stool during the catamenia.

Asarum. Violent pain in the small of the back, at the appearance of the menses, which scarcely permits her to breathe.

Baryta carb. Menses very scanty. Before the menses, toothache with swelling of the gums, or colic with swelling of the limbs. During the menses, a troublesome weight above the pubis in any position.

Belladonna. Pressure downwards, as if all the contents of the abdomen would issue through the vulva. Violent pains come on suddenly and disappear as suddenly as they came. Pains that cause redness of the face and eyes, throbbing of the carotids and in the head.

Berberis v. The menses are scanty and very painful, flowing much

like grayish serum. The pain is often in the kidneys or down the thighs and calves of the legs; again in the head and sometimes all over the body.

Borax. Stitching pain in right pectoral region before the menses. Pain from the stomach to the small of the back before the menses. During the menses, lancinating pain in the groin.

Bovista. Before the catamenia, diarrhœa and painful bearing down towards the genital organs.

Bromine. Violent contractive spasms during the menses; lasting from six to twelve hours; leaving the parts sore. Emission of large quantities of flatus during the menses, with slight pain in the abdomen. Membranous dysmenorrhœa.

Bryonia. Tearing pains in the limbs during the menses.

All her sufferings are increased by the least motion. Cannot sit up from nausea. Membranous dysmenorrhœa.

Calcarea carb. In leucophlegmatic constitutions. Vertigo on going up stairs. Menses too frequent and profuse. Involuntary emission of urine on taking exercise. She has cold, damp feet, and is very easily affected by the cold air. A variety of pains during the menses, with the above characteristic symptoms. Bad toothache after the menses. Membranous dysmenorrhœa.

Cantharis. Dysmenorrhœa, with the peculiar dysuria of this remedy. Membranous dysmenorrhœa.

Carbo animal. During the menses, violent pressing in the small of the back, groins and thighs, with unsuccessful desire to eructate. After the appearance of the menses, she feels so tired that she is scarcely able to speak, with stretching and yawning.

Carbo veget. Before the menses, much itching about the vulva; itching of old tetters, or of the skin about the neck and shoulders. During the menses, cutting pain in the abdomen, pain in the back, and pain in the bones as if bruised.

Castoreum. During the menses; pain commences in the middle of the thighs extending over the limbs, and in fact more or less over the entire body. Angry exclamations during sleep.

Causticum. During the menses; pain in the abdomen as if the parts were torn, with pain in the small of the back as if from a bruise and discharge of large clots of blood. A sticking pain below the left mamma. Face very yellow.

Chamomilla. Violent labor pains and tearing in the veins of the legs, with discharge of dark, coagulated blood. Desire to pass water

frequently, it being profuse and pale. Out of humor, even quarrelsome. Membranous dysmenorrhœa.

China. Feeling of distension and fulness, which is not relieved by eructations. In weakly persons who have lost much blood. Ringing in the ears and fainting fits; convulsions, with rush of blood to the head and chest with throbbing of carotids. A good deal of colic, particularly in the P. M., with eructations without relief.

Chininum s. Griping and tearing in the abdomen, extending to the chest with pressing towards the groins during the menses.

Cicuta v. Tearing and jerking in the os coccygis during the menses.

Cinnabaris. A few days before the appearance of the menses and during their continuance, tearing pain in the forehead, sensation of weakness in the eyes, rending in the spine, tearing and cramp in the bowels with diarrhœa and great prostration.

Cocculus. Dysmenorrhœa always followed by hæmorrhoids. Abdomen distended, with sharp cuttings or as if sharp stones were in the abdomen at every motion. Her sufferings often cause fainting. Discharge fitful, scanty and irregular. Paralytic pain in the back and weakness in the lower extremities.

Coffea. Exceedingly painful colic; so painful as to drive her to desperation. Continuous pinching pain in the iliac regions. Coldness and stiffness with profuse flow.

Colocynth. Cramping pain, causing her to draw her lower limbs up to the abdomen, with restlessness, moaning and lamenting. These pains are sometimes increased by eating or drinking.

Conium. Dysmenorrhœa with shooting pain in the left side of the chest. Pain in the mammæ, which often swell and become hard. Pressure from above downwards and drawing in the legs during the menses. Vertigo during menses, particularly whilst lying down. Intermitting urine during micturition. Painful abdominal spasms during the menses.

Creasotum. Difficulty of hearing, before and during the menses, with buzzing and humming in the head. The menses are usually too frequent and too profuse; succeeded by an acrid-smelling, bloody ichor, with corrosive itching and biting of the parts; with more or less pain during the flow, but much aggravated after it has ceased.

Crocus sativa. Dysmenorrhœa, with dark, stringy blood; sensation of bounding or rolling in the abdomen with other symptoms. Sensation of commotion in the stomach upwards and downwards, hither and thither, during painful menstruation.

Eugenia j. Acné, with pain far around.

Euphrasia. Menses last only one hour; time regular.

Ferrum acet. Pale face and lips, or fiery redness, with scanty discharge of pale blood with violent colic. The menses intermit and then reappear.

Graphites. The menses delay, are scanty; thick and dark, or else serous and pale blood, with griping and abdominal spasms, headache, nausea and pain in the chest. Morning sickness during menses. Constipation previous to and diarrhœa after the menses. Persons most suitable for Graphites are rather corpulent and subject to itching blotches here and there.

Gratiola. Darting in the right mamma when stooping, worse on rising, during the menses.

Hyoscyamus. Violent, almost convulsive trembling of the hands and feet during the menses. She is almost raging. Enuresis and sweat during the menses. Severe headache, profuse sweat and nausea at the appearance of the menses.

Hypericum. Menses delay, with tension in the region of the uterus as of a tight bandage.

Ignatia. Headache with heaviness and heat in the head. Photophobia, contractive colic, anguish, palpitation of the heart, languor unto fainting, during the menses. Weak empty feeling at the pit of the stomach with sobbing and sighing.

Indigo. Burning in the mammæ during the menses.

Ipecacuanha. Pain about the navel, extending towards the uterus. Sharp continued cutting pain from left to right with constant nausea.

Jodium. Flow at every stool, with cutting in the abdomen; pain in the back and loins.

Kali bichrom. Menstruation too soon, with vertigo, nausea, headache and feverishness. Obstinate suppression of urine, or small quantity of red urine.

Kali carb. A good deal of stitching, cutting colicky pain during the menses. She feels badly for a week previous to the menses. She is costive and feels a distress an hour or two previous to a passage. The menses have a bad, pungent odor, very acrid, excoriating the thighs and covering them with an eruption. Headache with great heaviness during the menses only in the morning.

Kali hyd. Great urgency to urinate, which disappears at the eruption of the menses. Sensation as if the thigh were tightly squeezed during the menses. Her abdominal sufferings extend into the groins and thighs. Drinking cold milk aggravates her complaint.

Kali nit. Menstrual blood black as ink, with much suffering.

Kalmia. Pain in the limbs, back and anterior part of the thighs during the catamenia. Pulse very slow.

Lachesis. Before the menses: vertigo, headache, and the nose bleeds a few drops. The first day of the menses: tearing in the abdomen, beating in the head, pains in the small of the back and bruised feeling in the hips—all relieved by a full flow.

Laurocerasus. Colicky pains in the P. M. and tearing pains in the vertex at night. Suffocating spells about the heart with a sort of gasping for breath.

Ledum. Great want of vital heat, and dysmenorrhœa.

Lobelia i. Violent pain confined to the sacrum, sense of great weight in the genital organs.

Lycopodium. Pain in the temples, as if they were being screwed towards each other, with a sort of stupor and compression during the menses. Much borborygmus, more in the left hypochondrium. Sense of satiety, the least quantity satisfies, or she is insatiably hungry. Shooting pain from right to left across the abdomen.

Magnesia carb. Flow only in the absence of the pain, and during sleep. The menstrual blood is dark, acrid and thick; is washed out with much difficulty. Much pain in the head and in the right shoulder. She can hardly raise the arm. The knees are painful in walking, and the feet when lying in bed.

Magnesia mur. Pain in the small of the back and thighs during the menses. More severe in the back when walking, and in the thighs when sitting. Pressing down in the iliac region during the menses.

Magnesia sulph. The menses stop for two days, then flow again. Bruised pain in the small of the back, with pains in the groins when sitting or standing, less when walking. Pain in the thighs when walking.

Manganum. Discharge of blood between the periods, and pressing in the genital organs.

Mercurius s. Before the menses; dry heat and rush of blood to the head. During the menses; anxiety, red tongue with dark spots, saltish taste, scorbutic gums, teeth feel sharp, breath of a mercurial odor and salivation. Teeth sore and loose, some of them are too long.

Moschus. Violent drawing and pressing pains towards the sexual organs till the menses appear.

Murex p. Sore pain as if injured with a cut in the uterus, or violent pain in the right side of the uterus, extending to the chest.

Muriatic acid. Sad and silent during the menses as if she would die. Varices of the anus so sore as scarcely to bear the least touch.

Natrum carb. Pressing in the hypogastrium towards the genitals, as if every thing would issue from the abdomen. Menses preceded by drawing in the nape of the neck and headache. During the menses, tearing headache, painful distention of the abdomen in the morning, relieved by diarrhœa. Tearing and bruised pain in right hip.

Natrum mur. Waking in the morning with headache. Terrible sadness during the menses.

Natrum sulph. Scanty menses with hard, knotty stool, streaked with blood, accompanied and succeeded by smarting in the anus.

Niccolum. Menses too scanty and short, with colic and pain in small of the back.

Nitric acid. Violent cramp pains in the hypogastrium, as if it would burst, with constant eructations during the menses. Violent pressing in the abdomen, as if everything were coming out of the vulva, with pain in the small of the back, through the hips and down the thighs.

Nux juglans. Menses preceded by violent pressing and drawing pains in the womb, finally an abundant flow of blackish blood, often in large lumps.

Nux mosch. Menses preceded by pain in the small of the back as if a piece of wood stretched across there were pressing from within outwards, with headache, pressure in the stomach, water-brash, pain in the liver and discharge of thick, black blood.

Nux vomica. Griping and digging in the uterus, with discharge of thick, clotted blood. Nausea in the morning with chilliness, fainting turns at the appearance of the menses, with spasmodic pains in the abdomen. Much headache; sometimes in the occiput as if from an ulcer in the brain; sometimes in the sinciput as if the eyes would be forced out. Tearing in the left arm and right hip.

Oleum Animale. Menses preceded and accompanied by cutting in the abdomen and small of the back and sticking in the left side of the head and vertex. Scanty menses, black blood and languor in the hands and feet.

Petroleum. Menses cause an itching in the genital organs. There is heat in the soles of the feet and palms of the hands; singing and roaring in the ears; tearing in the thigh, and spots on the legs painful to the touch.

Phosphorus. Very sleepy during the menses, she can hardly keep awake. Constipation, with a narrow, stiff stool, difficult to evacuate.

Stitches in the mammæ, sour eructations and vomiting of sour substances. Blue margins about the eyes. Cutting in the abdomen, chilliness and cold hands and feet. More suitable to tall, slim persons.

Phosphoric acid. Meteoristic distention of the uterus. Pain in the liver during the menses.

Phytolacca dec. Very painful menstruation in apparently barren females.

Platina. Painful sensitiveness of the mons veneris and of the vulva. Much threatening of the menses to come on. Finally they make their appearance with pinching in the abdomen, and pressure in the groins alternating with pressure in the vulva.

Plumbum. Cessation of the menses on the invasion of colic, but they reappear after the paroxysm; or not again till the next period. Sensation as if drawing from the abdomen to the back, often with great depression of spirits.

Pulsatilla. Particularly in mild, tearful, yielding temperaments. The pain is so violent that she tosses in every direction, with cries and tears. The blood is thick and dark or pale and watery; flows by fits and starts. She feels worse in a close, warm room.

Rhus tox. Membranous dysmenorrhœa, the rheumatic symptoms guiding the choice of this remedy; stiffness of the limbs, relieved by walking; stiffness of the limbs before a storm or in damp weather, relieved by a storm. Restless nights, must turn often to find a few moments' rest.

Sabina. Dysmenorrhœa. Violent pain extending from the back through to the pubis.

Sanguinaria c. Dysmenorrhœa. The pain rises into the head from the nape of the neck, and finally into the forehead, as if the eyes would be pressed out, the menses being scanty.

Sarsaparilla. Itching eruption on the forehead previous to the menses. Soreness in the right groin with desire to urinate at the appearance of the menses. Griping in the pit of the stomach in the direction of the small of the back during the menses. Painful conclusion in urinating.

Secale corn. Menses are too frequent and last too long, with tearing and cutting colic, cold extremities, cold perspiration, great weakness, and small pulse. Especially useful in thin, scrawny constitutions.

Sepia. Before the menses: violent colic, shuddering all over the body the whole day, acrid leucorrhœa, sensation as if the vulva were

enlarged and soreness in the perineum. During the menses: tearing in the tibia, toothache and obscuration of sight, violent pressure in the forehead with discharge of plugs from the nose. Constipation, the stool being hard, difficult, knotty, insufficient and sometimes mingled with mucus. Sensation as of a heavy lump in the anus.

Silicea. Before and during the menses she is costive. Stool composed of hard lumps, remaining long in the rectum, as if it had no power to expel it. Burning soreness of the vulva and an eruption on the inner side of the thighs during the menses. Repeated paroxysms of icy coldness over the whole body at the appearance of the menses, and icy cold feet during the menses.

Spongia. Violent drawing in the upper and lower extremities during the menses.

Stannum. The malar bone is painful to the touch before the menses, and during their flow it is painful even to move the muscles of the face. Dysmenorrhœa with terrible headache, the pain gradually increasing to its highest point, and, after remaining for a time, as gradually declines.

Stramonium. Excessive loquacity during the menses. Drawing pains in the abdomen, upper and lower extremities.

Sulphur. The menses are thick and black and so acrid as to make the thighs sore. Every evening, just before the menses, she always has a cough. Pain in the abdomen during the menses, as if the intestines were strung up in knots by threads. She has to take a sitting posture for relief. Flushes of heat on the top of the head, cold feet, &c.

Sulphuric acid. She always gets a distressing nightmare before the menses.

Tart. e. Pain in the groins and cold creepings just previous to the menses.

Thuya. Terribly distressing pain in the left ovarian and iliac regions with scanty flow. She has to lie down, the suffering is so great.

Veratrum. The sufferings during menses are attended with thirst for icy cold drinks, nausea, vomiting and diarrhœa, or simply diarrhœa. Cold sweat on the forehead from the pain. Great exhaustion.

Zincum. During the menses, heaviness of the limbs with violent drawing about the knees, as if they would be twisted off. Sore eyes. Sudden oppression of the stomach; she has to loosen her dress.

MENORRHAGIA is the term now employed to signify an increased or immoderate flow of the menses, or profuse menstruation. Formerly it was understood to embrace uterine hemorrhage in general; but it is now very properly restricted as above; while by the term Metrorrhagia are designated those hemorrhages from the uterus which are not connected with the catamenia.

The following very general division of the varieties of menorrhagia will simplify the whole subject, and at the same time render our brief description more clear and comprehensive.

I. Functional Menorrhagia; in which the flow is increased in quantity, or in frequency, or in both.

II. Organic Menorrhagia; in which the flow appears in connection with some positive disorder of the sexual apparatus.

III. Sympathetic Menorrhagia; in which the flow appears in connection with severe forms of general disease.

In *Functional Menorrhagia,* the flow may be perfectly natural, except in its quantity and in the frequency of its return; or it may be occasionally mixed with clots of blood. In either instance, the causes of this affection are to be found in the more or less plethoric condition, habits of life, or even in the various anomalies of the blood itself. These, and similar influences, some of them deeply seated and constitutional, may combine to produce such profuse discharge at the monthly periods, or even oftener, without the intervention of any distinct disorder either of the whole system in general, or of the sexual apparatus in particular. Only the earlier or milder forms of menorrhagia can be included in this class,—those which have not been preceded by any actual disease, and in consequence of which no organic lesions have as yet arisen. And many cases which in their initial stages would be classified here, subsequently become so complicated as to belong rather to the second class. In this same class of functional menorrhagia, must also be included all those cases which arise from general debility without positive disease; as in persons who fall into this "weakly way" from having too many children, or from over-suckling them to prevent the too rapid increase of the family. And cases arising from excessive coition or any other form of over-exertion; or from some inherent constitutional weakness (especially in this respect) which may be aggravated and developed by various provoking influences, are all to be included in this class.

In *Organic Menorrhagia,* the flow appears in connection with some positive disorder of the sexual apparatus. In the order of time, this

flow may precede or follow the appearance of the organic disease; but in either case there is such an established connection of the menorrhagia itself with other disorders as renders the case very different from what is described under functional menorrhagia. Nor is the reality of this connection at all affected by the view we may take as to the question whether, in any given instance, the menorrhagia is due to the disease which may have preceded it, or to the structural change which, in another case, may have followed it. Thus in some instances the threatened onset of some organic disease is preceded by congestions which, greatly aggravated at the menstrual period, render the flow abnormally frequent and profuse. So the actual presence of structural disorganization of the uterus, or of any of its appendages, even when not very far developed, may produce such menorrhagia. And finally, these forms of profuse menstruation, whether too frequently or more rarely recurring, may sometimes not only be caused by some hitherto undeveloped change in the interior organism, but they may also remain persistent as consequences of former diseased conditions of the various organs of the sexual apparatus. In the first of these three categories might be enumerated a very great variety of the disorders of the female organism, the majority of which are, in many instances at least, preceded by increased catamenia; in the second, might also with equal propriety be mentioned almost the entire range of such diseases, from simple uterine congestion up to polypoid and cancerous tumors; while in the third, the simple mention of the profuse menstruation which, unattended with any other disorder, sometimes appears after the period of the change of life, may supply all that is needed in the way of illustrative example.

Some forms of uterine disorder are preceded or even caused by entire amenorrhœa; but it is easy to see that the deep-seated physiological tendencies toward active disease of the uterus and its dependent organs must to a certain extent consist in congestion, which cannot but be greatly aggravated by the menstrual nisus, and which consequently leads to a more profuse menstrual discharge. The same is still more plainly true of the actual presence of structural disease in any of these organs, the constant congestion must necessarily be seriously enhanced by the added influence of the catamenia; and from this combination of pathological and physiological conditions, a more than normal flow results. And in those cases in which structural disorders have existed formerly, but have now subsided to all appearance, the proofs of their former existence still remain, in

many instances, in the form of chronic congestion, which is capable of producing menorrhagia, often of the severest form, and even of keeping it up and reviving it after the change of life.

We make these statements, not from any desire to give undue prominence to pathological views, but to show the importance, the necessity of most carefully studying all the symptoms, those preceding as well as those attendant, in order to prescribe correctly in such cases. The menorrhagia, which we are called upon to treat, is by no means such a hemorrhage as that from an open wound,—which may be stopped as soon as convenient; we have, in fact, something to do very different from arresting an active or even a passive hemorrhage: we have a sick person to cure. And just as fast as by our prescriptions, of advice and medicine, her general health improves, just so fast will she find her catamenia approaching the normal standard. Nor when we have done for our patient in such cases all that our art admits and science requires, shall we have merely "set her courses right;"—we shall have so restored her health that her courses will come right and remain right,—since by curing the patient herself we shall have removed the causes of the menorrhagia.

It is not intended to assert that all this can always be accomplished; but nothing less than all this should always be the aim of the physician. And even if he should not succeed in restoring his patient to perfect health, he will have gone to work in the right way to do it; and if his success be but partial and incomplete in a given case, even if it should disappoint both his own hopes and the expectations of his patient and her friends, how much greater will it not be than if he had gone to work in some other than the best possible method? How great is the difference, in chronic cases especially, between even a small improvement and a positive change for the worse?

In *Sympathetic Menorrhagia*, the flow appears in connection with severe forms of general disease. Examples of this variety of profuse menstruation are seen in some cases of variola; morbilli, especially rubeola nigra; scarlatina; erysipelas; typhus; cholera; and during the appearance of certain acute inflammations, especially those of the lungs. "Although experience has demonstrated that during the course of these diseases, especially when they determine a draining of the mass of the blood, the courses are often suppressed; still a great number of observations have proved that when the flow persists, it may become so copious that it completely exhausts the already feeble forces of the patient and may even hasten a fatal termination. This is especially the case with the exanthemata. We have often

observed that the appearance of a very copious menstrual hemorrhage during the course of these diseases, is almost always the precursor of a fatal dissolution of the blood. Sanguineous discharges from the skin, the nose, the rectum, etc., soon supervene, and death occurs sometimes even in a few hours after the startling cerebral symptoms have come to complete the picture represented by the rapid decomposition of the blood."—*Scanzoni.*

This fearful complication of disorders, already very grave, may well appal the allopath, the very largeness of whose experience in such cases, serves but to assure him of their utter hopelessness. But the Homœopathic practitioner, conscious of the wonderful virtues of such medicines as *Arsenic., China, Rhus, Secale,* and others, to arrest even the rapid decomposition of the vital fluid itself, and mindful of the special and characteristic indications, which will enable him to give the right remedy with unerring exactness,—can face even these profound degenerations of the organism with a patient, hopeful heart. It is necessary for the physician to realize the serious gravity of such cases,—especially that neither himself nor the friends be taken unawares, by the sudden and unexpected fall of the curtain; and then it is no less necessary that he should faithfully and perseveringly study all the symptoms of the case,—and *never despair,* till satisfied of the actual closure of the scene. Since in typhus, and even in cholera, some such patients have been rescued, as it were, from the very jaws of death, who most certainly would not have received the proper remedies up to the final turning-point of their apparently fatal disorder, had not their physicians been inspired by the most patient courage, and by the most hopeful and determined perseverance.

Aconite. In plethoric females particularly. Vertigo on rising from a recumbent position, she has to lie down again. She is alarmed and excited, is sure she will die, although there is no occasion for such an alarm.

Agaricus. Menses too profuse, with titillations in the genital organs. Itching, burning and redness of the toes, with titillation, as if frozen. Menses too profuse.

Ambra grisea. Discharge of blood between the periods, at every little accident; for instance, after a very hard stool, or after a walk a little longer than usual.

Ammonium carb. Menorrhagia after a long drive in the cold air.

Ammonium mur. The flow is more abundant at night. A quantity of blood is passed at every stool during the menses.

Antimonium crud. Menorrhagia with a peculiar pressing in the uterus, as if something would come out.

Apis mel. Menorrhagia, with heaviness in the abdomen, faintness, great uneasiness, restlessness and yawning.

Argentum nitric. Menorrhagia with cutting pain in the small of the back and groin. The head feels very much enlarged and the lower extremities very weak.

Arnica. Particularly after cases of concussion, as from a blow, a fall, or riding over rough roads. The flow is of a bright-red color, mixed with clots. Heat about the head, extremities cool. Menorrhagia with pain in the small of the back, extending into the groin and down the inner side of the thigh and leg to the great toe.

Arsenicum. Menorrhagia in feeble females; cachectic; affected with rheumatism, disorganization of the uterus, or ovaries; in eruptive fevers, and when aphthæ break out, indicating a low state of the system.

Belladonna. The flow is bright red, imparting a sense of heat, with a sensation of pressing outwards. Sometimes it has a bad odor, with lumps. Sometimes there is congestion to the head with throbbing of the carotids.

Borax. The menses are too soon, too profuse, and attended with colic, nausea and pain extending from the stomach to the small of the back. Too profuse menses and she is very nervous; starts at the least noise, and dreads a downward motion, like going down stairs, or the downward motion of a swing or rocking-chair.

Bovista. Menses too often and too profuse, flowing more in the morning and less at night, with discharge of blood between the periods.

Bromine. Menses too often and too profuse, of bright-red blood, particularly in females with affections of the chest, heart, or eyes. The flow is quite passive, and she only suffers from exhaustion.

Bryonia. Menses too early and too profuse, of dark-red blood, with pain in the back, and aching in the head, as if it would split; worse on the least motion. Nausea on sitting up and after eating.

Calcarea carb. Menses too frequent, too profuse, and last too long. She has vertigo on stooping,—worse on rising or going up stairs. Damp, cold feet. Particularly applicable to leucophlegmatic temperaments.

Cannabis s. Too profuse menses when dysuria attends, with sensation of soreness in the whole track of the urethra.

Cantharis. Menses too early, and too profuse, of black blood. Dysuria, with burning, cutting pain. Frequent desire to urinate. More suitable to females who are sterile.

Carbo animal. Menses too early, not too profuse, but last too long. Great weakness of the thighs. After the appearance of the menses she feels so tired that she is scarcely able to speak.

Carbo veget. Menses too early and too profuse, preceded by itching of old tetters, or by an itching eruption on the nape of the neck and between the shoulders; also by a dragging pain from the abdomen to the small of the back.

Causticum. She has a very yellow face, menses too early and too abundant. And after its cessation a little blood is passed from time to time for many days. The menses smell badly, and excite an itching in the vulva. She feels melancholy, and looks at every thing upon the dark side.

Chamomilla. Menorrhagia of dark coagulated blood, flowing more in paroxysms. There is great irritability of temper, so that she can hardly control herself. Frequent desire to urinate. Urine pale and profuse.

Chelidonium. Menses retarded, but continue too long, with pain under the inner and lower angle of the right shoulder-blade.

China. Menses too profuse, with a sensation of great distention of the abdomen, not relieved by eructations or dejections. Ringing in the ears and fainting spells. Losing of senses and sight. Also after the abuse of Chamomile tea; with flow of dark clots and frequent desire to urinate; pale urine; and in weakly persons from the loss of blood.

Chininum sulph. Menses too early and too profuse.

Cinchonium sulph. Menses too early and too profuse.

Cinnamon. Menses too early and too profuse, particularly in females troubled with itchings of the nose or nightly restlessness. She is constantly tossing, even during sleep. Diarrhœa, always worse after drinking.

Cocculus. Discharge of blood from the uterus in pregnant females. Profuse menses, with a sensation as of sharp stones in the abdomen, at every movement.

Coccus cacti. Menses too early and too abundant, of dark, thick blood, with a sensation of tension and constriction about the abdomen, and of something ascending towards the stomach, which makes her think she will vomit water.

Coffea. Profuse menstruation, with excessive sensitiveness of the organs and voluptuous itching.

Creasotum. Menses too early, too profuse and lasting too long, but inclined to be intermittent; she thinks she is almost well, when the discharge returns afresh.

Crocus s. Menorrhagia of dark, stringy blood; as it discharges, it forms itself into long strings. A sensation as if something alive were rolling or turning about in the abdomen. In the stomach a similar sensation is sometimes perceptible.

Cyclamen. Menorrhagia, with stupefaction of the whole head, and obscuration of vision as if a fog were before the eyes.

Ferrum. Menorrhagia in weakly persons, with a fiery red face. It occurs too frequently, is too profuse and lasts too long.

Fluoric acid. Menses too early and too profuse, thick and coagulated. With an uncommon buoyancy of mind, she fears nothing and is well satisfied with herself.

Hepar s. c. Menorrhagia in females, with chapped skin and rhagades of the hands and feet. A slight injury causes ulceration.

Hyoscyamus. Menorrhagia with delirium. She has uncommon, foolish manners. Silly laughing, and inclines to uncover or undress herself.

Ignatia. Menorrhagia with sighing and sobbing, faint feeling at the pit of the stomach. She seems full of suppressed grief.

Iodium. Premature and too copious menses, with great weakness, particularly indicated if she has goitre, or dwindling of the breasts, or if she has acute pain in the breasts.

Ipecacuanha. Profuse menstruation, with a constant nausea; not a moment's relief, not even after vomiting.

Lachesis. Menorrhagia, with chills at night and flushes of heat during the day.

Laurocerasus. Menses too early and too profuse, with nightly tearing in the vertex. Peculiar suffocating spells about the heart.

Ledum p. Menses too early and too profuse, with a great want of vital warmth, she can hardly keep warm.

Lycopodium. Menses too long and too profuse, with borborygmus, especially in the left hypochondrium; or a sense of satiety and fulness up to the throat, on the least quantity of food being taken; or an aggravation at four P. M.

Magnesia carb. Menses too early and too profuse, flowing decidedly more at night, and never during uterine pains.

Mercurius sol. Menses too profuse, with scorbutic gums. Saliva-

tion; teeth feel sore, and as if loose. Mucous stools with tenesmus and oppression; strong urine.

Moschus. The menses are too early and too profuse, with intolerable titillation in the genital organs.

Muriatic acid. Menses too early and too profuse, with extremely sore hemorrhoids which sometimes itch terribly.

Natrum carb. Menses too early and last too long, aggravated by a thunder-storm, and may even be reproduced by one.

Natrum mur. Menses too soon and too profuse, with great heaviness in the eyes, or intolerable sadness. Craves salt. Has an aversion to bread. Dreams that robbers are in the house.

Nitric acid. Menses too early and too profuse, with urine emitting an intolerably strong smell.

Nux juglans. Menses too early and abundant, in large, blackish lumps.

Nux mosch. Menses too early and profuse, with an intolerable dryness of the mouth, tongue and throat. Excessive disposition to laugh, particularly in the open air.

Nux vomica. Menses too early and too profuse, particularly as a forerunner of the change of life; or attended with weak faint spells; often as a consequence of high living, or a sedentary life. Constipation of large and difficult stools, or with frequent urging and discharge of small pieces. During her menses she does not sleep after three or four A. M.

Opium. Menorrhagia, with great sleepiness, yet she cannot sleep. The sheets are so hot she has to change to a cooler place every little while.

Phosphorus. Menses too often, too copious, and lasting too long. More applicable to tall, slim persons. Constipation of narrow, dry, hard stools, difficult to evacuate. Sense of emptiness in the abdomen. Much heat up the back, and cold feet and legs.

Phosphoric acid. Too early and too long menses; with pain in the liver; or rising frequently at night to pass large quantities of colorless urine. Meteoristic distention of the uterus.

Phytolacca dec. Menses too often and too profuse, with a corresponding increase of the tears, saliva, bile and urine.

Platina. Too long and profuse menstruation, with pressing from the groins to the genital organs. The blood is dark and comes away partly fluid and partly in clots.

Plumbum. Menorrhagia, with the sensation of a string pulling

from the abdomen to the back. Constipation of feces, composed of lumps packed together like sheep's manure.

Pulsatilla. Menorrhagia in delicate females of tearful disposition. The least circumstance of joy or sorrow causes weeping. She feels better in the open air, and worse towards evening. Bad taste in the mouth in the morning; no appetite; nothing tastes good.

Rhus tox. Menorrhagia from a strain; if in rheumatic females, worse at night, demanding constant change of position to find relief.

Sabina. Excessive, debilitating menses, with abdominal spasms. The blood is partly fluid and partly clotted, and the pain runs from the back through to the pubis.

Sambucus. Menorrhagia, with stoppage of the nose with thick, tenacious mucus.

Secale corn. The menses are too profuse and too long, with violent spasms. All her symptoms are worse just before the menses. Particularly applicable to thin, cachectic females.

Sepia. Menorrhagia, with a painful sensation of emptiness at the pit of the stomach; or with fetid urine, or the urine has a sediment like clay burnt down upon the bottom of the vessel. She has yellow spots on her face, a yellow saddle across the ridge of the nose.

Silicea. Menorrhagia, with paroxysms of icy coldness over the whole body. The menses have a very strong smell. Constipation before and during the menses of hard lumps, which remain long in the rectum, as if it had no power to expel them. Sometimes, after long straining, the protruding portion suddenly recedes again into the rectum.

Spongia. Menses too early and too profuse, preceded by colic, soreness in the sacrum and craving in the stomach. Chronic hoarseness and cough, the voice frequently giving out when talking or singing.

Stannum. Menorrhagia in females having a weak larynx. They cannot talk much, read aloud or sing, before the larynx aches; they become hoarse and cannot proceed. The same sensation is sometimes perceived in the chest.

Stramonium. Menorrhagia, with drawing pain in the abdomen, thighs and limbs. There may be excessive loquaciousness and a multitude of strange and absurd ideas.

Sulphur. Menses too early, too profuse, and lasting too long. There are flushes of heat followed by weak spells. Heat on the top of the head. Cold feet. Faintness from 11 to 12 o'clock. She cannot wait for dinner. Bleeding hemorrhoids. She sleeps lightly and

awakens very frequently; or she sleeps a profound sleep the whole night,—dead and heavy sleep.

Sulphuric acid. Menses too early and too profuse, always preceded by a most distressing nightmare. Tremulous sensation in the whole body, without trembling. Much general debility.

Veratrum. Menorrhagia, with diarrhœa or with nausea, vomiting and cold sweat on the forehead. Weak pulse.

Zinc. Menses too early and too profuse. Lumps of coagulated blood, passing away mostly when walking. Fidgety feet and lower extremities.

METRORRHAGIA is the term now employed to signify uterine hemorrhage, unconnected with the menstrual flow.

This hemorrhage may be active,—that is, composed of bright, arterial blood; or it may be passive,—consisting of the darker colored, venous blood. It may arise from the general influence of predisposing causes: from accidents; from violence; from excessive exertions of body; from sudden shocks and violent emotions of mind; from the presence of worms in the intestines; from the presence of polypi or other tumors within the pelvis; from ulcerated cancers, or other ulcers of the uterus; from any of the causes which may produce abortion or miscarriage,—and from the abortion or miscarriage itself; from retention of the placenta after parturition,—or otherwise, in consequence of parturition itself; and from the cessation of the menses after the change of life.

Those hemorrhages mentioned in the preceding section under the head of Sympathetic Menorrhagia, which appear during the course of severe diseases, even if not developed at the usual catamenial period, are still considered as resulting, in persons who have not passed the menstrual age,—from the profound disturbance of the sexual organism; and are therefore regarded as menorrhagic rather than as metrorrhagic. And the same characteristic will be considered as belonging to all hemorrhages occurring between the ages of puberty and of the change of life,—unless some strongly marked cause, such as one or the other of those above enumerated, can be discovered to operate independent of the catamenial function. And while every individual case of metrorrhagia must be treated with exclusive reference to the symptoms and conditions found in connection with itself,—a careful study of the causes of each case of such disorder must be absolutely essential to its successful treatment. This will be made sufficiently obvious by recalling for a moment the

fact that the most violent and dangerous forms of uterine hemorrhage may result from the most opposite conditions of body and of mind; from plethoric congestion, or from exhaustion and debility; from the highest emotional excitement, or from the most sudden and profound nervous and mental prostration.

The *Causes of Metrorrhagia* require to be considered a little more in detail.

And first, that most vague and common one of general predisposition, should never be lost sight of. Even as we sometimes see in children and others a remarkable disposition to hemorrhage from the slightest wounds or other causes; so in some females, it must always be remembered, there exists a corresponding predisposition to uterine hemorrhage. And this constitutional peculiarity should be carefully studied with reference to its connection with a psoric diathesis. In such cases, the characteristic of the difficulty and of course the key-note of the only Homœopathic remedy, may really consist in some far-off and apparently unimportant symptom. Our meaning here will be well illustrated by the instance of the picking of the nose as an indication for Cina in metrorrhagia arising from the presence of worms in the intestines,—which has sometimes been known to have kept up for many months a constant stillicidium of blood from the uterus. Here we can readily see the relation between the comparatively trifling symptom of picking of the nose and the irritation of the bowel caused by the ascarides and the consequent uterine irritation and hemorrhage. The fact that in many cases it is entirely impossible to trace any such physiological connection between remote symptoms, which still seem to be characteristic, and the disorders themselves, should not therefore induce us to conclude that such connection does not exist.

The manner in which violence, accidents, and physical and mental excitement, and debilitating mental and bodily causes act, in producing metrorrhagia, is very similar to that in which in other instances the same influences result in menorrhagia. But it is well to bear in mind that violence and excessive bodily and mental excitement tend to establish arterial hemorrhage; while exhausting and debilitating influences upon the physical organism, and depressing mental emotions tend to produce passive or venous hemorrhage. Mental and bodily excitement go together, equally stimulate the arterial action; while all depressing influences, whether physical or moral, tend to paralyze the peripheral nerves,—and thus arrest the capillary circulation. In the former case, we may find violent and dangerous

Metrorrhagia, of bright red blood; in the latter, a passive flow of dark stringy, or perhaps clotted blood, which from its intractable persistence is no less alarming, since the greater the debility which results from the flow, the more difficult it becomes to arrest the flow itself.

In certain chronic diseases or disordered conditions of the blood, such as are found in anæmic and in scorbutic patients; such as are seen to result from the excessive use of salt food,—as in scurvy; and such as follow the long-continued use of potash,—as in bread largely prepared with saleratus, the blood is thin and watery, loses its rich color, its fibrine is dissolved, especially by the action of the potash, and passive hemorrhages readily make their appearance. This state of the system, resulting in many instances from easily discernible causes, is analogous to the hereditary condition just referred to under the names of constitutional peculiarity and psoric diathesis. In either class of these affections, the abnormal liquidity of the blood favors the extravasation; and it is easily understood that the losses of blood,—although replaced as to quantity by the absorption of water called for by the intense thirst so commonly seen after severe hemorrhages,—do but still further aggravate the disposition to metrorrhagia.

In certain constitutions there is seen in connection with the catamenia, a remarkable disposition towards violent hemorrhage. And the same thing is equally true in other cases unconnected with the menses. This disposition may be termed a constitutional *metrorrhagic molimen*, in which,—under the influence of appropriate exciting causes,—the blood rushes to the uterus, and flows from it; just as sanguineous congestion and hæmoptysis result from corresponding excitement of the pulmonary organs. Cases of metrorrhagia of this class are mostly to be seen in persons of a plethoric habit, who are thus almost exactly the opposite of those above mentioned as anæmic, scorbutic and scrofulous.

The alarming, frightful, and sometimes even fatal metrorrhagias, which may arise from even very small polypi, have already been referred to in the description of these forms of uterine tumor. In cancer of the uterus, the metrorrhagia is often periodical, even in those who have long passed the critical age; it is alarming both from its quantity and from the frequency of its recurrence; it may be very sudden and severe from the destruction of some important blood-vessel; it may alternate with a limpid, serous, or extremely fetid discharge; it may form from time to time a sort of crisis in the

cancerous disease and congestion; it often augments during the whole course of the case, but may sometimes suddenly cease, leaving the patients entirely free during the latter part of their existence.

The metrorrhagias which arise from *placenta prævia*, from retained placenta,—and from other causes in connection with parturition, will be more particularly considered in the description of the difficulties of Parturition itself.

Those which arise from abortion may be due either to the violence or other causes of the abortion itself, or to the prolonged retention of the ovum and placenta. The latter has been known to have remained for weeks, keeping up a more or less constant hemorrhage during the whole time. But this subject will also be more fully and appropriately discussed in connection with the general subject of Premature Delivery.

Still another most important class of metrorrhagias is found in those which appear after the change of life. These may arise in some instances from disorganization of the tissues of the womb itself; but in most cases the hemorrhage is believed to be due to the real *metrorrhagic molimen* already referred to, or to the continuance of the same scorbutic or psoric influences in the system, which have been described as producing metrorrhagia in the earlier periods of the female life. In these cases, the hemorrhage may be more or less constant; or it may alternate, in various ways, with a watery or a leucorrhœal discharge. For even in those persons who have long passed the critical age, a certain amount of periodicity is observable. But the subject will be again considered in the chapter on the Change of Life.

The attendant symptoms, although always to be taken into consideration in prescribing for a case of metrorrhagia, need not here be recited. They are mostly symptoms of debility and prostration in various degrees and forms; it should be borne in mind however that some patients bear very severe losses of blood with comparative impunity, while others suffer very greatly from every slight hemorrhage.

The *treatment* of metrorrhagia requires the utmost quiet on the part of the patient, and the strictest attention to all the circumstances and conditions, on the part of the physician.

This is not a local affection, but is always constitutional, dependent upon some general disease which, when abated, the hemorrhage is controlled, except in case of actual rupture of the uterus, placenta

prævia, and atony or paralysis brought on by too suddenly evacuating the contents of the uterus.

The following remedies, and others mentioned under other titles relating to the different varieties of uterine hemorrhage, should be carefully studied and compared.

Aconite. In active hemorrhage, with fear of death and much excitability. She cannot sit up even in her bed. She seems so giddy she falls over. Particularly suitable to females of full, plethoric habit.

Antimonium crud. Uterine hemorrhage, with a distinct pressure in the womb as if something would come out. Somewhat rheumatic. White tongue. Nausea and vomiting.

Apis. Profuse uterine hemorrhage, with heaviness in the abdomen; faintness. Great uneasiness and yawning. Red spots, like bee-stings, upon the skin, and sensation, as if stung by bees, in the abdomen and in different parts of the body.

Argentum nit. Uterine hemorrhage, with much trouble in the head. Confusion, dulness and much pain, greatly aggravated by the least movement. A short time seems very long to her; and every thing done for her seems done so very slowly. She has, for instance, been flowing an hour, and to her it seems *hours;* we work rapidly for her safety, and she thinks we are so very slow.

Arnica m. In cases from a fall, a shock to the system or a concussion. Blood bright-red, or mixed with clots. Nausea in the pit of the stomach. Warmth about the head and the extremities cool.

Arsenicum. Hemorrhage with lancinating burning pains; in low states of the system, when aphthæ appear.

Belladonna. Profuse discharge of bright-red, hot blood, with pressing or forcing (outwards) as if all would escape the vulva; or pain in the back as if it would break. The blood sometimes has a bad smell. A flow occurs at times between the periods. Sometimes a vascular excitement prevails; throbbing of the carotids; flushed face, red eyes and full, bounding pulse.

Bryonia. Hemorrhage of dark-red blood, with pain in the small of the back and headache as if it would split. Dry mouth and lips. Nausea and faintness on sitting up in bed.

Calcarea carb. The history of the case shows that she has always menstruated too often, too much and too long. It seems difficult for her to stop menstruating. Leucophlegmatic constitution. Cold, damp feet. Swelling at the pit of the stomach like a saucer bottom

up. Vertigo on stooping,—worse on rising again or on going up stairs.

Cantharis. Uterine hemorrhage, with great irritation in the neck of the bladder. Urinating often, smarting, cutting and burning in passing only a few drops.

Carbo veg. Passive metrorrhagia with much itching of the vulva and anus.

Chamomilla. Metrorrhagia of dark, coagulated blood, with tearing pains in the legs, and violent labor-pains in the uterus. Hemorrhage of dark blood with pressure towards the uterus and frequent discharge of colorless urine. Great irascibility.

China. Hemorrhage from the abuse of Chamomilla. Discharge of clots of dark blood. Uterine spasms. Desire to urinate. Colic. Also after miscarriage, or labor, or at any other time when there is much loss of blood. Coldness and blueness of the skin. Twitching and jerking of single muscles. Heaviness of the head, ringing in the ears, loss of sight and fainting; in the most desperate cases of this type, China will speedily cure.

Cocculus. Particularly in pregnant females.

Coffea. Hemorrhage with excessive sensitiveness of the organs and voluptuous itching; she would like to scratch, but there is too great sensibility.

Creasotum. Discharge of a large quantity of dark blood; then for a few days bloody ichor with pungent odor, corrosive itching and smarting of the parts; then the discharge recommences and the same phenomena transpire again.

Crocus. After miscarriage or labor, or from dancing or a long walk during the catamenia, with or without pain, there is a discharge of a *dark, stringy* blood; it comes away in *dark* or *black* strings. Often there is a sense of rolling and bounding in the abdomen; sometimes there is a similar feeling in the stomach.

Ferrum m. Hemorrhage with fiery-red face, and hard, full pulse. After parturition or miscarriage, a frequent discharge of partly fluid and partly black, clotted blood, with violent labor-like pains, full, hard pulse, and frequent short shudderings; headache and vertigo; constipation and hot urine.

Hyoscyamus. Hemorrhage after accouchement, miscarriage, or at any time when there are general spasms of the whole body, interrupted by jerks or by twitching of single limbs; the bright-red blood continuing to flow all the time.

Ignatia. Hemorrhage after the abuse of Chamomilla. Heavy

sighing and sobbing, with empty feeling at the pit of the stomach. Great despondency.

Iodium. Uterine hemorrhage occurring at every stool, with cutting in the abdomen, pains in the loins and small of the back.

Ipecacuanha. Constant flow of bright-red blood with cutting about the umbilicus, or nausea. *Very* frequently used after parturition or miscarriage.

Lachesis. Pain in the right ovarian region increasing more and more until relieved by a discharge of blood.

Laurocerasus. Profuse discharge of liquid blood with nightly tearing in the vertex.

Lycopodium. Hemorrhage with cutting pain across the abdomen from right to left. Great fermentation in the abdomen and discharge of much flatulence.

Mercurius s. Metrorrhagia in aged females, scorbutic gums, salivation. Mucous or muco-sanguinolent stools with tenesmus.

Nitric acid. After miscarriage or confinement, with violent pressure as if every thing were coming out at the vulva; with pain in the small of the back, through the hips and down the thighs.

Nux mosch. The blood is thick and dark, with intolerable dryness of the mouth and tongue; the tongue is so dry that it sticks to the palate. Fainting. Sleepiness.

Nux vomica. Metrorrhagia as a precursor of the critical age; also after parturition, particularly if there be constipation of large, difficult stools, or frequent call to stool, with small and painful stools, or without result. She leads a sedentary life, drinks much coffee, wine or other liquids, and lives on highly seasoned food. She is dyspeptic and cannot sleep after three or four A. M. Dreams frightful dreams and does not sleep well.

Phosphorus. After difficult labor; between the monthly periods; or during pregnancy. Particularly in tall and slim females. Weak and empty feeling across the abdomen. Constipation of narrow, dry, difficult stools. Much belching of wind after eating.

Platina. Metrorrhagia of dark, thick blood with pain in the small of the back, which penetrates into both groins; with excessive sensitiveness of the genital organs. Metrorrhagia with the sensation as if the body were growing larger in every direction. In pregnant females.

Pulsatilla. Metrorrhagia, profuse at times; at other times intermitting and mixed with clots,—most profuse in persons given to

reveries. Also at the critical age. In females of mild, tearful temperament.

Rhus tox. Metrorrhagia in pregnant females of a rheumatic diathesis, worse on change of weather.

Sabina. Hemorrhage at the menstrual periods; after miscarriage; after parturition. The blood is dark, having blackish clots mixed with thin watery blood. The pain extends from the back through to the pubis. Painless loss of dark-red blood immediately after delivery. Sabina is used in frequency next to Ipecac.

Secale corn. Passive hemorrhage of very fetid blood. Sallow face. General debility, insensibility and feverish pulse. Passive hemorrhage in feeble cachectic females, particularly when the weakness is not caused by previous loss of fluids.

Sepia. Chronic metrorrhagia, when it is excited from the least cause. She has yellow spots on the face, a yellow saddle across the bridge of the nose. She has icy cold paroxysms; icy cold feet; and has flushes of heat. Painful sense of emptiness at the pit of the stomach. Urine fetid; it has a sediment as if clay were burned on the bottom of the vessel. Constipation. Stools mixed with mucus. Sense of weight in the anus.

Silicea. Metrorrhagia with terribly offensive sweating of the feet. Constipation of difficult lumps which the rectum has not action enough to expel and which sometimes recede after being partially expelled.

Stramonium. Metrorrhagia, with excessive loquacity, singing, prayers and praise. Full of strange and absurd ideas.

Sulphur. Chronic hemorrhage. She seems to get almost well, when it occurs again and again, day after day for weeks. She is weak; has weak and fainting spells; flushes of heat; heat on the top of the head, and cold feet. Sleep very light, often gets awake, wide awake. Feels very weak in the morning; gets hungry spells when she cannot wait for her food, especially for her dinner.

Sulph. acid. Metrorrhagia with tremulous sensation in the whole body without trembling.

CHAPTER TWENTY-FIRST.

REPRODUCTION.

REPRODUCTION forms one of the three most general divisions of the functions of organic life,—Nutrition and Innervation constituting the two others. It includes therefore the aggregate of the more particular functions which concur, in organized beings, towards the reproduction of their kind. *Generation*, although by many authors employed as synonymous with reproduction, may be used in a more restricted sense and understood to mean the simple creation of germs. *Copulation* expresses the union of the sexual organs, by which the germs of the male are brought into contact with those of the female. *Impregnation* represents the application of the semen or germ of the male to the ovum or germ of the female. *Fecundation* expresses the union of the two germs, or rather the influence exerted by the former upon the latter. *Conception* expresses, in the first instance, the result of the reception of the semen of the male by the female ovum,—the embryo or new creation, which arises from the influence of the semen upon the ovum, or from the union of the one with the other; and in the second instance it expresses the reception of this embryo into the womb. *Gestation* expresses the bearing or carrying of the embryo, both in the ovary and in the uterus, from the moment of its origin in conception to its final expulsion in parturition. While *Utero-Gestation* properly covers that portion only of the period of gestation in which the embryo is borne within the uterus itself.

Provision is made in the constitution of the individuals of the human race, as in other orders of the animate and even of the inanimate creation, for the perpetuation of the species. This is effected by means of *generation*, which results from the union of the male and female sexes. The act by which this union is effected is termed *copulation*. The two sexes are differently constituted in the various characteristics of their mental and moral being, and this difference of interior constitution becomes the foundation of corresponding differences in external form and in sexual organization.

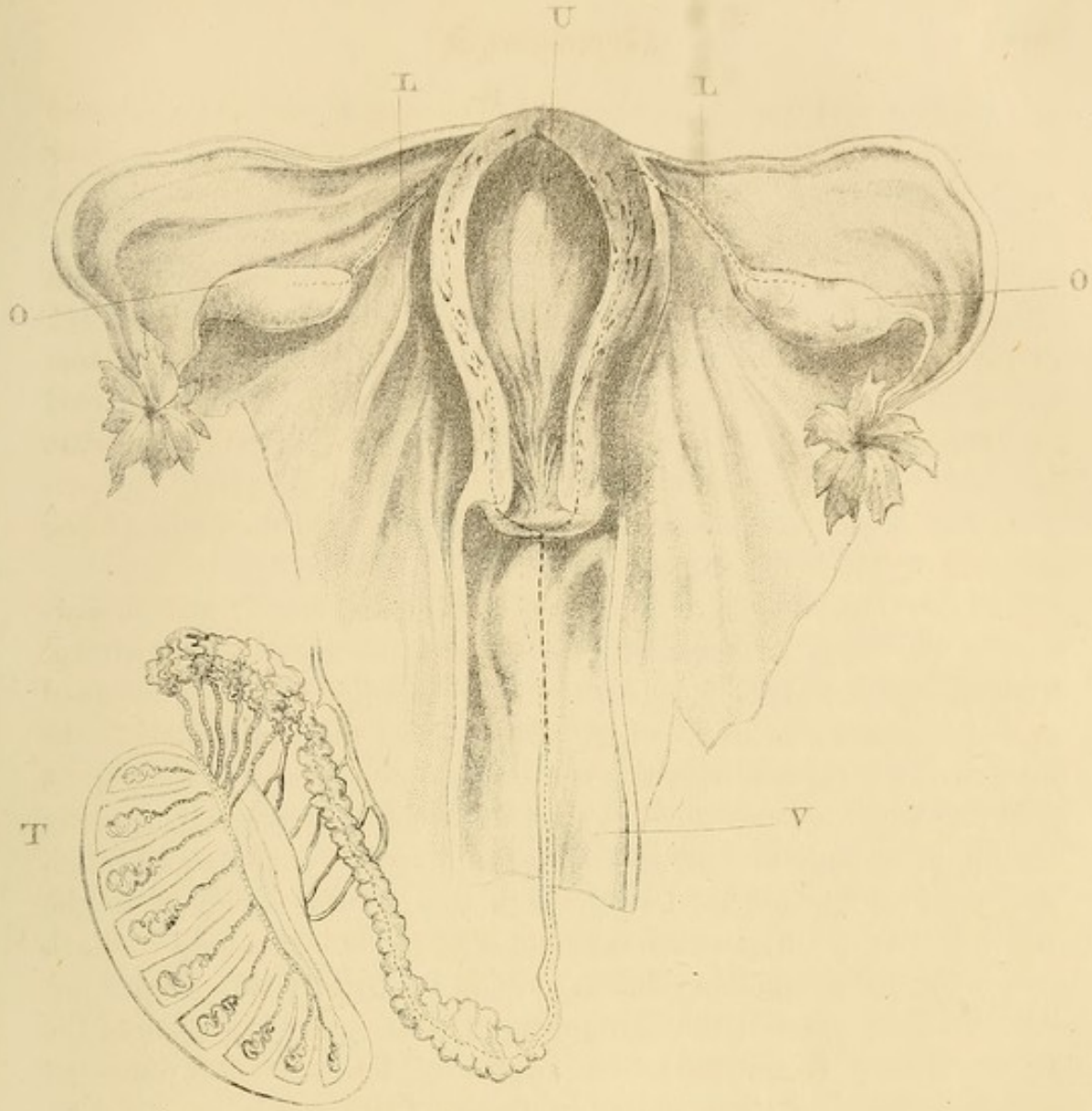
To the pure all things are pure. For the benefit of the human race then these things may be explained. The respective mental and

moral characteristics of the male and of the female are so constituted as to correspond to each other, so that from the conjunction of one man with one woman in the married state there results a perfect union, a complete man. Apart each represents but an incomplete moiety; together, they form a complete whole. In like manner the different sexual organs of the male and female are mutually adapted to each other; through their conjunction the prior spiritual and affectional union of the one man with the one woman is ultimated, confirmed and consummated. And through this conjunction, in the holy state of matrimony, is accomplished the procreation of offspring, the perpetuation of the race,—in which are at once secured the highest hope of the individual and the noblest aim of his being.

In their mutual adaptation to each other, in general and in particular, the male is formed for giving and the female for receiving. Thus the male and the female are seen to correspond,—to be adapted and yet opposite to each other. During the act of copulation, the male secretes the semen in the testicle, and deposits it in the vagina of the female,—whence the fecundating principle arises, and, entering certain ducts specially arranged for that purpose, passes up through the walls of the uterus, out through the ovarian ligament to the ovary. Here it enters and impregnates an ovule on that side. Each ovule, egg or Graafian vesicle terminates a distinct tubule or *seminiferous duct*, which is the extremity of the receptive organism of the female, and corresponds to the origin of the vasa differentia or emissary vessels of the donative organism of the male.

See the Plate opposite this page; the semen is represented as passing from the testicle, through the penis,—which is introduced into the vagina,—from thence its course may be traced upward through the uterine parietes and ovarian ligament to the ovary of either side.

The penis of the male and the vagina of the female are chiefly useful in producing the excitement, sexual orgasm, requisite for the secretion or flow of the semen of the male, and at the same time to open up and prepare the way for its ultimate reception by the female. For however ardent the emotions and however strong the affections on either side, the semen can neither be properly secreted and discharged, nor can it be suitably received, without such corresponding excitement in the sexual organs themselves as is provided for by the impulsive and repeated movement of the delicately sensitive glans penis along the course of the vagina, whose interior is diversi-



The above engraving represents the union of the extremes of the sexes.

The male, in all respects, is created for giving, even from the very inmost; the female, for receiving, even into her inmost. Hence the fecundating principle, secreted in the testicle from the bosom of his blood, is transmitted,—as shown by the dotted line,—to her ovary; where it is received into the ovule, and becomes conjoined with that which is secreted from the bosom of her blood. Thus the extremes meet in the ovule, within the ovary; and thus conjointly united, the male and the female principle become at once and forever a new creation, a new human being.

U.—The Uterus.
T.—The Testicle and Appendages.
O O.—The Ovaries.
L L.—The Ovarian Ligaments.
V.—The Vagina.

The dotted line represents the passage of the fecundating principle, from the testicle, through the vagina, uterine walls and ovarian ligaments, to the ovaries.

fied by equally sensitive rugæ and rendered stimulating by the peculiar secretion from these numerous surfaces.

By such conjunction of the sexes, in which, in its most perfect fulfilment, all the highest emotions of the human soul and all the energies of the spirit are excited, developed and ultimated in a corresponding intense orgasm and copulation of the sexual apparatus, is accomplished the first step in the reproduction of the species. And there results what is termed *fecundation*, or that inspiration of the ovum of the female by the vivifying influence of the semen of the male, in which is laid the physical foundation of a new creation, and in which are at the same time inspired also the germinal principles of the human soul. And according to the perfect, united and harmonious co-operation, alike on the part of the male and of the female, of all the powers of body, mind and spirit, will this rudimentary germ of a new creature be capable of eventual development into a perfect individual representative of the human race.

The ovum thus impreguated and constituting a new creation, presently escapes from the ovary, descends through the Fallopian tube into the uterus, where it remains for further development, and is nourished and protected during the nine months of *gestation*. This period being completed, it is finally expelled from the uterus, by the process to which are applied the terms *labor* and *parturition*.

The semen of the male is principally and in the first instance secreted by the testes themselves; in its passage it is commingled with the more delicate secretions of the corpus Highmorianum, the epididymis and vasa deferentia. To this are superadded the secretions of the prostate, of Cowper's glands and of the vesiculæ seminales. These latter appear to protect and perhaps otherwise modify the original product of the testes and render it more capable of fecundating the female ova.

In the mature condition, the semen principally consists of an extremely small quantity of a viscid fluid, and of innumerable, minute linear corpuscles, having a peculiar movement, which are termed by Kölliker, the spermatic filaments or animalcules,—*spermatozoa*. The semen, regarded as a whole, and as it is found in the *vas deferens*,—that is before any admixture with the secretions of the above-mentioned glands and mucous follicles which give it its peculiar odor,—is whitish, viscid, and inodorous, consisting almost entirely of spermatic filaments or spermatozoa, and containing between these bodies an extremely minute quantity of connective fluid. In the pure semen these filaments exhibit no movements, or scarcely any when

it is too much concentrated. The movements of the spermatozoa are first visible after the semen has entered the *vesiculæ seminales.*—*Kollicker.*

The *spermatozoa* constitute the essential peculiarity as well as the larger portion of the immediate secretion of the testes. These bodies, deemed essential to the procreative function of semen, are now believed to be the products of the formative action of the organs in which they are found; and cannot therefore be ranked in the same category with animalcules.—*Carpenter.*

The semen, as finally imparted to the female in copulation, consists then of three distinct portions; first, the original vital secretion of the superior portion of the testes; secondly, of the delicate fluids which are associated with this secretion as it passes through the secondary structures of the epididymis and vasa deferentia, which stimulate its filaments to active movement; and, thirdly, of the more voluminous mucous secretions of the subsequent glands and follicles, which envelope the whole as with a natural body. These three diverse and yet harmonizing elements are essential to the prolific and fecundating action of the semen. For neither the spermatozoa, nor the delicate secretions of the vas deferens, nor yet the grosser products of the various glands, can accomplish this great end separately.

These three constituent elements of the semen correspond to the body, soul and spirit,—and the semen is thus seen to be in each perfect globule a miniature man. Since within the inmost substance of each seminal nucleus is contained the very highest soul and life of the parent; the delicate fluids which immediately surround the minute globule are inspired by the animal spirits,—which serve to stimulate and awaken the spermatozoa to action; while the more gross and exterior mucous envelopments correspond to the animal body. Or the three different parts of which the semen is originally composed may be considered to be the spermatozoa, the granules and the connective fluid of the testes, the whole enveloped by the mucous secretions from the inferior glands and follicles. It is found that the minutest appreciable particle of the semen is capable of effecting fecundation; each minutest particle is therefore a perfect and complete semen or seed of itself. Thus while no one of the several components of the seed globule is of itself capable of fecundating;—each, in combination, is essential to the accomplishment of this object. Each minutest globule of semen, being perfect and complete, is composed therefore of the same several and indispensable ingredients; and must consist of a single spermatozoa; of

a seminal granule; and of an enclosing tissue of connective fluid in which the spermatozoa disports itself,—the whole covered and enveloped by the mucous secretion. Each particle of semen is therefore of itself a complete, organized, living body; a form representative of all the mental, moral and physical faculties, attributes and qualities,—whether orderly or disorderly,—of the parent from which it comes; and capable also of impressing its own type, in all these respects, upon the new creation which results from its union with the female ovum.

This organization of the seminal globule, which makes it correspond to a representative of the body, soul and spirit of the parent, finds in the female ova a corresponding threefold organization, equally representative of the female constitution. And the semen of the male therefore unites and combines with the ovum of the female, in each one of these three constituent and representative forms, in more or less perfect harmony, according to the more or less perfect adaptability of the male parent to the female. And as in the mingling of different races, the stronger takes the lead and predominates in the offspring; so in the union of the seed of the different individuals, the stronger predominates in the moral, mental and physical characteristics impressed upon the child. Thus as the lower, more gross and material portion of the male semen meets its counterpart in the grosser organization of the ovum, with which it unites and which it vitalizes with its degree of life; so each of the other constituent forms of the semen necessarily unite with and inspire the corresponding representative organization of the ovum. The ovum then receives, cherishes and nourishes the vitality imparted to it by the male semen, and the living form which is the result of such reception partakes of the qualities of the ovum on the one part and of the semen on the other, even as these are but faithful representatives of the various qualities, whether orderly or disorderly, of the male and female individuals from which they spring.

And even as it was stated in general at the beginning of this chapter, that all the sexual organs of the male were for giving, and all those of the female were for receiving; so here now it is particularly seen how the female ovum becomes receptive of the semen of the male. And at the moment of this vital reception, the entire female organism feels its influence, and prepares forthwith to provide for the protection, sustenance, growth and development of the new creation. This impregnation and fecundation of the ovum is called *Conception*. And this product of conception usually remains quiet within the

ovary for about the space of five days. During this time the first initial stages of subtle and mysterious vital organization and growth are taking place. Processes too minutely recondite for successful exploration by the eye of man. Wonderful arcana of nature! in which, after all our profoundest scrutiny into the mystery of life, we can discern only the means and the ends,—but not the manner. We see the minute, representative forms of two lives combined to produce a third, in which shall appear, during all the possible three-score years and ten of its subsequent life, the general characteristics of the human race as distinguished from that of other forms of animate nature; the general characteristics of the nation or tribe to which its progenitors belong; the characteristics of the family as distinguished from those of other families in the vicinity; and lastly the personal peculiarities of each of the immediate parents,—all which are impressed upon the embryonic germ, grow with its growth, and strengthen with its strength.

During this time in which the fecundated ovum remains quiet in the ovary, the interior surface of the uterus is being prepared for its reception. Under the influence of the impetus imparted to the entire system by this event of conception, the mucous lining membrane of the uterus becomes deeply congested, as in spontaneous ovulation. But the dynamic change which conception produces in the whole system, prevents this congestion from passing off in the form of critical hemorrhage,—as otherwise in menstruation,—and the formation of the decidua results instead.

Thus by the time the fecundated ovum bursts through its original seat in the ovary and reaches the uterus, it finds prepared for it a thick, rich, soft, vascular and velvety lining, quite different from that which is to be found in the unimpregnated uterus. This hypertrophied development of the mucous coat of the uterus, forms a sort of bed into which the impregnated ovule is received immediately upon its escape from the Fallopian tube. This, which is the original mucous lining membrane of the uterus, forms what is termed the *decidua vera*. While the subsequent extension of the same growth, which completely envelopes the ovum, is called the *decidua reflexa*. The decidua thus constituted and developed form a sort of nidus or nutritious nest, in which the villi of the ovum take root, and from which the development of the ovum itself, already quite advanced, now progresses still more rapidly.

Here then will appear the contrast between spontaneous ovulation and that which occurs in connection with impregnation. In the

former instance, the disengaged ovum passes from the ovary through the Fallopian tube, only to be swept away by the menstrual flood, which forms the crisis of the menstrual molimen. In the latter instance, the fecundated ovum, reposing for a few days in its original bed in the ovary, emerges at length from the ovary, and passes into the uterus to find, as the result of the uterine congestion attendant upon its escape from the ovary, the beautiful provision already described for its reception, under the name of decidua vera. Under the influence of the same congestion that attends this emergence of the ovum from the ovary, the Fallopian tubes become erect, and fix their fimbriated extremities upon the exact portion of the ovaries from which the ova are about to issue. The stimulus which arouses these tubes to their almost instinctive action, is to be found not in the orgasm of copulation, as is alleged by many authors, but in the reflex action of the emergence and escape of the ovum itself. The same reflex action of the *first birth* of the ovum ;—of its escape from the ovary,—causes the exact and timely application of the fimbria of the Fallopian tubes to the ovaries; and, in the case of spontaneous ovulation, results only in the critical discharge of the menses, which relieves the uterine congestion; while in the case of impregnated ovulation, Conception, it ultimates itself in that congestion of the mucous membrane of the uterus which forms the *alma mater* of the descending ovum.

Hitherto we have attempted to explain the nature of generation, or the reproduction of the species; the nature of the Semen of the Male and of the Ova of the Female,—their representative character; the mode of their union in copulation ; the results of that union, in Conception ; and the natural history of the Product of Conception from its first development and brief stay in the ovary, to its arrival at its more permanent but still temporary resting-place in the uterus. There will be seen an analogy between the repose and primary growth of the impregnated ovum in the ovary, and its much longer residence and final development in the uterus. The first is the era of Conception, the latter is the period of Gestation, or Utero-Gestation, to which we now invite your attention.

GESTATION, the act of bearing the product of conception, strictly speaking, begins at the moment of conception. As already explained, during a very small portion of this period the fecundated ovum is still retained within the ovary. But after a few days consumed in the vital organization of the ovum itself and in preparing the uterus

for its reception, the ovum usually descends into the uterus through the Fallopian tube of that side. From this moment the general term gestation is replaced by the more particular one of *utero gestation.* The cases of the so-called extra-uterine pregnancy occur from the failure of the impregnated ova to be properly transmitted through the Fallopian tubes to the uterus. In such cases the ovum may increase in size and development,—being nourished in a manner to be subsequently described,—wherever it may finally be deposited, whether in the Fallopian tube, in the adjacent folds of the perineum, or even in the ovary itself.

The more general term of *gestation* will however continue to be used here, since it is more convenient, and more applicable in some respects, such as in speaking of its period,—which, reckoning from its commencement at the moment of conception to its close at parturition, is *two hundred and seventy days,* or *nine solar months.* This period is however by no means invariable. For, not to speak in this place of those abortions, miscarriages and premature deliveries which are the results of accident or of disease more or less palpably developed, there are many instances recorded of persons who from some individual peculiarity have much prolonged this period. While in other instances there seems to have been a disposition to shorten this period, independent of any apparent morbid condition. Generally speaking, the shorter the period of gestation, the less viability has the child after birth.

As already explained, conception always takes place within the ovary; and where the embryo, the product of conception, descends regularly into the uterus, and there becomes developed, it constitutes what is termed a *good, normal* or *uterine pregnancy.* But when it does not thus descend and become developed in the womb,—if it remain and is developed in the ovary, if it fall into the cavity of the peritoneum, stop in the Fallopian tube, or become engaged in the substance of the womb itself, it forms a *bad, extraordinary* or *extra-uterine* pregnancy.

Uterine Pregnancy may be *simple* when the uterus contains but a single ovum; *double, triple, quadruple* or *compound,* according as there are two, three, four or more fœtuses; and *complicated* where, in addition to the fœtus, there is also found a tumor, polypus, dropsy or other pathological formation in the abdomen.

Extra-Uterine Pregnancy may consist of one or the other of the four following varieties, according to the location of the fecundated ovum: 1. Ovarian, where the ovum continues its growth in

the ovary itself; 2. Peritoneal, where the ovum fails to be received by the fimbria of the Fallopian tube, and thus becomes lodged in the folds of the surrounding peritoneum; 3. Tubal, where the ovum is arrested in its passage through the Fallopian tube, and is there developed; 4. Interstitial, where the ovum penetrates the parietes of the uterus instead of attaching itself to its interior surface. In either of these varieties, extra-uterine pregnancy must sooner or later terminate disastrously,—unless relieved by the Cæsarian section,—since normal parturition is impossible, except perhaps in the last.

What, by some authors, is termed *false pregnancy*, consists in an enlargement of the abdomen from the presence of hydatids or other tumors,—when in reality no living fœtus is present.

Simple, Uterine Pregnancy.—Upon the occurrence of pregnancy we have to do with two different living beings, which although still united, the one within the other, present two different subjects for our consideration and two different classes of phenomena for our study. The female, the prospective mother, represents one of these; and the embryo, the future child, represents the other. We will first study the influence of pregnancy upon the female; and observe the various changes which it introduces into the entire economy. The manner in which the anatomical structure, the physiological functions, and the intellectual and moral states and sensibilities are affected by this new condition of pregnancy, must be carefully explained. This account of the Natural History of Pregnancy will be succeeded, in a subsequent chapter, by a description of the disorders incident to pregnancy and a detail of the principal remedies required for their successful treatment.

CHAPTER TWENTY-SECOND.

PREGNANCY.

Physiological and Anatomical Changes.—Where fecundation does not occur, in copulation, the orgasm of the female sexual apparatus is as temporary as that of the male. But when fecundation does result, the excitement, congestion and turgescence of the uterus and Fallopian tubes become continuous; and numerous physiological and anatomical changes are established. Some of these are local; some more general; some are transient, others endure through the whole

period of gestation; some affect the physical economy only, others in a remarkable degree disturb the mental states and moral sensibilities; and finally, some of these changes are purely healthy and normal; these we shall consider in the present chapter,—while others, being accidental, morbid conditions, or the developments of inherent morbid predispositions, will be subsequently described.

The UTERUS becomes the seat of the most remarkable and first apparent of these changes,—in which both the cervix and fundus partake. Those which occur in the neck being separate from although simultaneous with those occurring in the body; the former also resulting from the latter. Thus the cervix softens and enlarges from below upwards, as the body softens and enlarges from above downwards, during almost the entire period of pregnancy. And the alterations affect this organ in every respect,—principally in its volume, form, situation, structure and functions. Let us first examine the changes in the *body* of the uterus.

As explained in a previous chapter, the congestion attendant upon a menstrual crisis produces a temporary increase in the uterine parietes. A similar and more permanent result attends fecundation. The orgasm of coition seems in some measure perpetuated; and a permanently hypertrophied condition of the uterine walls becomes established.

Volume, Size.—The mucous lining membrane becomes congested and almost double in thickness. And in consequence of this development of its vessels, as described by Cazeaux, and especially of the minute glands of which it is partly composed, it has its thickness so much increased in proportion to the size of the uterine cavity, as to be thrown, in a great many subjects, into soft, projecting folds or circumvolutions, which are so pressed together as to leave no vacant place in the cavity of the uterus. This, as will be subsequently explained, constitutes the *decidua* or enveloping membrane into which the fecundated ovule is received upon its entrance into the uterus from the Fallopian tube of the side corresponding to that of its ovarian birth-place.

Immediately upon its reception of the embryo, the uterus commences to increase in size,—not uniformly, but in a ratio proportioned to the larger development of the fœtus. That is, the larger the fœtus the more rapid the enlargement of the uterus. This growth of the uterus takes place in every direction; and is not a mere mechanical distention, as if arising from the outward pressure of the increasing ovum, since its walls are not thinned, but it is

proved to be a true physiological development, in which both ovum and uterus partake simultaneously and in unison.

Form.—The uterus instead of remaining flattened, on its two surfaces, becomes rounded, and then pyriform in the earlier stages of pregnancy. While in the later months, it becomes spheroidal, and finally assumes the form of an ovoid, which is slightly flattened from before backwards, and has its point looking downwards. "Of dimensions nearly equal in every direction, about the fifth or sixth month the uterus exhibits the figure of a spheroidal vase terminated by a very short neck; it might be compared to a hog's bladder, with the urethral extremity surrounded with thread for an inch or two; supposing some one should unwind the thread by degrees, from above downwards, while another blows into the bladder from the fundus, so as to distend it, we should acquire a pretty clear idea of the gradual effacement of the cervix of the womb."—*Velpeau.*

In the latter months of utero-gestation, the shape of the uterus is modified by the exact relative position of the fœtus. That side of the fundus which is occupied by one of its extremities is sometimes more elevated than the other. And since in the most usual presentations the trunk of the fœtus is found to incline to the right side, this portion of the fundus of the womb will often be found most elevated. These general statements as to the shape of the gravid uterus are, however, liable to exceptions,—which may arise from the number of the fœtuses, or from the varieties in the original shape of the uterus itself.

In its *situation* the gravid uterus is subject to important changes. These changes arise in the first instance from the change in size of the organ itself. Remaining in the pelvic cavity, during the first three months of gestation, the uterus sometimes becomes at first slightly depressed, so that its cervix approaches nearer to the vulva. This is especially the case in those in whom the pelvis is large. Still this depression of the uterus, when it does occur, is but temporary; and at three months, the position is in all respects almost exactly the same as before impregnation.

From the third and-a-half to the fourth month, the uterus finding itself more and more incommoded as it increases in size, gradually forces itself upwards from the excavation of the pelvis; rises above the superior strait; then to the level of the umbilicus; and towards the close of pregnancy it reaches the epigastric region. But during the last two weeks of gestation the uterus commences to sink down somewhat; and this, which is regarded as one of the earliest signs

of approaching parturition, is in fact almost the commencement of this process, since in most instances it results from the approximation of the fœtal head towards the cavity of the pelvis, and in some cases from its actual entrance into the cavity itself.

Direction.—The changes in the direction of the womb in pregnancy are no less remarkable than those of size and form. While still remaining within the pelvic cavity, the uterus, from the greater weight of the posterior portion of the fundus or upper portion, inclines backwards, as in partial retroversion; and the os uteri looks forward towards the pubic arch. But this is not always the case in the earlier, or first three months of gestation. In many such cases the fundus will be found inclining forward more in its natural position; while the os tincæ will be reached only by the farthest extension of the finger towards the hollow of the sacrum.

As the uterus in the fourth and fifth months rises above the level of the superior strait, two remarkable directions are assumed and maintained usually till the close of gestation. These are, the inclination forward, as if leaning over the arch of the pubis; and the inclination to one side,—usually the right side. The forward inclination of the gravid uterus is the necessary result of the hard, unyielding nature of the lumbar vertebræ behind and of the less rigid structure of the abdominal parietes in front, in combination with the constant pressure from above of the contents of the abdomen itself. The line of motion which alone is possible for the gravid uterus on emerging from the pelvic cavity, being the axis of the superior strait, as guided by the projecting promontory of the sacrum, will even from the first have given it a decided inclination forward. The lateral inclination, to one side or the other, is the necessary result of the projecting ridge of the lumbar vertebræ; as it would be little less than impossible to balance the uterus on this high-raised median line. The proportion of cases in which the uterus is found inclining to the right side is stated by various authorities to be as high as eight out of ten. But there is less unanimity of opinion as to the causes which produce such a result. Among the various causes proposed to account for this general tendency, no one seems entirely sufficient; nor do many of them unite with any degree of constancy in a given number of cases. Thus if the inclination is to be attributed to the greater weight from the attachment of the placenta, it is found that the placenta is far from being always on the side towards which the uterus is inclined. The same is true of the relation of the colon loaded with fecal matter; of the position of the

female while at rest on the right or left side. For the present, the most plausible opinion appears to be that of Madame Boivin,—that the round ligament of the right side is shorter, stronger and contains more muscular fibres than that of the left, and that to the more powerful action of this ligament is to be attributed the usual inclination of the uterus to the right side. Still there is no doubt that the more active physiological influences do much to determine this matter of the lateral inclination of the gravid uterus; and in confirmation of what is here implied, it may be sufficient to state that according to the observations of some authors, *the uterus inclines to the left in women who are left handed.*

The *thickness and density* of the uterine parietes form two of the most remarkable changes of pregnancy. The non-gravid uterus has already been described as having very thick walls. After fecundation, these walls maintain usually the same relative thickness; although as the uterus itself increases in size, its parietes become less dense, and, instead of being hard and fibrous, are said by Cazeaux, to have a clammy softness, closely resembling that of caoutchouc softened by ebullition, or that of an œdematous limb. "It is now known that the womb preserves nearly the same thickness during the whole course of pregnancy, as it had when unimpregnated. This thickness, which is greater at the insertion of the placenta, generally diminishes from the fundus towards the cervix, where it is frequently found to be not more than two or three lines or even less. It increases a little in all parts of the organ at the same time, until the third or fourth month, and then remains rather below its primitive limits, to exceed them again in the last stages of pregnancy, except the cervix, which at that period especially grows thinner."

Structure.—The immense enlargement of the womb, from its non-gravid size up to that capable of enclosing one fœtus or even more at full term, can only be the result of a very great increase in its entire mass. But this great development in substance,—in which the weight of the uterus comes to be reckoned by pounds instead of by ounces,—is accompanied with a corresponding development of its proper organization. In its non-gravid condition the uterus exhibits only the type of the wonderful development which it acquires in pregnancy, and which is essential to the proper performance of the important functions with which it then becomes charged. "Its fibres, which were pale, dense and inextricably tangled, soften, become redder and soon represent layers and bundles easy to detect and to follow. The cellular tissue, which was before

so firm, dense and elastic, relaxes, becomes supple, and indeed resembles the common cellular tissue, and in this way permits the other elements which it held in bondage, as it were, to follow the impulse that animates the whole womb. The arterial branches, folded upon each other like the vas deferens, and bridled in this condition by dense elastic laminæ, yield to the general relaxation, and gradually become lengthened; their angles at first so sharp, with their doublings, grow blunter, enlarge, and at last exhibit only certain zigzags of greater or less depth, tortuosities which do not impede the circulation.

The *veins* undergo the same metamorphosis: already, in the natural state, larger and less tortuous, they are enlarged and developed still more rapidly than the arteries; afterwards they are observed to furrow the fleshy layer in every direction, and form a net-work which in some measure separates it into two planes. They are large enough to admit a goose-quill, and in some instances the end of the little finger; near the mucous membrane they dilate so as to constitute cones with inverted bases,—which were first termed *uterine sinuses*, but which are now called *venous sinuses*."— *Velpeau.*

The *lymphatic* vessels and the nerves are also enlarged in a corresponding manner in pregnancy. The great change in the texture of the *mucous* lining membrane of the uterus has already been referred to in describing the formation of the decidua. All the component tissues of the body of the uterus receive accessions both in structure, size and physiological activity, to correspond with the new and most important functions which this organ is called upon to discharge in pregnancy and gestation.

The Cervix Uteri is also subject to certain changes during the period of gestation. These occur simultaneously with those already described as affecting the body of the womb; and are the results of the physiological action by which the entire uterus becomes adapted to its new functions. In the consistence of its tissue, in its volume, form, situation and direction, the cervix uteri becomes changed in a remarkable manner; and these changes, so far as they are appreciable, afford valuable indications for determining the fact and the stage of pregnancy.

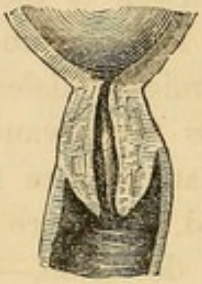
Softening of the tissue constitutes the principal modification of the actual structure of the cervix uteri. The change from a firm, fibrous structure to that of a soft, fungus-like substance, begins at the lower border of the interior surface of the os tincæ, in the first month of pregnancy; and increases from within outwards,

and from below upwards, till at the sixth month this softening embraces the whole thickness of the lips of the os tincæ and the lower half of the sub-vaginal portion of the cervix. This softening of the tissue is always from below upwards, and proceeds also *pari passu* with the development of the fundus. And so exactly is this proportion maintained that an experienced examiner can always determine with very great accuracy the advancement of the pregnancy by noting the extent of this upward softening in the cervix uteri. It must be borne in mind, however, that in those who have had several children, the sub-vaginal portion of the neck of the uterus loses a considerable portion of its length; otherwise the briefer extent of the softening in such cases might mislead the examiner to conclude that the pregnancy was less far advanced than it really was. So also in cases of first pregnancy, since this softening of the cervix uteri is less strongly marked, and more slow in its development, and therefore more difficult of detection,—these circumstances should always be taken into consideration in forming a conclusion in such cases.

The *increase in volume* of the cervix uteri goes on in equal ratio with the decrease in the density of its substance. But the cervix does not shorten,—the description given from Velpeau, on a previous page, of the development of the fundus at the expense of the cervix, is applicable only to the last fortnight of utero-gestation. On the contrary, the length of the cervix may begin to increase a little after the commencement of the fifth month; and this elongation,—which previously had been rather apparent than real,—is continued till the final absorption of the cervix itself in the fortnight immediately preceding parturition. At this period, the whole neck having become softened and thickened, becomes more easily distensible; and the development of the body of the uterus from above downwards meets the softening and development of the neck from below upwards, at this juncture, which is at the *os internum;* and the complete fusion of the fundus with the cervix takes place, and the cavity of the womb is one from the fundus to the os tincæ or *os externum*. This fusion causes the sinking down of the fundus from the pit of the stomach, so often observed in the last weeks of gestation; the fundus must sink as the walls and lower segment of the uterus are expanded. And upon the occurrence of this depression the female breathes freer and feels better in all respects.

The *form* of the cervix uteri differs in the multiparæ from what is observed in the primiparæ; this difference is principally to be

noted in the varying size and shape of the os tincæ and of the cavity of the cervix itself. In the primiparæ, the os tincæ changes from a simple transverse fissure to a circular depression. The cavity from being conical, becomes spindle-shaped; and the softening of the externally constricted os will allow the finger to penetrate into the cavity. The os tincæ never having been ruptured by parturition, its mucous lining membrane rounds it off very nicely; and none of the inequalities, fissures or puckerings so common in the multiparæ, are to be found here.



A section showing the neck of the uterus; the anterior and posterior lips are seen *in situ*, being separated from each other by the fusiform cavity in the neck.

In the multiparæ the numerous cicatrices and indentations render the os tincæ more originally patulous; and the most noticeable effect of the pregnancy upon the orifice in such cases is to cause it to be more easily dilatable. And as the gestation progresses, this dilatibility of the os tincæ becomes an actual spreading out of the inferior portion of the cervix, until it reaches the middle part of the cervix uteri about the seventh month, and nearly gains the internal orifice by the ninth month. The cavity of the cervix goes on enlarging simultaneously with the softening of its walls and the advance of pregnancy. And the opening and cavity become thimble-shaped, admitting the finger farther and farther into it, as the pregnancy advances.

The gradual change in the opening of the os tincæ and dilatation of the cavity of the cervix, may be seen in the accompanying cuts upon the next page. In the preceding account of the changes in the neck of the uterus incidental to pregnancy, we have principally followed the very excellent, and in some respects entirely original, account given by Cazeaux; and for the following summary of these changes, we are indebted to the same author.

Summary.—From the statements made in the preceding sections, we may draw the following conclusions:

I. The tissue of the neck begins to soften at the very commencement of pregnancy, and the softening, although not very apparent in

the early months, and limited to the most inferior part, gradually ascends, so as to invade successively the whole neck from below upwards; though it is much less marked and less rapid in its progress in primiparæ than in other females.

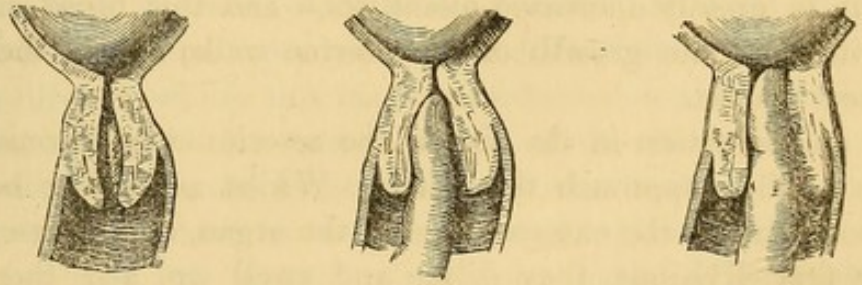
II. The cavity of the neck dilates simultaneously with the softening of its walls; and further, this enlargement causes it to be spindle-shaped in primiparæ; and in females who have already borne children, to resemble a thimble, the finger of a glove, or a funnel with its base below.

III. The external orifice remains either closed, or else very slightly open, in primiparæ, up to the very term of pregnancy; whilst in others, it is widely open, and constitutes the base of the funnel.

IV. The whole length of the neck disappears in the last fortnight, being lost in the cavity of the body.

V. Contrary to the opinions hitherto generally adopted, the neck preserves its whole length until the last fortnight; it does not shorten from above downward during the last four months; but the fusion of the neck with the body takes place only within the last few weeks of gestation.

Fig. 27. Fig 28. Fig. 29.



These three figures give an idea of the gradual dilatation which the cavity of the neck undergoes at various periods of pregnancy.

The Texture and Properties of the Uterus are also greatly modified by the condition of pregnancy. These changes affect the different tissues and structures of which the uterus is composed.

The *serous coat*, or peritoneum, which constitutes the external tissue of the uterus, like the entire substance of the uterine walls, is extended without being diminished in thickness. Just as the uterus itself grows with the growth of the ovum it contains, so its peritoneal covering absolutely grows, and in proportion to the whole growth of the uterus which it envelopes.

The *mucous coat* of the uterus, as already stated in speaking of the formation of the decidua, becomes much more highly developed in pregnancy; and this development belongs to the glands as well as to

the mucous tissue itself. This is also the case with the mucous glands of the cervix; these secrete a peculiar dense, semi-transparent, almost insoluble mass of mucus, which closes and fills the entire cavity of the neck during pregnancy.

The *muscular coat* of the uterus also becomes developed in a corresponding manner during pregnancy; so that the various layers of muscular fibres are much more easily demonstrable at this time than in the unimpregnated condition; and the actual muscular character of this middle coat of the uterus is positively ascertained. The various muscular fibres are now seen to cross and inter-cross in such a manner as to secure the greatest possible amount of strength. And the arrangement of the layers and fibres is such that at every orderly contraction, they all act upon one common centre, the centre of the womb itself. The obliquity of the fibres at the moment of crossing each other, give the *arbor vitæ* appearance seen particularly in the interior surface of the cervix uteri.

The vascular apparatus of the uterus also undergoes very important changes in connection with the advance of pregnancy. These consist in augmented development, which embraces the arteries as well as the veins. Through these vessels the blood flows into and through the uterus in greatly increased quantities,—and this blood supplies the nutrition for the growth of the uterine walls, and of the fœtus which they enclose.

"The augmentation in the size of the arteries only becomes considerable as they approach the uterus. Whilst advancing between the peritoneum and the external face of the organ, and before giving off their first divisions, they dilate and swell up, and then they furnish branches to the anterior and lateral parts, which ramify *ad infinitum;* they are not situated immediately below the peritoneum, but are separated from it by a delicate layer of muscular tissue. All these ramifications anastomose freely and penetrate through to the internal surface, where they generally terminate; but a large number of those corresponding to the placental insertion, traverse the mucous membrane and enter the placental deciduous membrane."—*Jacquemier.* Through these enlarged arteries is conveyed the blood requisite for the growth of the uterine parietes and appendages for the supply of the placenta and of the fœtus from thence. The arterial branches become lengthened with the increasing size of the uterus; but do not lose their original tortuosities, which however do not appear to impede the circulation through them. The veins undergo similar and no less extensive changes. This will be evident from examining them as

they emerge from the uterus; the ovarian veins are nearly as large as the external iliacs, and the uterine veins are but little less in size. In the original state, before pregnancy, they are larger and less tortuous than the arteries; during gestation they become enlarged and developed still more rapidly; and at term they furrow the muscular tissue in every direction, and form a net-work which lies intermediate between its external and internal face. This muscular tissue or coat of the uterus is traversed by a great number of venous branches running in every direction, which anastomose and form large sinuses at their junction. Some of the canals of this plexus, or net-work, are large enough to admit a goose-quill, or in some instances even the end of the little finger.

This is particularly the case at that part of the interior surface of the uterus to which the placenta becomes adherent. Opposite the insertion of the placenta these venous trunks are largest, and they diminish in size as they recede from this vicinity. And in the substance of the mucous membrane, immediately beneath which the placenta is situated, these vessels form through an enormous dilatation of their branches the long sinuses which exist at the adherent surface of the placenta. These sinuses communicate freely with each other, so as to form a reservoir of blood divided and kept in place by numerous partitions. At intervals may be found a small number of orifices through which this mass of blood communicates with corresponding sinuses in the muscular walls of the uterus. The veins, as well as the arteries, are lengthened, growing thus with the growth of the uterus; since even in their greatest extent, in the last months of pregnancy, they still maintain their tortuosities. The areolar tissue which envelopes the uterine arteries is not found on the veins; these latter being placed in immediate relation with the muscular tissue through which they pass. Neither are there any valves to be found in these veins; probably their numerous convolutions and sinuosities may serve to answer the purposes secured by the valves in other venous trunks.

The lymphatic vessels of the uterus also acquire an extraordinary development in pregnancy and gestation. These vessels form several distinct layers or planes in the uterine walls; the superficial being the most fully developed; and, as previously described, they belong to two distinct groups, those of the cervix communicating with the pelvic ganglia, and those of the body of the womb terminating in the lumbar ganglia. The lymphatic system forms, with the arteries and veins, a third and no less indispensable set of vessels; and the neces-

sities of the circulation, of the nutrition (reparation and growth) of the uterine tissues and their contents, require that the augmentation of the lymphatic vessels should be in some proportion to the increase of those of the arterial and venous systems.

The *nerves* of the uterus during the period of gestation necessarily partake of the same increased activity as the other uterine structures; and probably receive also a corresponding augmentation in development. Those arising from the ovarian plexus are distributed to the angles of the fundus; those arising from the hypogastric plexus are distributed to the cervix and lower portion of the body,—these, by branches from the third and fourth sacral nerves, are connected with the spinal nerves; and, finally, those arising from the great sympathetic, accompany the uterine arteries, and are lost upon the neck and lateral parts of the womb. Thus the entire structure of the uterus is sure to be supplied with nerves from the nervous system of organic life. A portion only of the nervous filaments distributed to the cervix being in immediate relation with the spinal nervous system.

The complicated arrangement of the various tissues and organized structures which make up the substance of the womb, renders it exceedingly difficult to demonstrate the full development of the nervous system of this organ. But there can be no doubt of the fact that the uterus is so abundantly supplied with nervous substance in itself and so intimately connected with the great ganglia in its vicinity, that it is endowed, especially in the gravid state, with a vitality peculiarly its own,—through which it is enabled not only to support the nutrition of the embryo, but also to exert a controlling influence upon the entire economy of the female herself. But these changes in the structures composing the uterus must occasion corresponding changes in the physiological and sensitive conditions of this organ.

The *physiological properties* of the gravid uterus, as to sensibility, irritability, and contractility, are very different from those exhibited in the non-gravid condition. The common sensibility of the uterus in the non-gravid state is but slight; but in consequence of the more active development of the nerves of organic life and of their connection, in the cervix, with the spinal nerves, this sensibility is much increased during pregnancy. And yet in many individuals the uterus shows in this respect a most astonishing power of endurance,—a wonderful tenacity which enables it to retain and preserve the embryo in the midst of the greatest dangers. Near akin to this increased sensibility, appears the peculiar irritability of the uterus. This may be defined as a certain morbid sensibility, or a sensibility attended

with weakness rather than with strength. In the former instance, the female can bear with impunity the active movements of the fœtus in utero; in the latter, these movements induce the most poignant anguish, or may even threaten a premature delivery.

Contractility is but a still further advance in the direction of sensibility and irritability; or rather the former is the crisis or reaction which results from the latter. This most important function of contractility is, of course, peculiar to the gravid, as contrasted with the non-gravid uterus. It belongs to the increased muscular development of the uterine parietes, nourished as they are by the augmented blood-vessels, and inspired by the more active influences of the nerves. This contractility may be excited by the reflex action from irritation of the cervix; thus a common cause of abortion is to be found in repeated and violent coition, and in other disturbances of the os and cervix uteri. The menstrual molimen, in the unimpregnated condition, seems to have the power of exciting all the contractility of which the womb is then capable. And even in the impregnated state, the same influence is still to be traced in the remarkable tendency to abort at menstrual periods, especially at the third. And it is thus that many drugs which are capable of so irritating the uterus or the adjacent sympathizing structures as to produce a congestion which may simulate that of menstruation, are also capable of directly producing abortion. But the grand physiological, functional contractility of the gravid uterus is seen only at full term. Then this organ arises in its might in the fulness of time, spontaneously casts off in the most violent manner, even at the blind risk of destroying the mother where deformity may be present, the ovum which it has cherished, protected, nourished and vivified through nine long months. And to the accomplishment of this contractility the nerves of the uterus summon not only all the various curiously-arranged and powerful muscular tissues pertaining to that organ,—but through their connections with the cerebro-spinal nervous system they compel the co-operation of all the involuntary and voluntary muscular apparatus of the entire body, and of all the determined energies of the mind.

The efforts of the will, co-operating with the involuntary muscular contractions, exert no small influence in maintaining the labor pain. In some rare instances the contrary has been observed. Mrs. C., living five miles from the city, at a time when the travelling was very bad, was taken in labor, and felt as if she would be confined before her physician could reach her. Her pains were frequent and vigorous; but by a determined effort of her will she had entirely

suppressed them, and her physician was obliged, after waiting in vain for some time, to restore them by exhibiting the appropriate remedies. This was not a case of fear; but the lady said, she exerted herself all she could to suppress the pains. The favorable influence of good hope of a speedy delivery is so well known, that the physician instinctively encourages his patient all he possibly can. In the state of nature in animals and among the savage tribes, this function of contractility, even at its final result in the expulsion of the fœtus at full term, is attended with no pain. But this is very far from being the case usually in civilized life.

That function of the uterine tissues by which the womb, after being thus emptied, is restored to its original state, is by some authors considered to be distinct from contractility, and termed elasticity. But this seems nothing more than a continuation, into the minute structure, of the same contraction which, in the first instance, had affected the entire organ. In the latter instance, the minutest filaments of the muscular and other tissues seem affected; as in the former, the entire muscles and muscular parietes.

This identity of contractility with what is termed elasticity, will be more certainly demonstrated by the consideration of the very similar effects of the same physical and even moral agents in producing or in arresting their development. Thus, the Secale corn.,—which is one of the most efficient agents in producing powerful contraction of the muscular parietes,—is no less active in arresting the hemorrhage subsequent to parturition which arises in consequence of a want of the proper interstitial contractility or elasticity which should close the open mouths of the blood-vessels. In the same manner, fright, from being told there was "something wrong" about the presentation, has been known instantly to arrest the labor-pains and change the labor itself from a natural to an instrumental one. So fear has been seen to stop the normal contraction of the uterus after child-birth, and thus admit alarming hemorrhage. The reflex stimulus of frictions to the abdomen may indifferently produce the pains of labor, or those after-pains by which the continued contraction and final restoration of the womb to near its original size is secured. The uterus may be so worn out in the actual labor, even if its involuntary contractions have not already ceased before delivery, that it has no longer any tone; and, like an overstretched piece of india-rubber, appears incapable of resuming its natural form. Such also may easily be imagined to be the case in those in whom, whether from failure of the vital forces in general, or from

organic exhaustion, the fœtus has to be removed by force. Nor is it unknown for the last, most violent, and successful expulsive efforts of the womb to be followed by entire paralysis of the organ.

But in general, the interstitial contraction would seem to keep pace with the organic; and, as the fundus closes in upon the fœtus as the head emerges from the os uteri, so the minute interstitial contractility (elasticity) of the tissues already follows on, and aids the organic contractility in separating and expelling the placenta.

Position.—The changes in the position of the gravid uterus have already been referred to under the head of direction. But the final position at term needs to be well understood. The uterus will now be found in relation, in front, with the vagina, with the posterior face of the neck and body of the bladder, and superiorly with the anterior wall of the abdomen. Behind the uterus, are the rectum, the sacro-vertebral angle, and the vertebral column below; and the mesentery and convoluted mass of the intestines above. On the right side of the uterus, are the right wing of the pelvis, the iliac vessels, the psoas muscle, cæcum, and abdominal wall of that side. On the left, are the left wing of the pelvis, the left iliac vessels and aorta, the sigmoid flexure, the psoas muscles, and that portion of the intestines which intervenes between the uterus and the left wall of the abdomen.

Changes in the Uterine Appendages and adjacent Organs.—Next to the changes which are induced by pregnancy, in the neck and body of the uterus, those which are wrought in the uterine appendages and adjacent organs need to be considered. The vagina, Fallopian tubes, round and broad ligaments, the bladder, the rectum, various parts of the trunk, and, finally, the mammæ, are all more or less affected in structure or in development during the period of utero-gestation.

The *vagina* becomes shortened with the descent of the uterus in the earlier stages of pregnancy; and lengthened, as the uterus subsequently arises above the superior strait. The veins of the vagina experience an enlargement somewhat corresponding, although less in extent, with the dilatation of the uterine veins; and these veins sometimes become varicose. Toward the end of pregnancy, the finger will often encounter these varicose enlargements, and certain nodosities, described by French authors under the name of thrombus. On the superior portion of the vagina, and especially on the infra-vaginal part of the uterus, arterial pulsations may also be

detected. This vaginal pulse has been considered an important diagnostic sign of pregnancy. The mucous membrane of the vagina also experiences an extraordinary development in pregnancy, analogous to the hypertrophy of the mucous lining membrane of the uterus. This is shown by the innumerable granules or enlargements of the mucous follicles, which, about the seventh or eighth month, are found covering the interior surface of the vagina, and which are also to be found upon the exterior and interior surface of the cervix uteri. An increased mucous secretion accompanies this follicular development. This increased secretion of mucous is the normal condition of pregnancy, especially in its advanced stages; and it should never be suppressed by injections. In such cases every cold water injection does harm; since, from the suppression of these vaginal mucosities, the labor is rendered more lingering and severe, —what is called dry labor may result.

The *Fallopian tubes* and *ovaries* are drawn nearer to the body of the uterus; the former, instead of being on a level with the fundus, now correspond to the upper fourth, or even to the middle of the uterus. This results from the ascent of the womb above the pelvis, by which the folds of the peritoneum, called the broad ligaments,— prolonged into the pelvic cavity to reach and support the uterus,— are shortened and caused to disappear. The round ligaments are carried forward by the greater development of the anterior than of the posterior wall of the uterus, so that their insertions, instead of being at the sides of the womb, are now found at the point of union of the anterior fifth with the posterior four-fifths of the antero-posterior diameter.

The *bladder*, during the early months of pregnancy, is gradually pushed above the superior strait; the urethra is elongated, and its orifice concealed behind the border of the symphysis pubis. The anterior projection of the bladder renders the line of the urethra much more curved; so that its course will be more readily followed by the male catheter, with its convex surface backwards and its concave surface forwards, than with the nearly straight one ordinarily used for females. The gravid uterus rests down upon the posterior surface of the urethra, and by compressing it against the arch of the pubis often causes an obstruction in its circulation. This may be known by the tumor to be found in such cases behind the symphysis, and by the severe and painfully distressing tenesmus, and even strangury, which not unfrequently arise from such compression and irritation of the meatus urinarius. In some of these cases the

catheter is requisite, in order to afford temporary relief, until, from quiet and rest in the horizontal position, the cause may be removed long enough to allow the irritation to subside, or the proper remedies to cure it.

The *rectum* is pressed upon in a similar manner posteriorly; hence, in part from the mechanical obstruction, there results the constipation, so common in pregnancy. A similar obstruction of the blood-vessels and lymphatics tends to develop the hemorrhoids and œdema of the vulvæ and of the lower extremities, which are so common under such circumstances. These deviations, partaking of a pathological nature, will be more particularly considered, with the other morbid conditions of pregnancy, in the following chapter.

The *relaxation* of the various pelvic symphyses, especially that of the pubis, which, during pregnancy, occurs in some peculiar constitutions, and which renders locomotion difficult, if not impossible, also results from a morbid condition subsequently to be considered.

The *abdomen* becomes very much enlarged as pregnancy advances; its parietes being thinned, and on the inferior portion often marked by broad or bluish streaks, which form parallel curved lines, with the convexity towards the pubis. On the median line, from the pubis to the umbilicus, may be observed a brownish streak, which in primiparæ, has been deemed a certain sign of pregnancy; a similar dark-colored line has been seen, however, in non-gravid females and in males. After delivery, an oblong tumor is sometimes seen on the median line, especially during any severe exertion. This results from the projection of the bowels where the abdominal parietes have been permanently thinned and weakened by the separation of the aponeurotic fibres. With each subsequent pregnancy, this enlargement becomes greater, until, in some instances, it becomes necessary to bandage it.

The *thorax* also, with the upward ascent of the large volume of the gravid uterus, experiences important changes. Its base is enlarged; the diaphragm is pressed upward and distended by the stomach and contents of the abdomen; the crowding together obstructs the circulation of the heart and great vessels; respiration is visibly affected, and sometimes the irritability of the distended diaphragm occasions a more or less constant cough.

The *mammæ*, both from original sympathy with the genital organs and in preparation for the performance of their own future function, exhibit remarkable changes during gestation,—which may also become diagnostic of the pregnancy itself. These changes are of two

kinds, those relating to increase in size, and those which affect the color of the areola surrounding the nipple. Very soon after the commencement of pregnancy, in many women, the breasts become more full and somewhat tender,—they have evidently assumed a more vigorous physiological activity. This increase in the volume of the mammæ will sometimes diminish towards the fourth or fifth month, but to return again and become still greater towards the close of gestation. The nipples also become turgid and more prominent; the same increased activity already mentioned as apparent in the mammæ in general, is particularly evident in the nipples; their erectile tissue becomes more permanently developed, as if in sympathy with the corresponding hypertrophy of the mucous coat of the uterus.

The areola around the nipples becomes much darker. And in the centre of the areola, immediately surrounding the base of the nipple, may be seen quite a number of minute glands, from which may be squeezed a serous, and, in the advanced stages of pregnancy, a sero-lactescent liquid. These changes in the size of the nipples, in the color of the areola, and in the development of the glandules, make their appearance in the course of the third month.

About the same time with these, blue veins begin to make their appearance over the surface of the bosom; from which numerous branches are given off to the areola. In connection with these venous trunks may sometimes be seen certain shining silvery lines, *linea albicantes;* both the enlarged veins and the silvery streaks are more prominent in the breasts of primiparæ. The change of the areola from the delicate pink tinge of the virgin to a more or less darker shade in the first pregnancy, remains permanent thereafter; the color becoming darker at the accession of each subsequent pregnancy. But a more particular statement of the changes in the structure and appearance of the mammæ will be given when we come to study them in the next chapter as signs of pregnancy.

Generally speaking, these changes in the external form of the female in pregnancy, but partially disappear after parturition. Where the abdomen has been so greatly distended, certain folds or wrinkles will still remain as consequences. So the hernia-like protrusion of the bowels along the median line below the umbilicus, which has been mentioned as resulting from the separation of the fibres of the aponeurosis on that line, unless remedied by appropriate treatment, will tend to increase rather than to diminish. Neither does the discoloration of the areola ever entirely fade away; it always re-

mains as evidence that pregnancy has existed. And yet not as of itself affording conclusive evidence, for this discoloration may be the result of uterine irritation, in females who have never been *enceinte*,—just as the breasts may enlarge from sympathy with enlargements of the uterus, which are caused by the development of tumors or other morbid growths.

CHAPTER TWENTY-THIRD.

THE DIAGNOSIS OF PREGNANCY.

The determination of pregnancy at the earliest possible period forms one of the most frequent, difficult and important problems in the practice of medicine. The physician will often be called upon to decide this question where strong feelings are awakened and great interests at stake, of the most opposite character. "The honor, and therefore the happiness, of a female, may depend upon his decision; the peace of families may rest upon it; and the inheritance of property be controlled by it." For some to be *enceinte* is the gratification of their highest hopes and most ardent desires; by others it is regarded as a most serious inconvenience,—as something to be dreaded on account of health; or, in the unmarried, as threatening a disgraceful exposure of their want of chastity. All these different states of mind and various social relations must always be considered in estimating the value of evidence for or against a supposed pregnancy; since those earnestly desirous of children will naturally magnify every new sensation; while in some other cases there may be a disposition to suppress or overlook the signs of an actual pregnancy. "In all such cases the physician must remember that he may not merely be requested to investigate a case of doubtful pregnancy where no shame is involved, but that he may be consulted in cases where pregnancy is concealed by unmarried women, or by married women under certain circumstances, to avoid disgrace; and on the other hand, where it is pretended, in order to secure an inheritance, to extort money, or to delay punishment." And the very circumstances which tend to render the question more difficult to decide, at the same time seriously increase the responsibility attached to such decision. Hence, the physician can never be too cautious or too discreet in these matters; especially where the question relates to the unmarried; his acknowl-

edging himself to have been mistaken will afford but a poor reparation for shocking the feelings and insulting the virtue of the pure minded and the innocent. Such a blunder were worse than a crime; and its consequences might be irreparable, as well for the physician himself as for his patient.

The signs of pregnancy may be divided into two classes; those earliest observed, which are called *rational* or *presumptive* signs; and those subsequently making their appearance, which are termed *sensible* or *positive* signs. From one or more of the first class a presumption of pregnancy may arise; and from all that the case affords in its early stages, a rational conclusion may be drawn; but this is not positive knowledge. This can be derived from the positive or sensible signs alone; even of all these there is but a single one that is entirely incapable of being mistaken, and that is the beating of the fœtal heart. The signs of pregnancy increase in number and become accumulative in value as the case advances. Thus the diagnosis which in the first instance had been possible pregnancy, becomes presumptive, probable, and finally, certain or demonstrable pregnancy. We will study, therefore, these signs as they arise, in order of succession, proceeding from the rational to the sensible.

Rational Signs are derived from the circumstantial history of the case, from the related experience and sensations of the female, and from our own observations of such changes as may appear. Among these may be classed the general effects observed in the female economy,—such as greater rapidity of pulse and of respiration; greater activity of the circulation and secretions, especially those of the genital organs; greater sensibility of the nervous system;—but from indications so general as these, no rational inference can be drawn; they are only important when taken in connection with other more particular signs.

The first sign of pregnancy,—strictly speaking of conception,—is individual rather than general; and consists in a certain peculiar thrill or voluptuous sensation, which is felt by some women during a prolific coition,—who by experience learn to regard this unusually profound erethism as a certain evidence of conception in their own case. Nearly connected with this is a certain sense of chilliness subsequent to coition, which is found, by those who experience it, to be invariably followed by pregnancy. These sensations, which experience has taught some individuals to regard as decisive in their own case, may therefore be considered as possessing some value when reported by primiparæ.

I. *Suspension of the catamenia* is however most generally the first indication which leads the female, in whom impregnation has been possible, to consider herself *enceinte*. But the importance of this symptom will very greatly depend upon the attendant circumstances; if the female have been very regular, and if the cessation of the menses promptly occur after some particular sexual intercourse, the presumption of pregnancy will be very strong indeed. But if she has always been very irregular, the mere fact of the menses failing to make their appearance at a particular monthly period, will carry with it but little weight. Where the entire absence of the menses for two or three months occurs from no other assignable cause, and where this suspension is attended with good health and appetite, and some perceptible increase in the size of the abdomen, the rational conclusion of pregnancy may be considered to be well founded. And yet even these circumstances are far from affording infallible evidences of pregnancy; since they have been known to arise in this combination from other causes. In newly-married females the catamenia are sometimes lost from irritation of the sexual organs, where no conception has taken place; and at the same time there may be an increase in the size of the abdomen and in the sensibility of the breasts; so that even this very strong combination of symptoms cannot be positively relied upon.

The attendant circumstances must be borne in mind in other respects; for while conception may take place in females who have never apparently menstruated; so the catamenia may still continue even after conception and through all the months of utero-gestation: cases have been recorded in which menstruation appeared only during pregnancy; but such cases are anomalous. Thus while the cessation of the menses, under favorable circumstances, becomes the first and one of the most important signs of pregnancy, it is by no means decisive; since on the one hand the catamenia may be suspended without pregnancy, and on the other pregnancy may occur without the suspension of the menses. The general rule will be all the more valuable, if we constantly bear in mind the possibility of the exceptions which, though far from being common, may occur in any given case.

II. *Morning sickness* forms in very many women the next sign of pregnancy; as its name indicates, it is a morbid symptom,—but on that account none the less valuable as a diagnostic sign. It arises from sympathy of the cœliac or solar plexus with the organic nervous system of the uterus; and indicates the existence of some hereditary psoric miasm in the system. This morbid irritability may commence

immediately after conception; but it generally sets in about the fifth or sixth week, and ceases soon after the third month. Like some of the voluptuous sensations already mentioned, this affection may become in individuals a positive indication of their being pregnant; since these persons learn by experience that these symptoms occur with certainty and regularity at a particular time after conception. Thus in different persons the presence or absence of morning sickness will have a very different diagnostic value. In those who have had it, in former pregnancies, unless the disposition to it has been removed by Homœopathic medication, its non-appearance will be tolerably conclusive evidence against the existence of pregnancy; while in primiparæ its non-appearance would scarcely be considered worth noticing as an evidence that they were not *enceinte*. Still, where morning sickness makes its appearance persistently, attended by suppression of the catamenia, and in circumstances liable to impregnation, it can scarcely be attributed to any other more probable cause than pregnancy. And this indication will be strengthened by the character of the sickness itself. The appetite improves and is good through the day, in spite of the nausea, vomiting of a peculiar watery fluid and sinking at the pit of the stomach which occur and continue for a short time only on first rising in the morning. The sickness and the fluids vomited up are different from those accompanying any other disorder, such as gastric or bilious fevers for example. While morning sickness, from its peculiar character, brief daily appearance, usual temporary continuance, and final sudden and perhaps unexpected disappearance, becomes, where it occurs, a valuable indication of pregnancy; its absence is hardly to be regarded as a negative sign.

Certain other *derangements of the digestive organs*, such as eructations, heartburn, remarkable longings for some particular article of food or other substances not used as food, and corresponding aversion to some one or more of the common varieties of food, which occur separately or in connection with morning sickness, or even subsequently to it, may also be regarded as among the rational signs of pregnancy.

The same may be said of *salivation*, which occurs in some women about the fourth or sixth week; in such cases the frequent spitting will be equally diagnostic whether the quantity be large or small. This salivation,—differing from that which results from mercurial influences by the absence of the fetid breath, sore gums, and great prostration,—becomes truly characteristic of pregnancy, just as the

morning sickness above described does, by reason of its being a sympathetic rather than a primary and idiopathic affection.

III. The *abdomen*, by its changes in size and form, affords some rational signs of pregnancy even in the early stages. The enlargement of the abdomen may indeed occur from many other causes; but no other causes can simulate the shape and manner of development of the enlargement of pregnancy. A careful study of all the successive appearances of the abdomen in pregnancy, will therefore enable the practitioner to estimate at their proper value the changes which may present in any given case. Sometimes even in the first month the abdomen will seem larger than it does in the second; this arises from the co-operation of two distinct causes. First the abdomen seems larger because it is rendered tympanitic by the reflex influence of the newly-begun pregnancy itself. After three or four weeks this tympanitis passes off; and the abdomen loses its apparent increase in size. In cases in which this tympanitic condition has disappeared, as well as in those in which it had not occurred, the abdomen becomes flattened. This flattening of the abdomen is usually attended with a drawing inwards and downwards of the umbilicus. These appearances, the very opposite to what might naturally be expected, are due to the sinking of the uterus a little lower down in the pelvis, as described in the preceding chapter. And in connection with these changes there may be more frequent calls to urinate. But the uterus soon recovers from this depressed position; and about the third month the abdomen is seen to be visibly enlarged, and the enlargement steadily goes on till towards the close of pregnancy. After the eighth week the uterus remains stationary, depressed in the pelvis for a time; then it gradually rises to its original and natural position,—where it continues till after the third, fourth or four and a half month, according to the capacity of the pelvis to give it room. It then rises above the superior strait, either suddenly or gradually, according as it has been more or less impacted in the pelvis.

This rising out of the cavity of the pelvis into the abdominal cavity, constitutes what is called *quickening;* and sometimes it occurs so suddenly as to quite alarm the mother. It was at one time erroneously supposed that no life was present in the fœtus till the occurrence of quickening; but it is now well known that at the very earliest moment of conception a living human soul is there. Motion probably takes place at a much earlier period than it is perceptible to the mother; but it is not usually sensibly recognized till the uterus has finally risen from the smaller into the larger or abdominal pelvis

Usually after the beginning of the third month the enlargement begins to show itself just above and behind the symphysis pubis, being always more considerable on the median line. After the commencement of the fourth month, if the pregnant female be not too corpulent, by placing her upon her back with her thighs flexed upon the abdomen, the enlarged uterus can be felt like a half moon rising behind the symphysis pubis; and this ascent of the uterus goes on regularly, and usually at the rate of about two fingers breadth, per month, until within two weeks of the full term. But this enlargement is not always so regular in its development; since it may be varied by dropsical accumulations, multiple pregnancies, a greater or less projection of the spinal column, breadth of the pelvis, or other individual peculiarities.

An important means of distinguishing the enlargement of the abdomen which results from pregnancy from that caused by dropsies, tumors or other morbid conditions will be found in observing the manner in which this enlargement is developed, very nearly *on the median line* and always proceeding *from below upwards.* Just above the symphysis pubis the tumefaction begins to show itself, at first being more considerable on the median line than elsewhere; the sides are flattened and the middle portion projects considerably. And the constant, steady and uniform enlargement of the abdomen, in the manner just described, and under favorable attendant circumstances as to health, appetite, etc., affords substantial ground for a conclusion in favor of the existence of pregnancy.

IV. The *umbilicus* also affords some indications of value among the rational signs of pregnancy, since the changes which occur here are almost always present and can always be observed. During the first two months of pregnancy, the depression of the umbilicus is greater than usual, owing to the descent of the uterus into the pelvis, and to its dragging down the fundus of the bladder, by which tension is made upon the urachus. This umbilical depression continues and gradually increases during the continuance of the descent of the uterus; and during this period the female may be seen to walk stooping in order to relieve the dragging sensation experienced by this strain upon the umbilicus. As soon as this sinking downward is arrested, and the uterus begins to rise again, the umbilicus is gradually restored to its normal condition. It next begins to lose its depression, growing decidedly superficial during the fifth and sixth months; becoming entirely flattened out in the seventh month and on a level with the surrounding integuments; and during the last two months

the umbilicus really pouts or protrudes beyond the general surface of the abdomen. This course of changes in the umbilicus during pregnancy is the general rule; there may be some deviations; but usually the phenomena afforded by the umbilicus are regular and of great value. Tumors or ascites may cause appearances somewhat similar, but these do not arise in the same regular order of time. When the three successive and well-defined stages of umbilical depression, restoration and projection occur as above described, they constitute a natural sign of pregnancy very easily observed and of very great value.

V. The *mammæ*, about two months after conception, begin to afford indications of much value. Although from various causes some of these indications, except in primiparous women, are less reliable in the early stages than many others, still taken in connection with other signs, they cannot but have some weight. As described by Tyler Smith, these indications consist in a certain sense of fulness and weight and shooting pains in the breast; subsequently the circulation becomes more active and there is an actual increase of volume; the gland becomes hard, knotty, and tender to the touch, and large blue veins may be seen meandering over its surface just beneath the integument. About the end of the second month the nipple swells, becomes more erectile, sensitive and projecting; its color is also deeper. The surrounding skin assumes an emphysematous appearance, and becomes also a little darker. By the end of the fourth month a dark brown areola is seen to surround the nipple in every direction, at a distance of three-quarters of an inch from its base. In blondes or in feeble, delicate women, this appearance is not so well marked as in those who have black hair and eyes, and in brunettes. "As pregnancy advances, especially if it be a first pregnancy, the deposit of pigment in the areolæ increases, the areolæ themselves become moister, and the follicles studding their surface are prominent, distended and bedewed with transuded fluid. These follicles or little glandules which appear near the base of the nipple within the areola, attain an elevation of one or two lines above the surface of the skin. Each little gland has an excretory duct, and by pressing upon its base a little serous or sero-lactescent fluid is made to escape. In several instances I have seen this fluid flow in considerable quantities during lactation;" and sometimes these glandules become very sore, when Calendula will effect a speedy cure. About the fifth month a sort of shadow of the first areola makes its appearance outside the first, very pale, although quite similar to the first; and outside of

these again somewhat later, or about the seventh month, we have often seen dark veins running across the breasts in various directions. Minute streaks, glistening like silver threads, are also observed running near these darker vessels.

These appearances of the mammæ, occurring in regular order, particularly when taken in connection with other rational signs, afford almost conclusive evidence of the existence of pregnancy. But it should be borne in mind that the discoloration of the areolæ, from never entirely disappearing when it has once taken place, is of little value as a sign of pregnancy except in primiparæ;—and also that both the enlargement of the mammæ and the discoloration of the areolæ, may be occasioned by distension of the uterus from other causes than pregnancy.

VI. *Quickening*, where it can be distinctly recognized, becomes of course a conclusive evidence of pregnancy; but it cannot be thus positively determined except in those whose previous experience leads them to interpret aright the sensations which compose it. The term was originally applied to the supposed period at which the fœtus in utero first became possessed of the living principle, or was united to its physical soul, which "quickening" of the fœtus was believed to be the cause of the changes and unusual sensations experienced by the mother at that time. It is curious to see how the advance in physical science is equalled by that in psychical knowledge; how physiology and psychology go hand in hand. Thirty years ago Davis wrote, in this connection: "It is now well known that the fœtus in utero possesses some of the most important attributes of life from the earliest pulsations of the first speck of organization called the punctum saliens." The true doctrine is well stated by an eminent Homœopathic physician in a recent publication.* "The true scientific position is this: from the moment of conception, when the spermatozoa coalesces with the cell-wall of the ovule, the ovum is a distinct human being, with a human soul, simply attached to the mother for the obtainment of nutritive material, but growing, living, organizing, by forces and powers entirely its own, and derived through nature from God."

By Quickening, therefore, we merely understand those sensations which indicate the escape of the gravid uterus from the pelvic into the abdominal cavity. It is not the result, as formerly supposed, of movements of the fœtus itself; but rather of the intrusion of the

*The United States Medical and Surgical Journal, Vol. i., p. 387.

uterus itself among the other organs of the abdomen, and perhaps of the removal of the pressure hitherto exerted by the uterus upon the large vessels in the pelvis. "The sudden intrusion of the volume of the uterus among the abdominal viscera, organs of high sensibility, accompanied by a sudden removal of pressure from the iliac vesssls, is quite equal to the production of the sensation called quickening. The sensation is felt in the transit at the moment when the uterus, upon quitting its residence in the pelvis, enters the abdominal cavity."—*Davis.* This sensation, which occurs at various periods in various women, is to be distinguished from those arising from the actual movements of the fœtus in utero, which are only subsequently experienced. Quickening may occur as early as the tenth week, or it may not be observed till the sixteenth, the eighteenth or even the twentieth week; the average period is probably about the sixteenth week.

VII. *Changes in the Urine.* Much valuable time and a great amount of labor have been spent in attempting to render the alterations of the urine useful as a rational sign of pregnancy. And while for reasons subsequently to be stated, we attach even less importance to these changes in the urine, than do the Allopathic writers, we will briefly describe them, following principally the account given by the celebrated Dr. Elisha Kent Kane.*

These changes consist briefly in the formation of a gelatino-albuminous product in the urine of pregnant females subsequent to the first month of gestation, which is separated from the other elements of that fluid by rest alone, and to which is given the name of *Kiesteine.* This consists of certain globules held in suspension in the urine when secreted and which rise to the surface and there form a pellicle, which resembles in appearance the thin scum of fatty substance covering soup as it cools. When thick, this pellicle is said to give off a strong cheesy odor. This pellicle usually makes its appearance upon the second day or in the course of the third; though it is sometimes not observed till the urine has stood longer, even till the eighth day. The experiments of Dr. Kane and others prove that the Kiesteine is by no means peculiar to pregnancy; but that it has more especial relation to *lactation,* either prospective or actually present. Since it makes its appearance either where the milk is but imperfectly withdrawn from the breasts; or in those cases in which, as in pregnancy, nature is preparing for the future function of lacta-

* See American Journal of the Medical Sciences, New Series, Vol. iv., July, 1842.

tion. And finally, Kiesteine cannot be regarded as an unerring diagnostic of pregnancy; since it may occur under other conditions of the system, and is not always observable where pregnancy actually exists; but its presence in the urine of an otherwise healthy woman is stated by Cazeaux to be an important rational sign.

It remains now to state why we attach little or no importance to this phenomenon as an indication of pregnancy in the Homœopathic practice. And this is from the fact that these changes of the urine which ultimate in the formation of this peculiar pellicle, if not purely pathological, are at least but the consequences of the imperfectly performed physiological processes. These imperfections are also manifested in other more positive morbid symptoms, which being cured by appropriate Homœopathic medication, the pellicle entirely fails to make its appearance. Still in cases of supposed pregnancy, the experiment could easily be made as a matter of curiosity.

Sensible Signs.—The *sensible signs* of pregnancy are observed through the medium of the senses of touch and hearing. By the touch we examine the condition and position of the uterus and its relations to the adjacent parts, externally, through the vagina, and, if necessary, through the rectum. By auscultation we ascertain the probable existence of pregnancy from hearing the *bruit de souffle,* or bellows murmur,—and, at a little later period, its positive existence by detecting the pulsations of the fœtal heart.

The term "*touch*" signifies the means whereby knowledge is obtained of the condition of the female as to health or disease, or whether she be pregnant or otherwise,—by vaginal or anal examination with the finger, or by external examination with the hand, called palpation. By vaginal touch we may be able to diagnose the stage of gestation, the stage of parturition, or whether the female is in that state; the progress of labor; the presentation and position of the child; in fact all normal and abnormal conditions which have ultimated themselves in material products. In order to be able to use the touch with certainty and advantage, the finger must be educated to recognize all the normal conditions; then it will be able to readily detect disease or any important change in material or structural manifestations. The vaginal touch may be practised with the female standing, lying upon her back or upon either side.

If she be standing, the physician should place himself towards her left, and upon his right knee; his left hand upon her abdomen externally, and his right hand, the index finger being well lubricated with oil, should be carried under her clothes and directly between her limbs,

—great care being taken not to touch her skin,—the back of the hand upwards, with all but the index finger closed. The index finger should be slightly flexed, and if carried directly between the limbs, without shocking her by touching the skin, the back of the finger will come directly in contact with the hairy portion of the vulva; now press with a little firmness and straighten the finger and its point will pass directly into the vagina. Now drop the wrist and pass the finger upwards and forwards and it will exactly trace the canal of the vagina; and by rotating the hand on the wrist, the interior cavity of the smaller pelvis can be explored and all the abnormities and deviations in that vicinity may be noted.

If the female be lying upon her left side, with her thighs flexed upon her abdomen,—which is the most usual position for the examination,—the physician will sit at her back, and use his right hand. In this case also the thumb and all the fingers should be closed except the index, which should be well lubricated and slightly curved, as before directed. The hand should be carried between the limbs as already directed, with great care to avoid touching the bare skin. As the back of the finger comes in contact with the hairy portion of the vulva, press firmly though carefully, straighten the finger and its point at once enters the vagina. Let the finger now be carried backwards and upwards and the canal of the vagina will be traced, and by rotating the hand, as before, all parts of the canal can be well examined. If the patient be lying upon her *right side*, the physician will seat himself at her back as before, but will touch with the finger of the *left hand*.

The physician should accustom himself to examine with both hands; since it may be necessary sometimes to use the left hand, from the peculiar condition of the patient herself, or from expe-riencing a temporary injury to his right. In like manner it may be desirable to examine both in the erect and in the horizontal position. In the earlier months the recumbent position, with the extremities flexed and separated, will give a greater degree of relaxation of the abdominal muscles and render the uterus more completely accessible. In the standing position, *ballottement* may be more readily accomplished. But in all doubtful or difficult cases, the female should be examined in both positions. When about to be examined standing, the patient should be placed with her back against the wall, a chair should be placed at each side to support her hands and the upper part of her body should be a little bent over and forward.

When it becomes necessary to make an examination, *per vaginam*,

all the parts of the perineum, vulva, vagina, and cavity of the pelvis should be carefully explored, in order to detect any existing abnormities or diagnostic indications. If the patient be a supposed primipara, the condition of the vagina as constricted and presenting the evidences of increased activity of the circulation will be carefully noted.

The position and direction of the os uteri will then be ascertained; if in the early weeks of pregnancy, the uterus may be found somewhat settled down in the pelvis, and the os looking towards the hollow of the sacrum. Or the supposed greater advance in the pregnancy will prepare him to find the uterus in its usual position when unimpregnated, or still higher,—above the superior strait. Thus, on the one hand, the indications given by the rational signs will be either confirmed or invalidated by these sensible evidences; and on the other, the rational signs and history of the case will direct the physical exploration. The impregnated uterus is heavier than in the ordinary state; and its lower segment, at about the third month, will be found so distended as to occupy nearly the whole cavity of the lesser pelvis. Its mobility is very slight; when, if unimpregnated, it would be very movable in every direction, and much easier to raise on the point of the finger.

One of the surest of the sensible signs of pregnancy at this stage consists in the softening of the extreme point of the neck. The sensation is that of a sort of velvety softness, only deeper, beyond which may be felt a certain hardness, as of a board. No other state than pregnancy can either produce or simulate this feeling of softness. And this softening, as well as a corresponding dilatability of the neck, increases from below upwards, from month to month, in almost exact proportion to the development of the pregnancy.

Palpation is a means of obtaining knowledge of the condition of the womb, by placing the hands upon the abdomen externally; and this method is more satisfactory and much pleasanter to the female than the former. If the abdominal integuments are not too thick and fleshy, by placing the patient upon her back, with her head raised and her thighs flexed, and pressing the points of the fingers gently downwards and backwards along the pubis, a hard, round tumor will be found on the median line rising out of the pelvis. This can be felt as early as the third month, if the walls of the abdomen are not too thick. In two or four weeks later, the increase is much more strongly marked, and the true state of the case more certainly announced. We must bear in mind that, as pregnancy

advances, the tumor loses more and more of its hardness, and becomes more and more elastic, like a cyst filled with water.

Percussion is also useful in deciding as to the existence of pregnancy. In such cases the uterine tumor will invariably afford a dull sound, unless a mass of intestines should intervene, while all around may be distinguished the usual clear abdominal resonance. But, in pursuing this method of examination, care must be taken not to confuse all the indications by percussing over a full bladder. Tumors of the abdomen or womb would also give a similar dulness on percussion; but such tumors are irregular as to the time of their development.

In doubtful cases, where decided enlargement of the abdomen is present, the exploration per vaginam becomes of very great importance; since the softening of the os uteri and even of the lower end of the neck, does not occur from any other cause than pregnancy. By the end of the sixth week, this softening can be detected,—like a piece of velvet drawn over a table. But, where tumors occur in the abdominal cavity, unconnected with pregnancy, they may be more easily detected by simultaneous palpation and vaginal touch. This is accomplished with the finger applied to the cervix uteri, and the other hand placed upon the abdomen externally, in order to find the fundus uteri. The finger may be brought in direct opposition with the lower portion of the uterus, while the other hand presses down its upper portion, so that, with the exception of the abdominal walls, nothing but the uterus itself intervenes between the two hands. In this manner, a judgment may be formed as to the size of the organ, as well as of its relations to the surrounding parts. And thus, any tumor, which may have occasioned the abdominal enlargement, may be distinguished from the uterus. If unconnected with this organ, the tumor will remain stationary when the uterus is moved; if it is attached to the uterus, moving the latter will, of course, be attended with corresponding movement of the former. And, in addition to any other tumor in the pelvis, or rising above it, the actual size of the womb will also be ascertained. Since the presence of any adventitious growth in the pelvis, whether connected with the uterus or not, does by no means preclude the possibility of pregnancy also. The greatest caution should be observed, as well in making the examination as in giving a final opinion. It is not many years since the profession, in a certain city in New England, were greatly amused at the *denouement* of a case of uterine tumor in the wife of a well-known practitioner. The poor woman,

who had sons grown up, and was supposed to have passed the change of life, during a course of several months, endured all the severities of the most orthodox Allopathic treatment at the hands of her anxious husband, assisted by a much older and more eminent practitioner than himself,—in which injections of solution of nitrate of silver and large and frequent doses of the most powerful drugs performed an active part. The case advanced in spite of the treatment; and, the symptoms becoming more urgent, a third physician was called in consultation, who presently relieved the patient from her dangerous condition by delivering her of a full-grown child, which had finally succumbed to the *tours de force* of the latest injections. The patient had had no other disease than this tumor, (pregnancy;) but it required many months for her to recover from the effects of the protracted treatment she had undergone.*

During the first three or four months it is a difficult matter to determine the existence of pregnancy; up to this time, the most certain sign is the unmistakable softening of the cervix or os tincæ. By taking into consideration, together, all the rational and sensible signs and the time of their appearance, we may in most cases be able to announce pretty confidently the existence of pregnancy by the third or fourth month, but not with absolute certainty. On the other hand, from being able to ascertain that the uterus still retains its natural size, we can, with much more positiveness, determine that pregnancy does not exist in a given case. The uterus may, indeed, be enlarged or distended by some other cause than pregnancy, but if it is not found enlarged at what should be the third month, we may be sure there is no pregnancy.

During the last five months the active and passive movements of the child reveal the fact of pregnancy with sufficient certainty. The *active movements* are felt by the woman at about four and a half months; sometimes earlier. In accordance with the strength of the child they are at first very slight and uncertain. We can easily imagine how delicate must be the sensations experienced by the female from the motions of a fœtus of four months; and trace them to the bounding and springing of a viable child of eight or nine months. It might be imagined that these sensations experienced by the mother would be quite infallible as indications of pregnancy. But other

* This statement is simple fact; the circumstances were well known at the time to the public, as well as to the profession, and are by no means forgotten now. The account is given here simply to show how men of the largest experience may not only be mistaken, but remain so.

sensations, the result even of morbid changes in the abdomen, have been mistaken by females for those occasioned by a fœtus in utero. Instances are given by writers, in which the sensations produced by an incipient dropsy, in connection with the enlargement of the abdomen from the same cause, have been mistaken in this manner, to the serious disappointment of all concerned. But the physician is not liable to such misinterpretation of sensations. By placing his open hand upon the abdomen the motions of the child may easily be perceived, if the woman be pregnant; and these movements are unmistakable, since no pathological conditions can simulate them. When from the inactivity of the child it becomes desirable to provoke its movement, this may be done by placing one hand upon one side of the abdomen and with the other hand gently striking the opposite side; the child will move quickly, as if to get out of the way. By some females the motions of the fœtus are felt about the end of the third month; usually at about four months and a half. Some are conscious of these movements only after six, seven, or eight months; and some do not experience them at all. This, which is owing to the great passiveness of the child, is particularly apparent in females of an inactive, sluggish temperament. After the motions have been distinctly recognized for some days, if they then evidently become weaker and weaker, or entirely fail, the physician should at once understand that there is danger. All the mother's symptoms should be at once sought out; for some condition threatens the destruction of the life of the child. The proper remedy will remove this abnormal condition of the mother, and restore the motions of the child. In plethoric females *Aconite* will often do this; bleeding, the corresponding, generally advised remedy in the Allopathic practice, is said to have always produced a favorable result.

The *passive movements,* or *ballottement,* are obtained by the manipulations of the examiner. The fœtus swimming in the amniotic fluid is nearly of the same specific gravity,—being a little heavier, it just swims in the fluid, just touching the lower internal surface of the amnion at intervals. Consequently, if we suddenly press upon the most dependent portion of the uterus, and then retain the finger steadily at that point, the fœtus having been forced to rise in the fluid by the sudden pressure will soon return, and its weight will be felt as it again strikes upon the finger of the operator. The proper method of performing this operation by the vaginal touch, is to place the female either in the sitting or the erect posture; then with the finger upon the wall of the uterus, either in front or behind the cervix,

curve the finger suddenly upward and forward, hold it there for a moment, when the fœtus having been displaced and made to rise in the fluid, will rebound and impinge upon the finger which displaced it. There results an unmistakable downward shock, and a sensation upon the finger which no other condition of the female can possibly produce. The same experiment with a stone in the bladder might seem to simulate this; but the sharp, strong blow which would be given by a stone, would convey a very different impression from that of the gentle, momentary touch of the fœtus rebounding in the amniotic fluid.

The same *ballottement* sensation may also be obtained by placing the female upon her side, with the palmar surface of all the fingers applied to the most dependent part of the abdomen,—forcibly flex them against the abdomen and hold them there; the fœtus thus suddenly displaced will rebound from the upper side of the uterine cavity, where its movement may be felt against the other hand there applied, and settle down again upon the fingers with a certain gentle, subdued, unmistakable shock. The most favorable time for obtaining this sign of pregnancy, is at any time after the period of quickening, and before the first of the ninth month; for then the child becomes too large to be easily displaced or to descend upon the finger. At six months and a half to the seventh month is the most satisfactory time.

Where, from the presence of the hymen, or the partial obliteration of the vagina, the examination per vaginam is inexpedient or impossible, it may be made through the rectum. But the unpleasantness of the operation, to the physican as well as to the female herself, would prevent resort to the anal examination except in cases where no other method was available.

Auscultation as applied to pregnancy consists in listening for the beating of the fœtal heart. If the stethoscope be applied to the abdomen with care, at any time after the period of quickening, the heart of the fœtus may be heard to beat nearly twice as fast as that of the mother, with a sound faint indeed and muffled, but still unmistakable. These pulsations generally become perceptible in the course of the fourth or fifth month; and they range from one hundred and thirty to one hundred and sixty per minute. They are sometimes faster and sometimes slower without any assignable cause; apparently not in the least influenced by the changes in the pulse of the mother. The fœtal pulsations will be most distinctly perceptible in that region of the abdomen which corresponds to the dorsal surface of the fœtus.

They are more frequently heard over the left iliac fossa than over the right; less frequently on the median line above the symphysis pubis. There is always a point over which these sounds are most distinct; and they diminish in intensity as we recede from this point. In their intensity these pulsations vary with the age of the patient, increasing in strength usually up to the full term. But the number of the pulsations is very much the same from the period of their being first distinguished up to the full term, except in some anomalous cases. When in the progress of labor the membranes are ruptured, the escape of the liquor amnii, by bringing the ear still nearer the fœtus, renders the beating of the heart more distinct. The pulsations become less regular as the labor advances; and they are more slow and feeble during the contractions. Hence it becomes evident that the health of the child must always be more or less seriously compromised during difficult and protracted labors.

When the dorsal surface of the fœtus is towards the abdomen of the mother, the pulsations are more distinctly heard; but after the sixth month they may be heard in any position of the fœtus.

There are two distinct sounds observable in the beating of the fœtal heart,—corresponding to those of the adult heart,—a first and a second sound, of which the first is more distinct. In those cases where at first but a single sound is heard, the other may often be distinguished by examining in some different position.

I. As a sign of pregnancy the *beating of the fœtal heart* is conclusive; since no other conditions can produce a similar sound.

Aneurisms or other abnormal pulsations of the mother must be synchronous with the pulse at the wrist, which is never the case with the pulsations of the fœtal heart.

Double or twin pregnancies may be detected by hearing the pulsations of the fœtal heart at two distinct parts of the abdomen; the sound becoming more and more distinct as you approach each part; while at the same time there is a perceptible want of harmony between the two sounds. In fact, there must be just as many fœtuses in the mother's womb, as we can thus trace fœtal hearts, each beating independently of the mother's pulse; and each growing more distinct as we approach the particular part and growing more and more faint, as we recede from it. Still the apparent absence of the sounds of two hearts does not preclude the possibility of a twin pregnancy; since one fœtus may be so directly behind the other as to mask its sounds.

The position of the fœtus in the uterus can be determined to a

limited extent only by auscultation. The pulsations heard most distinctly on the left of the median line, low down, just above the horizontal ramus of the pubis, indicate the first position. When they are heard in the same situation on the right side, they indicate the second position. The sounds being heard on either side on a level with or even above the umbilicus, indicate a breech presentation.

A careful study of the sounds of the fœtal heart both during the continuance of utero-gestation and at its period in labor, enables us to determine the health of the child. Thus after the sixth month, when we have had sufficient evidence of the existence of pregnancy, the absence of the sound of the pulsations of the fœtal heart ascertained by repeated examinations made at different times, will prove the death of the fœtus. And during labor, if after the rupture of the membranes the pulsations of the fœtal heart become irregular, more and more feeble, and more and more rapid, with irregularity of rhythm, absence of the second stroke, complete cessation of the beats during the pains, and slowness of their return after these have ceased, the life of the child is evidently threatened by further delay, and the labor should be terminated as promptly as possible. Still it should be remembered that just in proportion as from auscultation we have reason to conclude that the child is no longer living or viable, we should give our principal attention to the mother and govern our conduct by indications derived from her condition. For in many cases of protracted labor in which the pulsations can still be distinguished at the moment of birth, the child has already suffered so much that respiration cannot be established. While the positive evidence of the death of the fœtus *in utero* which may be afforded by auscultation leaves us at liberty to resort to craniotomy, under circumstances in which it might not be justifiable if the child were still living.

II. The *bellows murmur, bruit de souffle,* although capable of being distinguished before any of the other intra-uterine sounds,—before the beating of the fœtal heart can be heard,—is here mentioned in the second place,—since it possesses little or no diagnostic value. This sound may generally be heard as soon as the uterus has risen out of the pelvic cavity; that is a little earlier than the sound of the fœtal heart can be made out. From the supposition that it was produced in the utero-placental circulation it has been called the *placental murmur.* From being supposed by others to be produced by pressure of the developed uterus upon the iliac arteries and aorta,

in the posterior plane of the abdomen, it has been termed the abdominal souffle. From being supposed to originate in the enlarged vessels which ramify in the walls of the uterus, it has received from others the name of *uterine souffle*. The fact that this sound has been distinctly heard for a short time after delivery is conclusive against the placental theory. The double fact that this sound is heard as distinctly in the same position,—when the pressure of the gravid uterus must be supposed to be removed from the posterior abdominal arteries, and that it disappears under pressure made upon the anterior of the uterus directly towards the spine,—proves no less conclusively that it is not caused by obstruction of or pressure upon the iliacs and the aorta. There remains only the hypothesis of the uterine sinuses; and here the following circumstances may be considered as decisive of the question; the *bruit* is heard in the earlier part of the second moiety of utero-gestation, nearer the pubes, and it gradually ascends with the upward advance of the uterus; it is most distinctly heard in that portion of the uterus where its vessels are largest, and finally it may be heard through an instrument (the metroscope of M. Nauche) applied to the cervix uteri,—when it cannot be distinguished by the ordinary abdominal examination.

The bruit de souffle, uterine murmur, then is produced in the walls of the uterus itself and is synchronous with the radial pulse. It can be heard in chlorotic females in whom no pregnancy exists, in cases of fibrous tumor and vascular tumor of the uterus, and in males. As a sign of pregnancy, its value is very differently estimated by different authors, some giving it much more importance than others do. It can only serve to render probable the existence of pregnancy; since it may exist independently of pregnancy and does not always accompany it. No proof of the life or death, or position of the child can be obtained from the uterine murmur; nor whether the uterus contains a double fœtus or only a single one.* Where we are certain the female has no disease, the bruit de souffle becomes of some importance as a sign of pregnancy.

In auscultating the abdomen for the purpose of discovering the signs of pregnancy, it should be remembered that the uterine murmur may be first distinguished at about the fourth or fifth month, or at whatever time the uterus rises out of the pelvic cavity; and that the beating of the fœtal heart may be discerned in the course of the fifth month; so that in most cases the examiner may expect to meet

* For a fuller elucidation of this subject, compare Tyler Smith, Lecture VIII., and Cazeaux, on Signs of Pregnancy.

with both classes of sounds. The *bruit de souffle* coming first in order of time may serve to render pregnancy probable; while the clearly distinguished beating of the fœtal heart not only renders absolutely certain the presence of a living fœtus, but affords some indications as to its position in the womb, and its healthy condition.

Auscultation in the earlier months of pregnancy can only be accomplished by placing the female upon her back; later she may lie on her side, sit, or be examined standing. It is always best to use the stethoscope, which should be placed at once, first on the left side, low down; then in the same region on the right side if necessary. Thus by applying directly to the place where the pulsations are most usually to be found, we escape annoying the female by searching at random. It is important for the physician to avoid stooping too much, which in many cases will cause such a pressure of blood in his head as to prevent him from hearing at all. By using the stethoscope the examiner will avoid all danger of confusing the uterine sounds by the friction of his ear upon the abdomen; and at the same time relieve his patient from the close personal contact which to many females is a very serious annoyance. In cases in which the mother has already recognized the fœtal movements, the stethoscope should be applied exactly opposite to the side where these are most distinctly felt. For the upper and lower extremities of the fœtus which cause the "motions," being folded upon its abdomen, and the pulsations of the fœtal heart being most distinctly perceived from the back, it will be evident that if the motions are felt in the left side of the abdomen of the mother, the sounds of the fœtal heart will be plainest on the right side, and vice versa. Before the fifth month, however, the pulsations are usually most plainly discernible on the median line, from the pubis to the umbilicus.

In addition to the uterine murmur, or as it is termed by some, the *bruit placentaire*, and the beating of the fœtal heart, certain "sounds of the displacement of the fœtus," have been distinguished by auscultation; and at a period even prior to the uterine murmur. These sounds consist of shocks, sometimes quick, like a light tap, and at other times more like a heavy plunge; and there are also friction-sounds, which are evidently produced by the gliding of the surface of the fœtus over the inner surface of the uterus. Some have even believed they could distinguish the pulsations over the funis itself,—in cases where the parietes of the abdomen were extremely thin. But both these classes of sounds,—while they possess at the least very little of practical diagnostic value,—require for their successful

discovery more protracted opportunities for auscultating the particular case, and greater skill and more extended experience in auscultation in general, than usually fall to the lot of the young physician, at least in private practice.

Statement of the Principal Signs of Pregnancy;

Showing the time and order of their appearance; condensed from Cazeaux.

First and Second Months.—Suppression of the menses; usually from the first of conception; some exceptions, which however are less numerous in the later months. *Morning sickness, nausea and vomiting*, and other gastric disturbances; sometimes flattening of the hypogastric region; depression of the umbilical ring. Enlargement and tenderness of the breasts; increase in the size of the uterus. It slightly descends, and becomes less movable.

Third and Fourth Months.—Towards the close of the third month the fundus uteri rises to the level of the superior strait. About the end of the fourth month it reaches midway in the space between the umbilicus and the pubis. *Vomiting* and other gastric derangements. A small protuberance in the hypogastric region. By abdominal palpation a round tumor may be detected, of the size of a child's head. Less depression of the umbilical cicatrix. Increased enlargement of the breasts; the nipple appears more prominent and the areola slightly discolored, especially in primiparæ. In the fourth month the cervix uteri appears elevated, and directed backwards and to the left side. The orifice of the os tincæ is more softened; in multiparæ it is patulous, admitting the finger; in primiparæ, it is closed and rounded. *Kiestein* in the urine.

Fifth and Sixth Months.—Towards the close of the fifth month the umbilicus is one finger's breadth below the umbilicus; and the same distance above at the end of the sixth month. The gastric disturbances generally disappear. The sensation of "quickening" may be experienced about the sixteenth or eighteenth week, that is about the beginning or middle of the fifth month. Then the movements of the fœtus itself begin to be noticed. The abdomen becomes still more enlarged. The umbilical depression is nearly effaced. The uterine murmur may be heard. And soon after the beating of the fœtal heart may be distinguished. Ballottement may be performed. The discoloration of the areola becomes deeper. Kiestein in the urine. The inferior half of the intra-vaginal portions of the

cervix uteri is softened. In multiparæ the finger can penetrate the cavity of the neck, which in primiparæ remains closed at its orifice, though softened.

Seventh and Eighth Months.—The fundus uteri is four fingers' breadth above the umbilicus at the seventh month; and five or six at the eighth. Dilatation of the umbilical ring; pouting of the navel. The movements of the fœtus are more sensibly felt. The sounds of the fœtal heart are more clearly distinguished. Ballottement, which is easily performed in the seventh month, becomes obscure in the eighth. The softening of the cervix uteri extends above the vaginal insertion; in primiparæ the cervix is ovoid and shortened; in multiparæ it is conoid, and so patulous as to admit the whole of the first phalanx of the finger, while at the upper portion of the neck it still remains closed. The areolæ become darker. The breasts become more fully developed, and there is a show of milk. Kiestein still appears in the urine.

Ninth Month.—*First Fortnight.*—The fundus uteri reaches the epigastric region and (on the right side) presses the inferior margin of the false ribs. Difficulty of respiration. The abdomen is still more enlarged; the skin is stretched and very tense. The fœtal movements are active. The sounds of the fœtal heart are heard. In primiparæ the cervix is softened and its external orifice slightly opened. In multiparæ the finger may penetrate its entire cavity to the os internum, which remains closed.

Second Fortnight.—The fundus uteri sinks down a little. The vomitings are less troublesome; and the respiration easier. Walking becomes difficult. Frequent and sometimes ineffectual efforts to urinate. In multiparæ the internal orifice is dilated, and the finger may reach the naked membranes. In primiparæ the entire cervix is expanded, the os externum remaining closed. Hemorrhoids; varices; and œdema of the lower limbs and even of the vulva.

CHAPTER TWENTY-FOURTH.

DEVELOPMENT OF THE OVUM.

THE UNIMPREGNATED OVUM.—The ovary is principally composed of Graafian vesicles, or follicles imbedded in areolar tissue, and abundantly supplied with blood-vessels.* Each vesicle contains a single ovule; and consists of two membranes, the outer of which is in contact with the stroma of the ovary, while the inner tunic, or *membrana granulosa,* forms the immediate covering of the ovule and of the liquid in which it floats. For the ovule occupies but a very small part of the cavity of the Graafian vesicle, the remainder being filled with albuminous fluid, which, from its greater gravity, supports the ovule upon its surface near the upper portion of the vesicle. Here the ovule comes in close relation with the inner surface of the membrana granulosa; and at this point there is found, collected upon the ovule, a zone of granules called the *discus proliferus.*

The *ovule* is composed externally of an envelope, the *vitelline membrane,*—sometimes called the zona pellucida,—which after fecundation is known as the chorion; internally the ovule is composed of the *vitellus,* or yolk, a spherical, semi-solid mass, or granular, organized liquid. The ovule is very small, measuring from the two hundred and fortieth to the one hundred and twentieth of an inch in diameter.

Within the vitellus, and situated almost immediately beneath the vitelline membrane, is found a clear, colorless, transparent vesicle, of a rounded form, called the *germinal vesicle.* This may measure from the eight-hundredth to the five-hundredth part of an inch in diameter.

Upon the surface of the germinal vesicle may be seen a dark spot, like a nucleus, called the *germinal spot.* While the rest of the contents of the vesicle is transparent, this is opaque; and its diameter may be stated to be not more than the two-hundredth or three-hundredth part of a line.†

Such is a succinct description of the human ovum in its unimpregnated condition. But if we examine the same ovum some three

* See cut and description, pages 49, 50.

† Müller's Elements of Physiology, London, 1842, vol. ii., p. 1471.

weeks after it has become fecundated, we shall find it so wonderfully changed, that were it not for the fact that all the various steps and stages of this remarkable transformation may be traced in the development of the ova of fishes, of birds and of the lower orders of the mammalia, we might entirely fail of being able to recognize and prove the identity of the one with the other.* The external tunic, or ovisac, becomes the *chorion*, whose cellular surface is extended into a number of villous prolongations, which form the channel through which the embryo is nourished by the fluids of the parent, until a more perfect communication is subsequently formed. The internal tunic, above described as the membrana granulosa, becomes separate and distinct from the outer one, and is called the amnion. Between these two membranes now intervenes some considerable space, which is occupied by an albuminous liquid, in the midst of which is situated the umbilical vesicle. Within the amnion is found another fluid, the *liquor amnii*, in which is supported the ovum. In the ovule itself the germinal vesicle disappears, and a new cell, the embryo cell, arises in its place. And finally, the entire ovum, with its external covering, is enveloped by a double covering, the *deciduous membrane*, which is developed and reflected from the inner surface of the uterus.

The manner of the escape of the unimpregnated ovule from the ovary has already been described, on page 247 of this work, to which reference is now to be made. The description of the manner in which impregnation is effected, will be found on page 296, which see. The changes which occur in the uterus immediately after conception, and the attendant condition of the ovary and Fallopian tubes, have been recounted on pages 299 and 300; these should be carefully reviewed. It remains now to describe the changes that occur in the ovum from the first possible moment of observation after impregnation, to the full development of the new being at the period just preceding parturition.

No change has ever yet been observed immediately after fecundation, until the escape of the ovule from the ovary into the abdominal extremity of the Fallopian tube. No ovule has yet been observed in the Fallopian tube still presenting either the germinal vesicle or the germinal spot. At what time, exactly, these features of the ovule become transformed, has not yet transpired. But it is certain that

* The reader will find a full, complete and very instructive exposition of the comparative anatomy of ovular development in the volume of Müller above referred to, pages 1507–1572.

the ovule, either while still remaining in the ovary, or on its way out from it, gradually loses both the germinal vesicle and the germinal spot. It may be possible that the spot disappears first, the vesicle subsequently; and it is certain that the space occupied by them becomes filled with granules. This single circumstance alone is sufficient to prove that conception must take place before the ovule enters the Fallopian tube; and that the ovules that have just caused the menstruation cannot be the same that are impregnated. The same circumstance also proves that there is one ovule for menstruation; and another for conception.

The only change observable in the ovum during its passage through the first half of the Fallopian tube, is the thickening of the

Fig. 35.

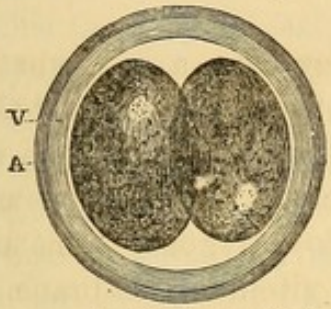
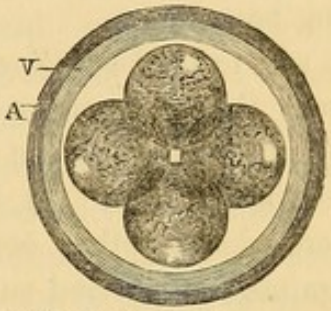
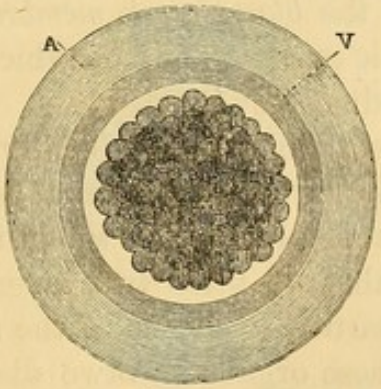


Fig. 36.



A. The layer of albumen. V. The vitelline membrane.

Fig. 37.



The Fecundated Ovum at a more advanced stage.

A. The albuminous layer surrounding the vitelline membrane V, which is seen to be thickened, and to contain within its cavity the mulberry-like mass.

vitelline membrane. During the passage of the ovum through the second portion of the tube, the vitellus evidently becomes more consolidated; and in concurrence with this change a thin, white fluid escapes, entirely surrounds the vitellus, and fills the interval between the vitelline membrane and the vitellus, occasioned by the condensation of the latter.

Other and very remarkable changes take place in the ovule as it

descends through the second portion of the Fallopian tube. One of the more remarkable of these constitutes what is termed the *segmentation of the vitellus*, which, with its immediate consequences, may be thus described. The vitelline membrane continues to thicken, and the vitellus becomes divided into two distinct spheres; each of which is again divided into two others; these again into others, and so on, during the whole course of the descent into the uterus; each minute sphere dividing and subdividing until the ovum reaches the uterine cavity. The vitellus is thus completely dissipated, and what in the first instance was its exterior surface, comes to resemble a mulberry-seed in its appearance; while its cavity or interior is filled with a liquid containing an infinite number of minute granules. (This process of *segmentation* is illustrated in Figs. 35, 36 and 37, on the preceding page.)

These are termed *vitelline spheres;* they have a somewhat firmer consistency than the original substance of the vitellus; and this consistency appears to increase as they successively multiply in number and diminish in size. At last they become so abundant as to be closely crowded together, compressed into polygonal forms and flattened against the internal surface of the vitelline membrane. They have by this time become converted into true animal cells, which, adhering together by their adjacent edges, form a continuous organized membrane, called the *blastodermic membrane.* This constitutes the germ-mass, or plastic material, out of which the entire organization of the fœtus is gradually evolved.

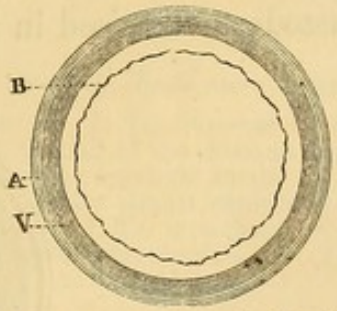
This blastodermic membrane is subsequently divisible into two distinct layers, which are known as the external and the internal layers. And as the blastodermic membrane, as a whole, represents all the fœtal organization in its totality, so these two layers represent the commencement of all the particular organs of the fœtus; and the subsequent division of all these organs into two distinct classes, those of the vegetative life and those of the animal life, respectively, finds its foundation in this pre-organic stage of organization. For the internal layer of the blastodermic membrane produces the intestinal canal and all the organs of vegetative life; while the external layer is developed into the spinal column and the organs of animal life.*

As nearly as can be determined, the time occupied by the human ovum in traversing the Fallopian tube is twelve days. And the movement is always much more rapid in the first than in the second

* Compare T. Smith's Obstetrics, Second Am. Ed., p. 97; Draper's Physiology, p 523, and Dalton's Physiology, p. 587, *et seq.*

half of its descent; when the nearer it approaches the uterus the slower it moves, probably on account of the increasing narrowness of the tube. The ovum is known to enlarge decidedly during its continuance in the tube; during which time the product of conception must be nourished by the granules contained in its interior fluid. When the ovum approaches the uterine cavity, we find in it simply the vitelline membrane much thickened and surrounded by a dense layer of albumen which it has collected in passing through the tube, and the vitellus containing some granulations remaining from the decomposition, of the mulberry-like body. The vitelline granulations as they disappear, give place to a perfectly white, transparent liquid, In their disappearance, these granulations seem to be condensed, and by adhering to one other, they form a new vesicle which lines the first. This fact may be easily demonstrated by macerating the ovule in water, when the new vesicle will be thrown off by the water percolating through the vitelline membrane, and be seen to lay corrugated in distinct folds, in the above-mentioned transparent liquid. This new membrane, or vesicle, is called the blastodermic vesicle. Whilst this process is going on, the albumen collects as above stated, becomes absorbed, and the vitelline membrane is much thinned. The ovule, now for the first time begins to be fixed, and can no longer be blown about, as before, on the surface of the mucous membrane.

Fig. 38.



The Ovule shortly after its arrival in the Womb.

A. The diminished albuminous layer. V. The vitelline membrane. B. The blastodermic membrane.

In sixteen or seventeen days after fecundation, a rounded, whitish speck is perceptible on some portions of the blastodermic, vesicular membrane, and really stands out in relief; this is called the *tache embryonnaire.* This embryonic spot is composed of granulations like those of the blastodermic vesicle, only they are more numerous and more concrete. It is very evident that the embryonic spot and the blastodermic membrane are each developed from processes of a double lamina, which may be separated by means of fine needles

Fig. 39 accurately portrays the doubling of the blastoderm; the embryonic spot assuming an elongated form. Finally, the blastoderm exhibits a convex and a concave surface, as in Fig. 41. The

Fig. 39.

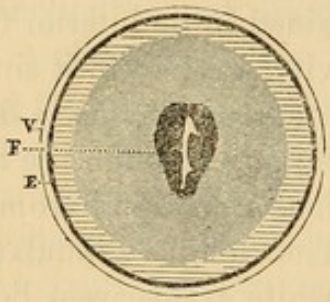


Fig. 40.

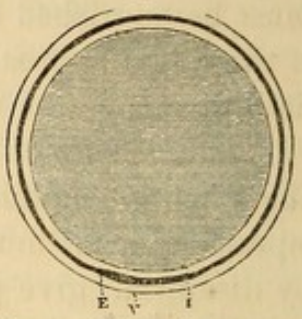


Fig. 39. The blastoderm with the embryonic spot seen in front. V. The vitelline membrane. E. The external layer of the blastoderm. F. The embryonic spot.
Fig. 40. The same figure in profile, to show the two layers of the blastoderm. V. The vitelline membrane. E. The external; and I, the internal or intestinal layer of the blastoderm.

concave surface is divided into two distinct portions, one embryonic, the other becoming the umbilical vesicle. The tache embryonnaire becomes the embryo. The margins of the embryo exhibit a tendency to double over, leaving a cavity (as well as the extremities) of considerable depth. The extremity which is most fallen is called the cephalic, the other the caudal extremity. As the development of the embryo goes forward, numerous minute elevations appear, scattered over the external surface of the ovum; these become the villosities which subsequently appear on the chorion. At the same time, the external layer of the blastoderm is raised in folds around the central

Fig. 41.

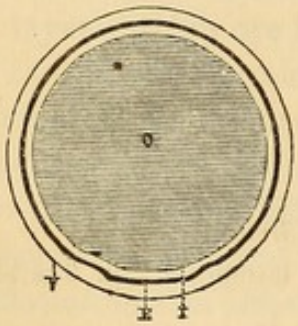


Fig. 42.

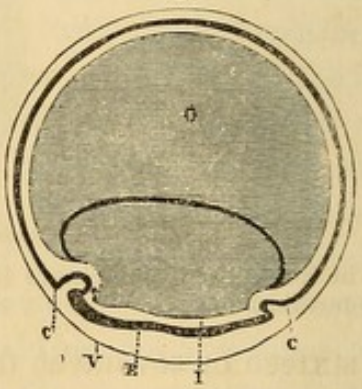


Fig. 41. A section of a more developed ovum, in which the two portions, the embryonic and the umbilical vesicle, begin to appear. O. The umbilical vesicle. I. The internal layer of the blastoderm. E. The external layer. V. The vitelline membrane.
Fig. 42. A section showing the origin and first traces of the amnios. O. The umbilical vesicle. I. The intestinal; and E, the external layer of the blastoderm. V. The vitelline membrane. C C. Origin of the cephalic and caudal amniotic hoods.

or embryonic portion; see Fig. 42. Figs. 43 to 46, exhibit the continuous approach of the embryo towards the centre of the ovum, until the blastoderm has become united over the dorsal surface of the

embryo, their union absorbed, and the embryo, surrounded by a complete fold of the inner or mucous surface of the blastoderm, which seems to be a continuation of that upon the abdomen of the embryo.

This new membrane thus formed, is called the amnion, and becomes distended and separated from the external surface of the embryo by the amniotic fluid. The external or serous lamina now forms a ring or membrane by itself, which surrounds the whole. This contains the liquid in which the embryo with its amnios swims, and which, as the fœtus develops into the child of nine months, is forced onwards to join the vitelline membrane and chorion. Immediately after the formation of the amnios, the doubling in of the cephalic and caudal extremities increases and forms more and more the abdominal cavity of the embryo, and finally a mere canal leading out of the abdominal

Fig. 43.

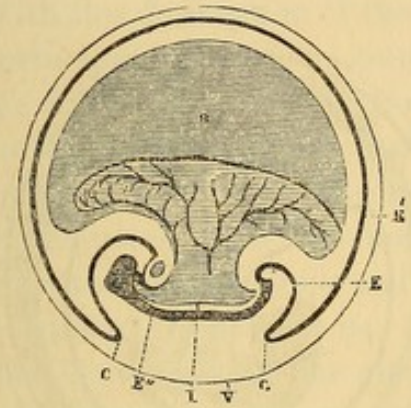
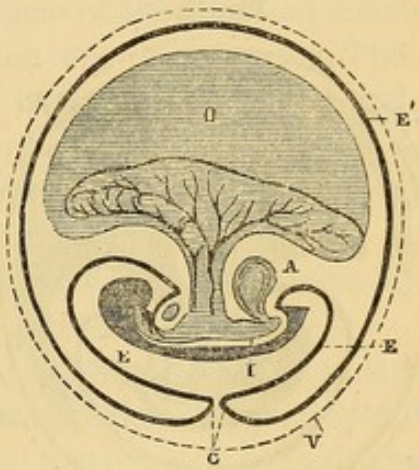


Fig. 44.



The Amniotic Hoods more developed.

Fig. 43. O. The umbilical vesicle. I. The internal or intestinal; and E, the external layer of the blastoderm. E'. A portion of the external layer converted into the amnios. E''. The embryo. C. The limit of the amniotic hoods. V. The vitelline membrane.

Fig. 44. This figure shows the amnios almost completed, and likewise the origin of the allantois. O. The umbilical vesicle. I. The intestines. E. The amnios. E'. The external layer of the blastoderm, or the non-vascular chorion. V. The vitelline membrane. C. The amniotic hoods ready to close up. A. The allantois.

cavity into a large vesicle, called the umbilical vesicle; and this canal, as it finally closes up, forms the umbilicus of the nine months child.

In the cuts 43, 44, 45, 46, blood-vessels may be seen running from the embryo into this vesicle and again returning,—one artery from, and two veins returning to the embryo,—these are called the omphalo-mesenteric vessels. As this doubling of the embryo goes on,—see Fig. 44,—we find a slight elevation springing up at the spot where the rectum and bladder are confounded in the earlier days of embryonic life, under the name of cloaca. This begins to take place about the time the embryo has nearly exhausted all the nourishment contained in the umbilical vesicle, and the embryo would inevitably

perish at this stage from want of nourishment but for this wise provision of nature, by which a connection is formed with the parent. For this little elevation rapidly extends to the villi of the chorion, passing out from the abdominal canal alongside of the umbilical vesicle, and is called the allantois. The allantois is composed of two arteries and one vein; the arteries arising from the primitive iliacs, carrying arterial blood of the embryo, seeking a fountain for allaying its thirst for material wherewith to sustain the little being over which it presides, for the blood always contains all the material elements for upbuilding and for repairing tissue.

These arteries seem to compel the growth of the allantois, and, with the accompanying veins, (for veins always accompany arteries,) plunge into and take root in the villous coat of the chorion when the desired nourishment is found in the blood of the mother. This is

Fig. 45.

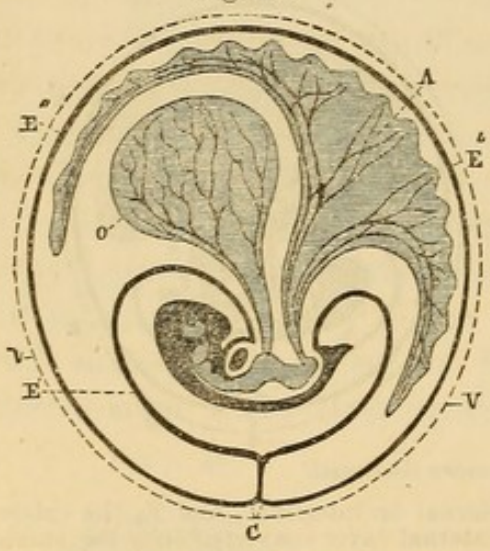


Fig. 46.

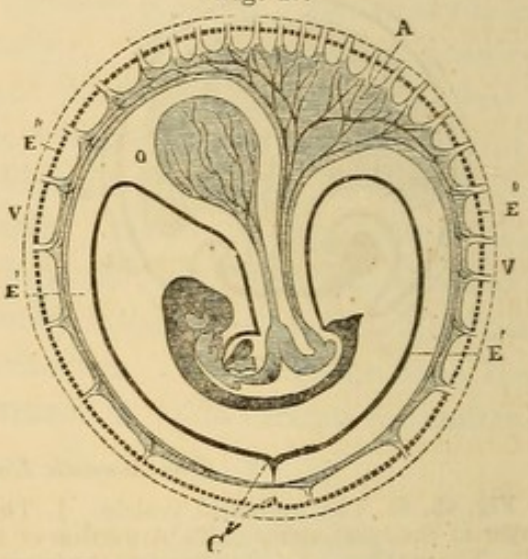


Fig. 45. This figure shows the rapid progress of the allantois, and how it spreads over the fœtus, the umbilical vesicle, and the amnios. This latter begins to unsheath the pedicle of the umbilical vesicle, and that of the allantois in such a way as to form a commencement of the cord. According to some writers the vitelline membrane disappears more and more. O. The umbilical vesicle. E'. The amnios. E''. The external layer of the blastoderm. C. The point where the two hoods come in contact. V. The vitelline membrane almost entirely atrophied. A. The allantois.

Fig. 46. In this figure, the allantois has spread over the whole internal surface of the ovum, and but very slight traces are left of the continuity between the amnios and that part of the external layer of the blastoderm which formed the non-vascular chorion; the latter has a tendency to be confounded with the chorion, and the amnios encloses the umbilical cord more and more. O. The umbilical vesicle. E'. The amnios. C. The point where the two hoods are fused into each other, and form but a single membrane. E''. The external layer of the blastoderm. A. The allantois. V. The vitelline membrane.

quickly carried back by the vein to the famishing embryo and delivered into its bosom through the liver, as will be seen farther on. In the subsequent pages also, it will be shown that the first circuit in the embryonic circulation constitutes the beginning of the placental mass, to be afterwards described.

In some animals, and perhaps in the human female, the allantois in its development spreads out like an umbrella; but, for all practical purposes, it is sufficient to describe it as taking root in a single villus of the chorion, and spreading out more and more as more ample means of supply are demanded till the full time is accomplished.

The closing up of the abdominal or umbilical canal brings the amnios in close juxtaposition to the remaining minute stem of the umbilical vessels,—as seen in Fig. 46;—and as this canal closes up, the amnios sheaths over the allantois and the small stem of the remaining umbilical vesicle, which vesicle is thereby forced out and is found finally to be a little yellow body lying between the chorion and the amnion, next to the placental mass; and the allantois stem is found to be one and the same thing as the umbilical cord entirely sheathed over by the amnios.

With this description of the development of the allantois, concludes the principal parts of the ovum;—which are therefore: 1, The embryo; 2, the liquid in which it swims; 3, the amnios, filled with the liquor amnii, and forming a sheath over the umbilical vessels; 4, the umbilical vesicle with the omphalo-mesenteric vessels still to be seen communicating with the embryo; 5, the allantoid vesicle; 6, the space between the amnios and the umbilical vesicle, filled with liquid; and 7, the chorion, the outer envelope over all.

THE DEVELOPMENT OF THE DECIDUA.—The *decidua*, from first to last, is simply the mucous membrane of the uterus, hypertrophied by the influence of conception and gestation. This hypertrophied development, which constitutes the deciduous characteristic, as previously stated, has already commenced when the impregnated ovule is about to make its escape from the ovary. So that upon its arrival in the cavity of the uterus, the ovule finds a soft, velvety bed in readiness to receive it. And as the mucous membrane of the uterus is continuous with that of the Fallopian tube,—so in cases of extra-uterine fœtation, the deciduous development has sometimes, although not always, been found in the uterus; and in one case of development of the ovum in the Fallopian tube, referred to by Müller,* the decidua was observed both in the uterus and in the tube.

Into the vegetative bed above described, the ovule becomes fixed by the villi of the vitelline membrane (which becomes the chorion) taking root and growing into it in every direction. The decidua at the same time grows up all around the ovum,—which latter thus

* "Elements," vol. ii., p. 1572, London, 1842.

becomes implanted in a living cyst, attached to one portion of the wall of the uterus, usually that of the fundus. When thus encysted the ovum is not only completely covered by the mucous membrane; but by means of the villi of its own membrane, the chorion, it becomes attached to the decidua, growing into it whenever they thus come in contact.

Now as the ovum becomes developed, it is very evident that one portion of it must remain in contact with that region of the uterine wall to which it has already become attached,—and this, as already stated, is usually the fundus,—the other portions of the ovum must therefore continually extend more and more into the cavity of the uterus, during the entire period of utero-gestation. In tracing the cavity of the uterus at an early period of gestation, we find something like four-fifths of the apical portion entirely unoccupied by the ovum. That portion of the decidua which covers this part of the interior surface of the uterus is called the *decidua vera*. This part of the membrane at the same time covers all the lower segment of the ovum, or chorion, and is therefore called also the epichorial decidua. That part of the deciduous membrane which extends between the ovum and the portion of the wall, or fundus of the uterus to which the ovum itself is more immediately attached, is called the utero-epichorial decidua, because it really grows out from the uterus and upon the chorion on that side. As the development of the ovum advances, the epichorial decidua is pushed farther and farther into the cavity of the uterus, towards its apex, and of course grows thinner and thinner. The villi which at the outset so thickly studded this portion of the chorion become gradually atrophied for want of use; while at the same time those of the opposite side become more and more largely developed, from being the medium through which supplies are transmitted from the mother to the embryo. Finally, at the close of the period of utero-gestation, the epichorial decidua is found to have been forced down to the very apex of the uterus, and thus everywhere brought into contact with the decidua vera. The utero-epichorial decidua remains as it was. The whole however becoming so worn out, having performed its uses, that it is cast off at parturition, and replaced by a new membrane.

The Further Development of the Ovum.—Having thus described the provision made for the primary reception and support of the ovum in the changes which occur in the interior surface of the uterus, we will now proceed to the more particular examination of the further development of the ovum itself. We have briefly traced

this development from the original egg to the production of the embryo; and noticed in a cursory manner the umbilical and allantoid vesicles, the amnios and the chorion. These appendages to the embryo, which at the same time protect it and administer to its growth, require now to be more particularly considered.

The *allantois*, as before partially described, is usually observed to arise as a minute tubercle from the inferior portion of the canal, about the tenth day; it then rapidly shoots forward and takes root in the villi of the chorion. This organ is also called the *urachus;* and is accompanied by, or rather principally composed of two arteries, proceeding from the iliacs and called the umbilical arteries, and one vein which returns the blood from the mother to the embryo.

The allantoid vesicle, as such, disappears very rapidly; after a few days no trace of it can be found, excepting a cord of no definite length which connects the embryo with the chorion, and contains the umbilical vessels. That portion of this vesicle which is contained within the abdomen of the child, is, however, more persistent in its duration, becomes converted into the urinary bladder, and in the rudimentary state terminates in the rectum and constitutes the temporary cloaca,—all of this is capable of demonstration in the human subject. It is here easy to understand what is meant by the urachus, which is really that portion of the allantois which extends from the rectum to the umbilicus; hence any thing that is capable of causing descent of the uterus must drag on the bladder from this attachment, and thus results the dragging sensation felt in the umbilicus in such cases, from the attachment of the urachus to that organ.

The *umbilical vesicle*, when first seen, seems to occupy the whole of the cavity of the ovum. Subsequently the embryo is seen on the blastoderm, its back corresponding to the serous, external, surface; and its abdomen to the mucous or interior surface of the blastodermic membrane. Thus at this early period the abdomen is open to the entire umbilical vesicle. As development goes on, the embryo seems to rise more and more towards the umbilical vesicle; and to be developed forwards and inwards upon the abdomen. In consequence this vesicle loses more and more of its bulk and assumes the appearance of a long narrow stem. This vesicle contains a yellowish and highly nutritious fluid, which, through the intervention of a vascular apparatus, serves to nourish the embryo, until it can provide for itself by other means. This vascular apparatus is supplied with two trunks for the transmission of blood,—one venous, the other arterial,

both however accompany the pedicle and form an important constituent part of it. See Fig. 60, Plate III. "The first, N, called the omphalo-mesenteric vein, enters the abdomen, winds around the duodenum, and then opens into the umbilical vein at the point O, just as the latter emerges from the liver. As it passes the duodenum, branches are given off to the stomach and intestines, and when it discharges into the umbilical vein it sends a voluminous trunk to the liver. That portion which furnishes the branches just described, persists in the adult under the name of ventral or hepatic-portal vein, whilst all the rest will disappear with the umbilical vesicle and its pedicle. The arterial trunk P accompanying the pedicle, has been designated as the omphalo-mesenteric artery. Arising from the aorta, it gains the summit of the intestinal convolution, and gives off branches to the mesentery and to the intestine itself; then it reaches the pedicle, and follows the latter to the umbilical vesicle upon which it ultimately ramifies. The part that supplies the mesentery is converted in the adult into a mesenteric artery, all the rest being effaced. From all which, it appears that the vascular system of the umbilical vesicle represents the primitive circulation in the embryo, corresponding in it to the sanguiferous apparatus of the yolk of fowls."—*Cazeaux.*

The *amnion,* as before stated, becomes developed by the embryo rising into the umbilical vesicle, thereby completely developing the blastoderm about itself, when the doubled parts unite, the bridge uniting this new ring with the former becomes absorbed, leaving two distinct circles formed out of one,—the former being the chorion, the latter the amnion. Now as the amnion becomes distended more and more, with liquor amnii, of course the umbilical vesicle becomes encroached upon and grows smaller and smaller, at the same time the abdomen of the embryo curves up more and more, and the pedicle of the umbilical vesicle becomes longer and smaller, being now found on the outside of the amnion, between it and the chorion. At the end of six weeks after conception this is seen to be a small yellowish point about as large as a coriander seed. The umbilical vesicle is of vital importance to the embryo until after the formation of the allantois and its union with the villi of the chorion,—after which it is no longer of any particular account, and with the exception of the above-mentioned remnant of its artery and vein, it becomes entirely atrophied.

The amnion is thus seen to be the most internal membrane of the body, and that it is formed by folding the blastoderm over the em-

bryo in every direction,—which latter is accomplished apparently by the rising of the embryo towards the centre of the umbilical vesicle. In this manner the external or serous surface of the blastoderm is turned inwards and forms the inner surface of the amnion, and the internal or mucous surface is turned outwards. When the folding over is complete, and both portions have grown together so as to form a complete shut sac around the embryo, then we have the amnion containing the embryo, the umbilical vesicle, and a quantity of fluid, thick and gelatinous, between the amnion and the chorion. which becomes less and less as the amnion itself becomes distended with its own proper fluid. The notion that the amniotic fluid is a secretion from the surface of the amnion is a mistake,—since this liquid is unquestionably an efflux from the embryo itself. From the moment of the complete formation of the amnion as a shut sac, there is no longer any outlet for the escape of the efflux from the embryo; and that there must be such an efflux, must be evident since there are certain portions of the nourishment flowing into the embryo that are not entirely assimilated, some material carried thither from the mother, which, although it has served the purpose for which it had been imbibed, must be in part rejected in the form of sensible or insensible perspiration. In fact there can be no doubt that there is enough of what we may call offal from the embryo and fœtus to account for the quantity and quality of the liquid found within the amniotic membrane.

As the embryo develops and the liquor amnii increases, the amnion is forced to recede more and more from the fœtus, of course it must eventually be forced to join the outer membrane, or chorion, and thus form a covering to the umbilical cord all the way from the navel of the fœtus to the outer membrane or chorion, into which its maternal end is inserted; and all the parts thus enclosed constitute what is called the umbilical cord. Consequently the whole abdominal cavity must be in connection with the canal represented by this cord, that the fœtal appendages may communicate with it through the opening thus prepared for them. It is in this manner that the pedicle of the umbilical vesicle becomes united to the ileo-cæcal fold of the intestine, whilst the allantois connects with the rectum by the intervention of the urachus. As the development of the ovum advances, the amnion grows more and more like a serous membrane in firmness and consistency, although it never becomes enclosed, nor does it at any period possess any vessels.

The *liquor amnii* itself varies in appearance with the time at

which it is examined. At the earliest period, it is clear, transparent and limpid; at later periods it becomes thicker, more opaque, sometimes flaky, green, yellow, or of almost any other color,—according to certain states of the fœtus itself, which it derives from corresponding conditions of the mother. Its odor varies also; sometimes it is like that of spermatic fluid, with saline taste. The proportionate quantity of the liquor amnii also varies according to the time; in the earlier periods it is much greater than the weight of the fœtus. At the middle of the term the relation may be about equal; and after that time the liquid lessens in proportion, as the fœtus increases. So that at full term the quantity of water is usually about a pound and a half,—sometimes more and sometimes much less.

The analysis of this fluid usually shows 98.8 of water; albumen, hydrochlorate of soda, phosphate of lime and lime, 1.2 parts in a hundred.

The formation of the embryo involves the formation of the amnion as a matter of course, as a reservoir for the reception of effete matters from the fœtus. The amnion also affords protection to the fœtus by surrounding its body with an aqueous shield, impervious to blows and shocks, since the embryo floats freely in its centre. The fœtus, thus floating in the liquor amnii, is at liberty to accommodate itself to all the movements and varying positions of the mother, and to yield, with the least possible disturbance, to all the influences of her mental and moral states. The accoucheur finds in the ballottement, practised by the aid of this fluid, an important diagnostic sign of pregnancy; and at the period of parturition is able to correct any malpositions with greater ease before than after the waters have been discharged.

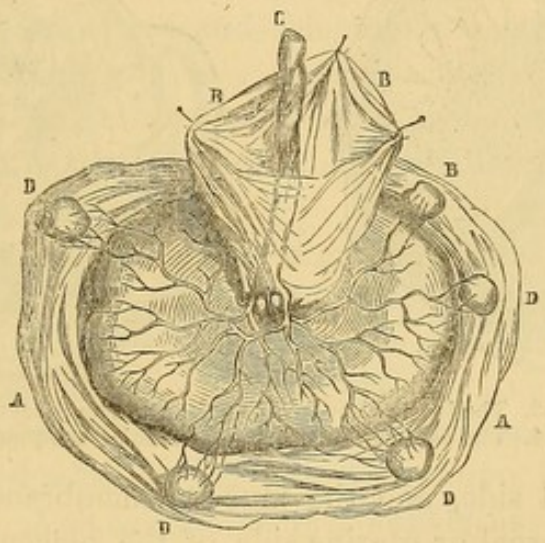
The *chorion,* it is now very evident, consists in the later stages of pregnancy, first, of an outer membrane, the original vitelline membrane; next to this lies the blastodermic membrane; the former being called the *exochorion,* the latter the *endochorion;* within this last lies the ammiotic membrane; so that at the time of labor we are often conscious of rupturing these three distinct membranes.

The Placenta, After-birth, Secundines.—In order to obtain a proper idea of the *placenta,* it is necessary to commence its description at the very commencement of its formation. It will be recollected that the allantois shoots from the embryo at a very early period of its existence, and very soon takes root in the villi of the chorion. Examination and experiments prove that this process is adapted to

furnish nourishment to the embryo by means of arteries, and one vein, passing from the embryo to the mother and back. The arteries carrying the impoverished arterial blood from the fœtus towards the mother, seeking aeration and nourishment in the mother. The vein brings it back, purified and laden with all that the embryo needs for its growth and nourishment. In this first circuit there is made the beginning of the placenta, or the placenta itself so far. The next circuit adds to its size by the larger demand made by the increasing embryo; and so it goes on, constantly enlarging, circuit after circuit, until the accomplishment of the full time.

The placental mass, at its full size, is about six inches in diameter; three-fourths of an inch thick in its centre, tapering to a thin edge at its circumference. In different persons the placenta will often be found to vary in form and size; but the above are about the average dimensions. The cord is usually attached in the centre; but it is

Fig. 52.



Placenta with five separate Cotyledons.

A. Chorion. B. Amnion. C. The cord. D. Separate Cotyledons.

sometimes found attached to one edge, constituting what is termed a battle-door placenta. The placenta presents an internal or fœtal surface, and an external, maternal, or uterine surface, and a border. At full term the internal surface is found covered by the chorion and the amnion; while numerous ramifications of the umbilical vein and arteries are seen (as in the cut) to converge from the circumference to the centre to form the umbilical cord. This convergence commences with the very first circuit, after the allantoid vesicle has taken root in the villi; and it continues, becoming more and more largely developed till the completion of the full term. The fœtal surface is smooth,

concave and transparent, showing these ramifications most beautifully at full term. The maternal surface is convex, rough, and subdivided into a variable number of lobes, held together by an albuminous tissue which is so easily torn off that it is very difficult to retain it in separating the placenta. These lobes, or cotyledons, are the original villi of the chorion, very much enlarged and compacted together; although even these are also very easily ruptured and separated into loose disorganized masses.

The villi have been described as compacted together; this results from their having grown into the mucous membrane of the uterus, between that organ and the ovum. At the same time the mucous membrane has also grown into the villi and the chorion; so that there is a mutual growth of one into the other, each supplying its own share in the formation of the placenta: the villi and their growth

Fig. 53. Fig. 54.

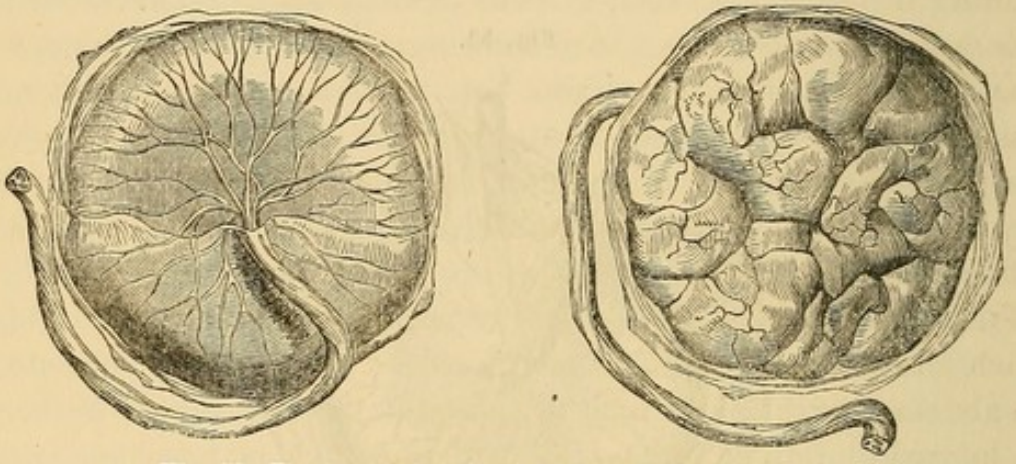


Fig. 53. The internal or fœtal surface of the placenta.
Fig. 54. The external or uterine surface of the placenta.

forming the fœtal side, and the mucous membrane and its growth forming the maternal or uterine side of the placenta. Thus, in the the very first circuit of the fœtal blood in its vessels on the inner side of these villi, it becomes aerated and supplied with all things needful from the maternal blood on the outer side of these villi. In this way the process goes on, hour after hour, day after day, the demand and the supply alike increasing, till large rivers of blood are formed on each side; their banks, however, never breaking, while the fœtal blood constantly communicates, but never commingles, with the maternal blood. This is proved by injecting the vessels on the fœtal side; not a particle, even of the finest material, is ever found to pass beyond the fœtal side, while on the other hand, it is found equally impossible to cause a particle of the finest injection to pass from the maternal to the fœtal side.

When the placenta is peeled off from the uterus, large open mouths of blood-vessels are seen, which show how the blood passes from the uterus, through the mucous membrane as its medium, towards the fœtus. In fact, blood-vessels, arteries, and nerves come from the mother, through the uterus and its mucous membrane, to meet the demands of the fœtus, in a manner similar to that in which we see the ramifications of the cord diverging from the fœtus, upon the fœtal surface of the placenta, to make its demands upon the mother. These opposite streams meet and embrace each other, entertwine with each other, mutually giving to and receiving from each other, in each successive moment from the first insertion of the allantois into the villi of the chorion till the accomplishment of the full time.

Thus the structure of the placenta is seen to be strictly vascular, being entirely composed of arteries and veins; those of the fœtus intertwining with those of the mother; the chorion and its villi constituting the *septum* between the two, and through which fluids can pass only by endosmosis. After the birth of the child all comes away in a mass; the chorion and the amnion constituting the membranes, which are sometimes called also the secundines. The placenta is usually attached to the fundus of the uterus; but the attachment may be at the side, or upon the lowest segment, from the ovule sinking to that spot at the first.

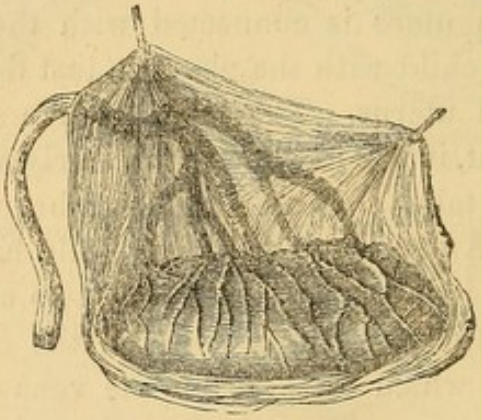
The Umbilical Cord. — This organ is the flexible trunk by which the fœtus in utero is connected with the mother; it unites the abdomen of the child with the placenta just described as adherent to the walls of the uterus. The product of a somewhat advanced state of development, it is not found in the early weeks of pregnancy. The umbilical cord takes its origin in the embryo, in the form of the allantoid vesicle. And as soon as this vesicle has taken root in the villi of the chorion it is found to consist of two arteries arising from the bifurcation of the abdominal aorta in the embryo, and of one accompanying vein, which arises from the vena cava ascendens and the hepatic portal vein. The arteries carry the embryonic blood away, to be replenished and nourished by that of the parent. This is accomplished by its dipping into the villi of the chorion. From them the blood is returned by the vein to the embryo; and thus is established the living connection of the fœtus with the mother.

As the abdomen of the fœtus closes up with the advancing development, it is found that the stem of the allantoid vesicle and the umbilical vesicle are embraced in one common sheath, the amnion. And when the abdomen fails to close up firmly and tightly around

the cord, there remains what is called a congenital umbilical hernia which continues till the child is perfectly formed. The urinary bladder is formed on the abdominal portion of the urachus or allantoid vesicle. Hence it appears that the bladder is on a line with the cord; and when the child has been separated from the mother and the fœtal circulation cut off, the two arteries arising from the bifurcation of the aorta are converted into suspensory ligaments of the bladder which terminate in the umbilicus.

The umbilical cord at full term differs very much in length in different cases; it may be but a few inches, or even five or six feet in length; but it is usually from twenty one to twenty-three inches. Neither nerves nor lymphatics have been satisfactorily demonstrated in the cord. Thus as the waters of the amnion serve to protect the fœtus as far as possible from external violence, by allowing it easily to float away and evade any direct attack; so the entire absence of direct nervous connection between the fœtus and the mother prevents the former from being too injuriously affected by any sudden mental emotion or moral excitement of the latter. The child must indeed be powerfully affected in such cases, but through the circulation only; and thus not so rapidly or so violently as if there were direct nervous communication.

Fig. 57.



An anomaly, described by Benchiser; a division of the cord, just within the membranes, into five or six branches.

The greater part of the body of the umbilical cord is made up of the arteries and vein; but what is very curious, the arteries wind around the cord, from left to right, through its whole length, the vein constituting the central axis of this regular spiral. The cause of this,—for it must have a determinate cause,—has not been satisfactorily explained; a similar phenomenon may be observed in

Fig 58

Fig 59

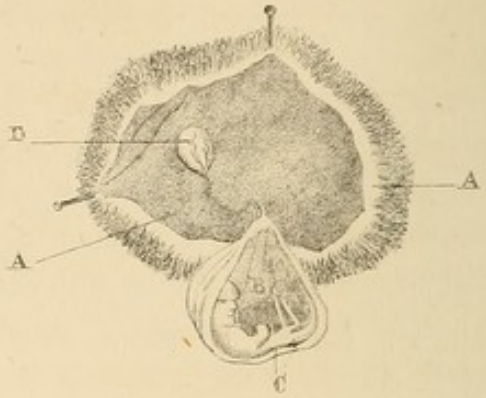
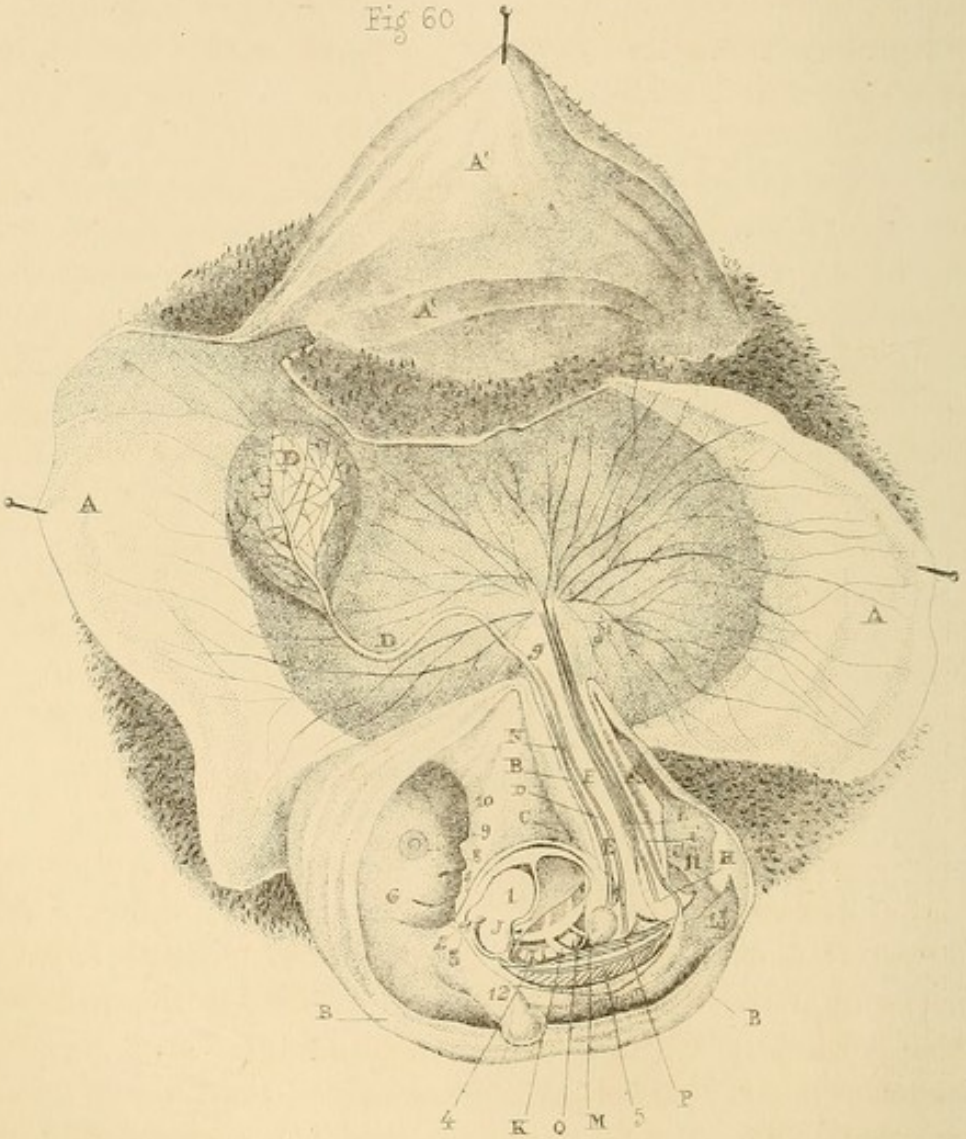


Fig 60



pouring fluids through a tunnel; they will always gyrate in a single direction.

It is very common to find the cord wound round the child's neck, at parturition, requiring to be slipped off upon the emergence of the head; in such cases there is probably an abnormal length of the cord. Other cases are reported, in which the cord is tied in knots, but not so tightly as to compromise the fœtal life by impeding the circulation. The umbilicus usually constitutes the point of origin of the cord; but it has been known to arise from the head, the chest, the shoulder, &c.; such anomalies result from some peculiarly disordered condition of the mother, during this period of the incipient development of the embryo. It will be observed that as the interior or abdominal portion of the blastodermic membrane represents the organs of the vegetative life, so the umbilical cord, arising from this very portion of the embryo, and connecting with a corresponding portion of the mother,—through the placental mass attached to the uterine walls,—directly unites the vegetative organization of the mother with that of the child; this organization, being thus seen to underlie the whole organic life, and thus to involve all that we understand by hereditary constitution. The same ideas are also no less plainly suggested by the fact that the whole life of the child is absolutely dependent upon the vital circulation of the mother,—the movement of which is entirely under the control of the vegetative, organic, or ganglionic nervous system.

CHAPTER TWENTY-FIFTH.

DEVELOPMENT OF THE FŒTUS.

HAVING thus described the primary development and organization of the ovum with its appendages, we now come to the study of the fœtus as a whole, with particular reference to its safe delivery from its gestative world to a more independent state of existence. But before proceeding to trace the intra-uterine life to the full term, it will be proper to review the ground already surveyed; this will be best done by a careful examination of Plate III., Figs. 58, 59 and 60, in which are delineated the embryo and appendages up to the already described state of development.

EXPLANATION OF THE FIGURES IN PLATE III.

Fig. 58. The human ovum, of its natural size, at about the thirtieth or thirty-sixth day.

Fig. 59. The same ovum, of its natural size, laid open to show its constituent parts.

A. A. The chorion. B. The amnion. C. The fœtus. D. The umbilical vesicle.

Fig. 60. The same ovum highly magnified, and opened in such a way as to exhibit the principal relations existing between the embryo and its appendages. The walls of the abdomen and chest have been cut away so as to bring the viscera into view and the umbilical cord has also been split up, for the purpose of showing how the appendages of the fœtus are brought into relation with this latter.

A. A. The chorion, consisting of two layers, placed back to back, and confounded with each other, but which have been dissected apart for a limited extent at A′ A′.

B. B. The amnion, laid open, so as to show how it is continuous with the umbilical cord, along which it is reflected, thereby forming a sheath, which, under the form of the canal B′ B′, is directly continuous with the umbilicus or the umbilical walls C C of the embryo.

D. The umbilical vesicle, and D′ its pedicle.

D″. The point where this pedicle communicates with the intestine E.

E. The loop of the intestine prolonged into the cord.

F. The urachus, continuous by one extremity, *g*, with the chorion, and by the other with the rectum at the point H.

ii. The umbilical arteries.

j. The umbilical vein.

j′. The part of the right auricle from which the umbilical vein comes off.

K. The vena cava inferior.

M. The inferior surface of the liver.

N. The omphalo-mesenteric vein.

O. The point where this vein empties into the umbilical vein.

P. The omphalo-mesenteric artery.

1. The heart.—2. The arch of the aorta.—3. The pulmonary artery.—4. The lung of the right side.—5. The Wolffian body.—6. The branchial fissure, which is converted into the external ear.—7. The lower jaw.—8. The upper jaw.—9. The nostril of the right side.—10. The nasal canal still forming a kind of fissure, which extends from the eye to the nostril.—11. The caudal extremity, or coccyx, projecting like a tail.—12. The upper extremity.—13. The lower extremity.

Successive Dimensions and Weight of the Fœtus.—The first indications of the formation of a new human being that it is possible to discover, even by the help of a microscope, consist in an oblong figure, obtuse at one extremity, swollen in the middle, blunt-pointed at the other extremity. This rudimentary embryo is slightly curved forwards, is of a grayish-white color, of a gelatinous consistence, from two to four lines long, and weighs one or two grains. Here a slight depression, representing the neck, enables us to distinguish the head; the body is marked by the swollen centre, but there are no traces of the separate extremities. So much can be observed about the end of the third week after conception.

At about the fifth week the embryo is found much more distinct. The head is very large in proportion to the rest of the body; the eyes are represented by two black spots; and the upper extremities are represented by small protuberances on the sides of the trunk. The embryo is now nearly two-thirds of an inch in length, and weighs about fifteen grains. The umbilical cord can now be distinguished in its rudimentary stage; and the lower extremities begin to appear in the shape of two minute rounded tubercles. Minute depressions may now be discerned between the vertebræ, and the embryo is so much curved forwards that its caudal portion very nearly approximates the head. Till about this time a straight artery has been observed to beat with the regularity of the pulse; but now it appears doubled somewhat in the shape of an adult heart,—although as yet it has but one auricle and one ventricle. But as the time advances we find at length the perfect heart, with its two auricles and two ventricles, all developed from the original straight artery. The division of the first cardiac cavity into others is effected by partitions thrown up, or by contractions accomplished in the course of the same natural and orderly development. The septum which divides this primary ventricle into two, is developed from the apex towards the base between the pulmonary artery and the aorta,—so that we shall open the pulmonary artery from the right ventricle, and the aorta from the left ventricle.

At this period the lungs appear to exist in five or six different lobes, and we can barely distinguish the bronchial tubes,—terminating apparently in minute cul-de-sacs. Along the vertebral column may be perceived two large glandular structures, which extend from the lung to the bottom of the pelvis. These structures, termed the Wolffian bodies, are constituted by an excretory canal which runs through their whole length, and perform the functions of the kidneys until the latter are developed. By means of numerous cæca which appear on one side only of their surfaces, they secrete a fluid which is poured into the canal and thence transmitted into the temporary cloaca. The Wolffian bodies disappear upon the development of the kidneys, and leave no traces of their former existence.—*Cazeaux.*

A second canal, perfectly distinct, although lying alongside of that of the Wolffian body, is also to be discerned, which presents in the adult, and, according to the sex, becomes either the oviduct or the vas deferens. At about the same period of embryonic life may be distinguished four transverse fissures upon each side of the neck, which open into the pharynx. These are separated by fleshy par-

titions that correspond with the branchial arcs of fishes, and they may for a time serve some similar or corresponding purpose. In the course of the subsequent development these fissures are dispersed, and disappear, with the exception of one on each side, Fig. 60, Plate III., which is converted into the external ear. At about the same period, upon what appears to be the face, appear two isolated tubercles, which gradually approach the mesian line as development goes on, and form the upper jaw. The double hair-lip, so often seen in children, results from the failure of development of the upper jaw and nose, as the nostrils originally constituted one cavity on a mesian line with the mouth.

At about the *seventh week* the first centres of ossification appear in the clavicle, and subsequently on the lower jaw. The intestines still extend some distance along the interior of the umbilical cord; the omphalo-mesenteric canal is nearly obliterated, although it may still be traced as far as the umbilical vesicle, where it is reduced to a mere thread. The anus is not yet opened or formed. The kidneys now begin to be formed, and soon after the genital organs. The urinary bladder is first seen in the form of a small tumor continuous with the urachus. And the embryo is about one inch in length.

At two months the rudiments of the extremities become more prominent. The forearm and hand can be distinguished, but not the arm; the hand is larger than the forearm, but it is not supplied with fingers. The cord has not yet become spiral, and still contains a large quantity of intestine; it is four or five lines in length, and is found to proceed from the lowest point of the abdomen. A minute tubercle may be distinguished between the cord and the termination of the spine, marking the locality of the genital organs, but the sex cannot yet be determined. The length of the embryo is now from one inch and a half to two inches, and it weighs from three to five drachms. The eyes are discernible, but still uncovered by the rudimentary lids. The nose forms an obtuse eminence, the nostrils are rounded and separated; the mouth is gaping and the epidermis can be distinguished from the true skin.

At ten weeks the embryo is from one and a half to two and a half inches long, and its weight is one ounce or one ounce and a half; the eyelids are more developed and descend in front of the eyes; the puncta lachrymalia are visible, and the mouth begins to be closed by the development of the lips. The walls of the thorax are now more completely formed, so that it is no longer possible to see the movement of the heart. The fingers become distinct, and the toes appear like small projections webbed together like a frog's foot. The um-

bilical cord now assumes the spiral form, still contains a portion of the intestine in its base, and its place of attachment appears higher up in the abdomen.

At the end of the third month the weight of the embryo is from three to four ounces, and its length from five to six inches; the eyeballs are seen through the lids; the pupils of the eyes can be discerned; the forehead, nose and lips can be clearly made out. The neck now appears between the head and shoulders; the cord contains no intestine, and its spirals are more numerous and apparent; the finger-nails resemble thin membranous plates; the sex may be determined; and the skin shows more firmness, although apparently without fibrous structure; it is still rosy hued, thin and transparent.

At the end of the fourth month the product of conception is no longer called the embryo, but the fœtus. The body is from six to eight inches in length, and weighs seven or eight ounces. The sutures and fontanelles are now very large; and little white hairs may be seen scattered over the scalp. The development of the face is still imperfect. The eyes are now closed by their lids; the nostrils are well formed, and the mouth is shut in by the lips. The tongue may be observed far back in the buccal cavity; and the lower angle of the face is rounded off by what a little later will be a well-formed chin. The umbilical cord is attached to the abdomen still higher up, though as yet much below the centre of the body. A fœtus, born at this time, may survive for several hours. I once made desperate efforts to save one born at this age, in order to satisfy the anxious parents, and to cause it, if possible, to grow up; it was born at three P. M.; but in the middle of the night the disappointed father called me up to announce that the child had ceased breathing, and to ask what should be done in that case!

At five months the body of the fœtus is from eight to ten inches long, and weighs from eight to eleven ounces. The skin has now a fairer appearance, and is more consistent; the eyes can no longer be distinguished through the lids, owing to the increasing thickness of the latter.

At six months the fœtus is from eleven to twelve and a half inches in length, and weighs about sixteen ounces, more or less. The hair upon the scalp is thicker and longer, the eyes remain closed; and very delicate hairs may be seen upon the margins of the eyelids and upon the eyebrows. The nails are solid; the scrotum small and empty; the surface of the skin appears wrinkled, but the dermis may be distinguished from the epidermis.

At seven months the length of the fœtus is from twelve and a half

to fourteen inches; its weight is about fifty-five ounces; and it is both well defined and well proportioned in all its parts. The bones of the cranium, hitherto quite flat, now appear a little arched; and as the process of ossification goes on the arching increases till the vault is quite complete.

At the eighth month the fœtus seems to thicken up, rather than to increase in length, since it is only from sixteen to eighteen inches in length, while its weight increases to four or five pounds. The skin is red, and characterized at this period by a fine downy covering, over which is spread a quantity of thick viscous matter, called the sebaceous coat. The lower jaw has now become as long as the upper one; and in the male the left testicle may be found in the scrotum.

At nine months the anxious time has arrived; the fœtus is from nineteen to twenty-three inches in length; and weighs from six to eight pounds, on an average. Some children weigh very much less; some as much as fourteen pounds; but such extremes are very rare. In most instances the child is covered with a whitish, sebaceous matter, called *casseusa,* which is really a secretion from the child's skin, which may be dissolved and removed from the surface after birth by rubbing with some unctuous material, such as oil or lard.

Upon a careful review of the preceding account of the growth and development of the fœtus, it will be seen that this growth is much more rapid in the first and in the last three months of its intra-uterine life, than during the middle of this period.

Description of Fœtus at Full Term.—It must be evident that all the mechanical difficulties attending child-birth increase with the development of the child; hence the necessity of particularly studying the most voluminous portion,—in order that we may intelligently adapt it to the passage in the pelvis through which it must pass. The most voluminous, the least yielding and compressible, and by far the most difficult part to manage in parturition is the head; and of course where this may pass, the remainder of the body can follow with comparative ease.

The shape of the fœtal head is ovoidal; the posterior layer being larger than the anterior. The cranium, with which as accoucheurs we are principally interested, is composed of the os frontis, the occipital, the two parietal and the two temporal bones. These are articulated by means of sutures, which in the fœtus at full term are usually cartilaginous. Angular spaces, composed also of cartilage, and called fontanelles, are left at the crossing of these sutures. Each suture and fontanelle has its particular designation.

The sagittal suture, arises from the root of the nose, dividing the frontal bone on the mesian line, runs across the top of the head to the occipital bone, and sometimes divides that bone to its very base.

The coronal suture crosses the sagittal at right angles, uniting the os frontis to the parietal and temporal bones.

The lambdoidal suture also crosses the sagittal, although at a more acute angle, uniting the occipital bone to the parietal and temporal bones. Where it crosses the coronal suture there is left a large, quadrangular, cartilaginous space called the *anterior fontanelle*. The crossing of the lambdoidal suture with the sagittal, leaves a three-sided space, smaller than that of the anterior fontanelle, and called the posterior fontanelle. There are other sutures and fontanelles, formed in a similar manner, between all the bones which compose the fœtal head; but these are the only ones of practical importance to the accoucheur. By means of these sutures and fontanelles the head may be compressed so as to require less space during parturition,—thus rendering this function less frequently injurious to both mother and child than must otherwise be the case.

The diameters of the fœtal head at term may be reduced, for all practical purposes, to seven in number. The occipito-mental, (*a b*, Fig. 61,) extending from the posterior fontanelle to the chin, is five and one-fourth inches. The occipito-frontal, *d e*, extends from the

Fig. 61.

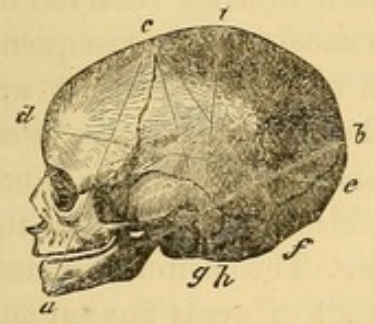
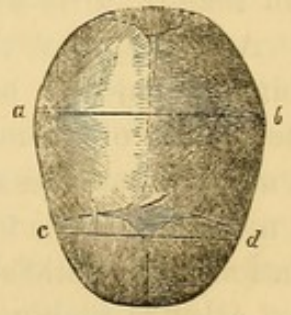


Fig 62.



occipital protuberance to the frontal boss, is four and one-fourth inches. The sub-occipito bregmatic, *c f*, extends from the central point between the foramen magnum and the occipital protuberance to the anterior fontanelle, and measures three inches and three-fourths. These are called antero-posterior diameters. The transverse diameters are, one bi-parietal, *a b*, (Fig. 62,) extending from one frontal protuberance to the other, three inches and three-fourths; the other, the bi-temporal, *c d*, (Fig. 62,) extending from the zygomatic process of the side to the same point on the other, measures three inches. Finally, there are also two vertical diameters: First, the vertical

diameter, *i g*, (Fig. 61,) extending perpendicularly from the highest point of the vertex to the anterior boundary of the foramen magnum, measures three inches and three-fourths. Second, the fronto-mental, *d a*, (Fig. 61,) from the frontal boss to the lowest point of the chin, measures three inches.

Now, it will be readily seen, that the antero-posterior diameter is quite too long to pass any diameter in the well-formed pelvis, even in the dried state, where the largest diameter is only five inches. Hence it must be apparent that, in order for the head to be capable of passing in parturition, the longest diameter must lead the way; that is, the long diameter of the head must be made parallel to the axis of the pelvis by making either the occiput or the chin lead the way. When this is accomplished it is evident that all the other diameters of the head will be permitted to pass through a well-formed female pelvis. And the more perfectly the antero-posterior diameters of the head can be made parallel with the general axis of the pelvis, the easier,—other things being equal,—will the child be born.

A great difference exists between the heads of male and female children, in the greater size and more complete ossification which are found to obtain in the former. As a proof of this, we may adduce the one observed fact, that the proportion of still-born boys to still-born girls, is one hundred and fifty-one of the former to one hundred of the latter. And even of those born alive, a much larger number of boys than of girls die in infancy from injuries received during birth. And finally, of the mothers who succumb to consequences of child-birth, a majority have given birth to boys. Thus it appears that the growth of the male portion of the race costs much more suffering, and a greater loss of life, than does that of the female portion.

One more fact needs to be studied in this connection; and this the articulation of the child's head to its trunk. The occiput is articulated with the atlas in such a manner as to admit of great flexion and extension, while at the same time the atlas is so placed upon the axis as to admit of great rotation,—much more freedom of movement in either articulation than is possible in the adult. Hence it makes little difference, so far as the child's neck is concerned, whether the occiput or the chin lead the way in parturition. It is, however, much better, as is usually the case, for the occiput to lead the way; for, as the chin thus rests upon the sternum of the fœtus, the long diameter of the head corresponds more exactly with the long diameter of the body of the fœtus, and consequently the whole long diameter is more in harmony with the axis of the cavity of the pelvis. Thus the direct

force of each contraction of the uterus is received by the propelled body in a mass, none of the force being lost, as would necessarily be the case if the chin were to lead the way. For here every contraction would tend to throw the occiput back upon the spine, in which, instead of finding a firm base as in the natural position of the chin upon the sternum, the tendency would be to break the child's neck at each contraction.

THE PRESENTATION AND POSITION OF THE FŒTUS AT FULL TERM is a thing of much interest; and the true causes which influence and determine these must now be stated and explained. At the earliest period at which the embryo is seen, it has always been observed to be curved forwards; and in all orderly developments this position continues as the growth increases, until at full term of gestation, the head is found flexed so that the chin nearly touches the sternum, the arms flexed upon the chest, and the forearms upon the arms, so that the palm of each hand is applied to its side of the face and chin. The inferior extremities are also flexed in a similar manner; the thigh upon the abdomen and the leg upon the thigh, the feet lying together and within the thighs, the knees and elbows touching each other. This is found to be the position most economical of space; it forms of the body a compact and ovoidal mass, similar in shape to that of the head, and most convenient for expulsion from the genital organs.

Upon a little reflection it must be evident, that the same influences that give shape to the embryo and fœtus must also shape its position in utero. And furthermore that the same influences must also determine the presentation of the fœtus,—not at once, but as it is gradually developed so it is gradually made to assume its best possible position, and gradually to present itself at the superior strait with its head downwards, the occiput turned to the left ilio-pectineal eminence; its back,—relative to the mother,—to the left and in front, and its face looking back to the mother's right. This position and presentation is assumed by means of the all-pervading influence of the mother, more frequently than all the others put together, simply because it is the most favorable for an easy expulsion from the generative organs, and is consequently the most orderly and natural one. When the fœtus deviates from this, it assumes the next most favorable position for an easy delivery, and so on,—the greatest number of presentations and positions being by far the best, and the least number being the most difficult. The causes of all these different presentations and positions may be much more rationally ac-

counted for, by referring the whole matter to Nature's formative process, than by attempting to explain them as the effects of gravity or of any other mechanical influence; since the same result is obtained where women maintain the horizontal position during the entire period of utero-gestation. If the formative powers of nature in the mother are adequate to the folding of the limbs in the compact and symmetrical manner just described, why should they not be deemed sufficient to determine the presentations and the precise position?

It may be asked why then are there so many different presentations and positions? The head is sometimes extended upon the back, as in the face presentation; and sometimes the lower extremities are thrown over towards the back. All these various attitudes, presentations and positions result from corresponding variations in the vital energies of the mother. Should she be well, in an orderly and happy condition, both mentally and physically, her young will have only natural and orderly presentations and positions. The truth of this is proven by daily experience in practice. For females who, for instance, invariably have face presentations of their children and who have always been ill in some particular manner themselves, after the removal of their malady, have as invariably had their children present naturally. Hence the great importance of making the most strenuous and persevering efforts to remove the various illnesses with which women are afflicted, and to advise happy and orderly modes of life, in order that the distresses of child-bearing may be entirely overcome,—which indeed is not only possible, but under the prevalence of the Homœopathic regime, quite probable, in the course of time. It should be remembered here that the embryo or fœtus is not suspended in the uterus by the umbilical cord, but that it always floats in the liquor amnii, the child being of lighter specific gravity than that liquid. Hence it must swim or float, touching nothing but water for its support,—hence it is also free to obey any influence brought to bear upon it by its mother, through the cord, its only medium of connection.

By Presentation we mean the part that presents at the superior strait; as the vertex, the face, the breech, &c. By Position we mean the particular posture in presentation; as the occiput in the left half of the pelvis, anterior, transverse or posterior. But the further consideration of this subject will now be postponed, till we come to treat of the Mechanism of Labor.

THE DEVELOPMENT OF THE FŒTUS needs also to be studied with especial reference to the three great *Functions of Nutrition, Respiration and Circulation,* by which this development is accomplished. Each of these functions is evidently maintained during intra-uterine life, in a manner altogether different from that after birth.

NUTRITION.—At no instant in the history, even of the unimpregnated ovule, is it without the support of the mother, from the earliest moment of its existence within the ovary, till it is ruthlessly washed away by the menstrual flux or broken and destroyed by some other means. But, when impregnated, the ovule becomes still more especially the object of the particular care of the mother. Hence, immediately upon the occurrence of conception, the entire natural, spiritual and vital organism of the mother is aroused to provide for what is really a *new creature, already a new human being.* From this moment, therefore, commences the nutrition of the embryo. And at the very first this is accomplished in a manner similar to the nutrition of a seed in the earth; which, although in a general manner supported by the external influences of the mother-earth, is in a still more immediate and particular manner sustained by itself, the sprout flourishing upon the remaining substance of the seed till that is consumed. So the impregnated ovum, even after it has left the ovary, is sustained in a general way by a sort of endosmosis from the mother; but in a more immediate and particular manner, its primary development is maintained, and the embryo itself subsists upon the vitellus—a substance most nutritious, and especially provided for this very purpose. When this original resource is exhausted, the embryo throws out the allantoid vesicle in search of other supplies. These are found by coming in contact with the mother's blood in the villi of the chorion. In this great life-fountain the embryo finds a bountiful supply of all things needful for its present wants and future growth and development. The vitellus is indeed very small, but the embryo itself is correspondingly minute; it wants but little.

Sufficient proof of these statements may be found in the fact that the umbilical vesicle is entirely constituted from the vitellus, or from what remains of it after the formation of the blastodermic membrane. And in the further fact that the omphalo-mesenteric vessels, artery and veins are found to circulate blood to and from the embryo in a manner altogether similar to that in which it is subsequently done in the umbilical cord. And, finally, the umbilical vesicle and the omphalo-mesenteric vessels soon become obliterated after the nutri-

tious root has become well established by means of the allantoid vesicle, its arteries and veins.

Pure arterial blood contains all the needful materials for growth, and for the separation of the waste and decomposition of tissue; these must be first accumulated in the blood, then distributed as needed. For this supply of the elements necessary for growth and repair, there is a constant yearning, of which the blood, as a living body, is conscious, and to which it continually seeks to respond. Blood is found in the embryo at the earliest possible period of examination; a circulation has already been established in the embryo and in the omphalo-mesenteric vessels,—by the time the supply is exhausted which was contained in the umbilical vesicle,—into which these vessels ramify in search of nourishment for the blood itself.

Upon the failure of the supplies from the umbilical vesicle, a new route must be opened up to furnish the demand. This is done by the embryo throwing out the allantois supplied with the two arteries arising from the internal iliacs and containing impoverished blood which must be renovated and returned to the embryo. These arteries are accompanied by a vein. The whole apparatus soon takes root in the villi of the chorion; and forthwith a return of nourishment is made to the already flourishing embryo. The impoverished arterial blood from the embryo, by endosmosis through the coats of the villi of the chorion, is renewed and regenerated from the maternal blood. And the arteries anastomosing with the vein, the aerated and revivified blood is immediately returned to the embryo for its especial benefit. Now is formed the first nucleus of the placenta; now the grand and lasting event is established, and in this manner, for the continued nutrition of the future fœtus, by its famished and exhausted blood being thus supplied with all things needful by endosmosis from the maternal blood, through the vessels in and about the villi of the chorion. From this time the fœtus, the cord and the placenta grow *pari passu*, till the completion of the full term. And by no other means is the nutrition of the embryo and fœtus provided. All the plants, and, indeed, the whole animate creation is nourished by a kind of endosmosis from the parent earth, or mother; but the material thus supplied is appropriated by each receiver in its own way, in accordance with its own blood and form of life.

A positive proof that the nutrition is supplied by means of the cord, and in no other way, is found in the well-known fact that compression of the cord so as to arrest the circulation, although but for a very short space of time, is certain death to the child. What change

the nutritious material obtained from the mother undergoes before it is fitted for appropriation by the fœtus, or where that preparatory change is made, whether in the fœtal placenta or in the fœtal liver, is not yet known. Nor is it known where or how the plant transforms the nutriment derived from the earth, into its peculiar sap, fibre and bark.

Respiration.—This function is essential to the existence of all the animals of creation; and for every individual thereof. For this is the process by which the effete blood becomes aerated, and gives up the excess of carbon and other morbid matters with which it is loaded. This, as just above described, is accomplished by the fœtal blood coming in contact with the maternal, through the vascular coats of their respective blood-vessels, in a manner not unlike that in which the blood of fishes is decarbonized by being exposed, by means of the gills, to the air contained in the water which passes through them. The blood of the mother serves exactly the same purpose for that of the fœtus, that the water does for the blood of fishes; the water contains an appreciable amount of air or rather of oxygen; and so does the mother's blood. In proof of this, it is only necessary to compress the cord so as to prevent the blood of the fœtus from being exposed to that of the mother, and the child turns black and dies, as from asphyxia.

Secretion.—As development advances, all the secretions are successively established. The liver secretes bile, the gall-bladder is found full; and there is reason to believe that it is steadily supplied to the intestines. Even prior to the fifth month, the alimentary canal contains a substance called meconium, which is principally composed of biliary matter and the detritus of the mucous membrane. There is no positive evidence that this meconium is ever evacuated into the amniotic sac; but it sometimes passes off freely during labor; and in other cases not long after delivery. This is secreted, and usually passes in considerably quantities after birth, and it is thought by some that the fœtus in utero discharges the urine into the amniotic cavity. But we have no positive evidence that the urine is ever discharged from the bladder till after delivery.

Circulation.—In the fœtal circulation there are apparently different streams of blood, and consequently the circulation is here more complicated than in the child after birth. The blood returned from the placenta, richly laden with the nutritious elements from the mother, enters the ascending vena cava, either directly or indirectly through the liver; passes through the right auricle of its heart into

the left auricle; thence into the left ventricle; and from thence it is made to ascend the aorta to supply the head and upper part of the body; it then passes into the veins, and descends into the descending vena cava, and through a foramen, called the foramen of Betel, into the right ventricle; then through the ductus arteriosus into the aorta to descend into the lower part of the body,—a portion returning through the iliacs to the mother to be replenished and again returned to the embryo as before.

The ventricles, in the fœtus, act in unison, when one contracts the other does. Thus when they contract, their respective streams of blood meet in the aorta,—one from the left ventricle, the other from the ductus arteriosus; so that one acts as a dam to the other. Consequently, the stream from the left ventricle, being uppermost, is made to ascend by the stream coming in from the right ventricle at the same time just below;—this latter of course descends the aorta. Thus the extremes of the fœtal circulation meet to be separated by extremes, to meet again.

Immediately after birth, the lungs being opened to the circulation, for the purpose of aeration, the blood takes new channels more easily than it can follow the old ones; and the whole circulation becomes more simple. All the blood entering the right auricle is thrown at once into the right ventricle, and from thence with great ease into the pulmonic artery to be distributed to the lungs for aeration. From the lungs it is returned by the pulmonic vein to the left auricle, thence into the left ventricle,—to be again distributed by the ascending and descending aortas to the whole system. All other passages in the lungs are of course thus closed up, from want of use. And the iliacs which formerly carried a portion of the blood to the mother in search of the materials for renovating and revivifying it, now receive supplies through the mouth and alimentary canal of the child.

Multiple Pregnancy.—It is by no means an uncommon occurrence for a mother to give birth to twins. From very extensive observation this has been noticed to occur about once in seventy-five cases. Triplets occur still less frequently; say one in six thousand cases; while quadruple pregnancies are rarer still. The cause of the anomaly of multiple pregnancy may arise from there being two or more yolks in the same egg, two or more eggs in the same vesicle, or two or more ovules in separate vesicles, or one or more ovules may be at the same time impregnated in each ovary. In these respects there seems to be no end to anomalies and strange varieties. Nature

seems disposed at times to imitate in man the wonderful fecundity of the lower orders of creation.

Multiple pregnancies can only be positively determined by clearly and unmistakably distinguishing the beat of more than one fœtal heart. In this class of pregnancies one embryo or more may perish,—dry up as it were,—leaving the remaining one to be developed in a fine healthy condition to full term. After the birth of the living, the dead will also be discharged. The membranes are differently disposed in different multiple pregnancies. Each child may have its own separate membranes and placenta; or there may be one placenta and two cords; each a separate amnion, but all enveloped in the chorion. Or again, two fœtuses may be found in one amnion, and enveloped in a single chorion. Sometimes also the body of one fœtus is found inclosed within that of another; this is called a monstrosity by inclusion.

Extra-uterine Pregnancy.—Impregnation is effected within the ovary, as described in a previous chapter.* But where the fecundated ovule fails to reach the cavity of the uterus, it may lodge, adhere and become developed in some other place; this constitutes *extra-uterine pregnancy*.

Sometimes the impregnated ovule remains in the ovary, and is there developed, constituting ovarian pregnancy. The autopsy of a woman suddenly dying has revealed, as the cause of her dissolution, an enlarged ovary rent in twain by a fœtus of four and a half months. The ovary could no longer accommodate the fœtus! Sometimes the ovule is arrested in its progress down the Fallopian tube, attaches itself to its walls, and proceeds to develop itself as a new human being; this is called tubal extra-uterine pregnancy. In other instances, on account of some abnormality of structure, the ovule slips in between the interstices of the uterine walls, and develops there in what is termed utero-interstitial pregnancy. The ovule in some cases remains fixed between the fimbriated extremity and the ovary; this results in ovaro-tubal extra-uterine pregnancy. And in those instances in which it drops down into the cavity of the abdomen

* This does not accord with the views of some modern physiologists, who affirm (Dalton's Physiology, chap. vii.) that "the egg comes in contact, after leaving the ovary, and while passing through the Fallopian tube, with the spermatic fluid, and is thereby fecundated." "The spermatic fluid meets the egg at or soon after its discharge from the ovary," p. 562. (Vide et 574.) Müller, on the contrary, teaches that "the ovary is the place of impregnation, at all events, in man and mammiferous animals." Elements, ii., p. 1491.

and fastens and develops itself upon some portion of the serous membrane, or peritoneum, it constitutes what is called abdominal extra-uterine pregnancy.

The mode of development in these abnormal cases is precisely similar to that in others. Internally the ovule goes on developing precisely as in normal pregnancies, in the formation of the amnion, chorion, umbilical cord, &c. Externally, to whatever point the ovule may become attached, it becomes so attached by means of the villi of the chorion growing into whatever structure they are brought into contact with. Simultaneously with this growth on the part of the ovule, the maternal structure grows to correspond and to furnish her part in the reproduction, by growing upon these villi and throwing out blood-vessels to meet those coming from the embryo. Thus the placenta is formed precisely in a similar manner here as in the uterine cavity,—only with far less present security to the embryo, and with almost certain fatal consequences to the mother.

After the ovule has thus become fixed in its unnatural bed for development, its growth goes on for a longer or shorter time, according to the strength of the membranes;—usually till about the middle of the ordinary term of utero-gestation,—sometimes even to the full term. At last, the membranes, from want of sufficient protection, burst, and their contents are poured out into the abdominal cavity; and there results a rapidly fatal inflammation of the peritoneum of the ill-fated mother. Sometimes the maternal surface of the placenta becomes ruptured, so as to produce fatal hemorrhage. In other instances the first shock is withstood; the contents of the cyst become absorbed, or again encysted,—as any foreign body may be,—and the female not only survives but may even enjoy good health for years. In some cases the fœtus itself perishes at about the full term, and makes its exit by means of fistulous openings through the abdominal parietes or otherwise.

The diagnosis of such cases of extra-uterine pregnancy can most easily be effected by observing that while the other signs of pregnancy are present, the os tincæ and neck of the uterus do not change,—do not soften from below upwards; and the uterus itself will be found nearly in its normal condition,—except in cases where the pregnancy is interstitial.

Treatment.—In the present state of our science, nothing can be done in these cases, till the latter half of gestation. Then a successful termination of this unhappy state of things may be accomplished by means of the Cæsarian section, either through the abdominal walls, or through those of the vagina, according to the circumstances.

CHAPTER TWENTY-SIXTH.

DISORDERS OF PREGNANCY.

AFFECTIONS OF THE FUNCTION AND APPARATUS OF DIGESTION.

In the state of perfect health all the functions of the body are so harmoniously carried on,—each receiving its proper portion of the vital force in due season,—that no one preponderates over another. But where, as in cases of excessive intellectual development in children, any one structure obtains more than its just share, the others must suffer in equal ratio. Gestation is indeed a normal condition; but the remarkable development of vital action in the uterus, renders it an exceedingly difficult task for nature perfectly to adjust the balance. But while in general a similar increase of vital action seems to pervade the entire system, the health remaining perfect, there are numerous and sometimes most distressing exceptional cases. The greater number of these appear in connection with the nervous system, and at first take the form of sympathetic irritation.

There are other disorders in the pregnant state which arise from mechanical pressure, and even displacement of the abdominal organs by the gravid uterus. And there is still another class of disorders, severe functional derangements, and even deeper-seated derangements of the elementary constituents of the blood, which seem to be the result of some of those before mentioned.

All these sympathetic irritations, structural difficulties, and derangements of the constitution of the blood, acquire a still greater importance from the fact that they become the occasion for the development of every constitutional weakness and hereditary taint. The way is long and tedious; what wonder then that the heavily-laden system of the pregnant female sometimes stumbles? How much greater the wonder if the nine months of gestation, even before being concluded by perhaps twice as many hours of almost convulsive effort, should not expose and aggravate every inherent debility and fully develop every latent miasm.

There is yet another class of difficulties, which if they do not actually make their first appearance during gestation, then at least for the first time become seriously troublesome; this class includes disorders connected with the uterus itself and with its appendages.

Some of these are structural diseases of the vagina, os, or cervix uteri, unnoticed before,—now rapidly developed. And even if there were no morbid conditions, the suspension of the regular catamenial flow, could not but exert an important disturbing influence upon the more delicate female constitutions.

But from whatever cause they arise, and to whatever class they may be referred, all the disorders of pregnancy require the most patient and careful attention on the part of the Homœopathic physician. The season of gestation is the time given him for sowing the good seed, from which his patient may reap a rich harvest of improved health during all her subsequent life. The fact just mentioned that the almost herculean labors of nature tend to develop and ultimate all the *hitherto latent, hereditary* predispositions to disease, renders this period of gestation at once of the greatest value to the true physician, and of the most serious importance to the patient. For even as an hereditary tendency to phthisis pulmonalis, may be most readily and radically cured when its temporary development in a bad cold or even in a severe attack of pneumonia, renders its characteristics more apparent; so the exaggerated manifestation of her constitutional disorders, which in one form or another so afflicts the pregnant female, may be made the opportunity for radically purging them from her own system, and at the same time of purifying the constitutions of all her children.

As already intimated, the tremendous strain upon the constitution of the pregnant female, finds its crisis in the agonizing labors of parturition. These are rendered all the more terrible, are sometimes followed by the most disastrous consequences, and even rendered immediately fatal, by the culmination of the disorders developed during gestation. Thus the same sedulous attention on the part of the true physician which will relieve her from present sufferings during the long months of pregnancy, will also render her confinement much more safe and easy, and entirely prevent those consequences which so often fill her subsequent life with wretchedness. And the invaluable means and methods committed to the Homœopathic physician, will often enable him not only to ameliorate the unfortunate condition of his suffering and despondent patient, but in many instances to secure for her the preservation of the fruit of her womb. In the Homœopathic jurisprudence, morning sickness and all other forms of gastric derangement must be entirely stricken from the list of justifiable causes for inducing premature delivery. The most distressing of these cases are relieved and the offspring preserved,

where under the Allopathic regime the health of the mother was often rendered permanently wretched, and the child inevitably sacrificed at an earlier or later stage of pregnancy.

And in many instances in which the mother had suffered for many months from the disorders of pregnancy incidental to her constitution, and had in consequence greatly deteriorated in her own vital nutrition, the child, if not actually destroyed, became of necessity greatly enfeebled. Such results are too common in the Allopathic practice to attract much attention; and such offspring go far to swell the bills of mortality to the frightful extent of one-third of all who are born dying within the first three years. Contrast with this the fine healthy child born after the mother has been relieved of her distressing disorders of pregnancy, and in a great measure at the same time cleansed of her constitutional impurities by Homœopathic medication, and you have a picture of what has been done in thousands of cases, and of what it is now the duty of the Homœopathic physician at least to attempt to do in every case of the kind. He is the true physician who seeks not only to relieve the present suffering, but at the same time to remove its cause in the constitution itself, and thus prevent the return of the evil. He is truly a benefactor of his kind, and shall well deserve to be called a Healer of Nations, who, not content with curing the generations with whose successive portions he mingles, thus seeks to improve his present opportunities in the light of an advanced and beneficent science, in such a manner that the race may be rendered more healthy in all the years to come.

Our object in these remarks is simply to call attention to the profound importance of most carefully treating the disorders incident to pregnancy; even in cases where their severity does not entail suffering, they may thus be seen to afford most precious opportunities for permanently improving the health of the mother, and of rendering her confinement comparatively comfortable and perfectly safe, and of insuring the preservation and health of the offspring, and finally securing the comfort of both mother and child during the season of lactation—And to state that, for reasons rendered obvious by the preceding remarks, the most valuable and efficient remedies for the disorders incident to pregnancy will be found among the antipsorics; and that in some cases the higher these are given the more good will they do. Such is my own experience in innumerable cases.

The disorders which appear during gestation vary in almost every possible respect in different females; each individual, however, usu-

ally suffering in the same manner whenever *enceinte*, and with the same comparative severity, unless relieved by appropriate Homœopathic medication,—the Allopathic treatment, in most respects, being considered worse than useless. Since it differs little in effect from tearing down the house to save it from the danger of being burned up. In some females these disorders appear with but slight intensity, and soon pass away. While others declare they never have such good health as they enjoy when pregnant. Others again dread this condition as bringing with it for them a long train of most various and distressing sufferings, by which their health is profoundly deteriorated, their strength exhausted, and their prospects in confinement rendered gloomy in the extreme. In some instances these disorders appear very soon after conception, and in different forms continue during the entire period of utero-gestation. In others they are relieved by the third, fourth, or fifth month; while in other cases the difficulties make their appearance only during the later months, and continue to increase in severity till confinement.

And while the disorders of pregnancy principally affect individual cases in some one or even more of their various forms,—the entire range of these forms, as collected from the records of many cases, is found to cover every function and particular organized system in the female economy. The principal of these disorders may be classed under the following heads—which are given in the order of their subsequent description: *Affections of the Digestive System;* of the *Secretions and Excretions;* of the *Uterus and its Appendages;* of the *Circulation and Respiration;* of *Locomotion;* and of *Innervation.*

The disorders of the Digestive Function and Apparatus may be enumerated under the heads of Variations of Appetite; Gastric Disturbance; and Intestinal Affections. In the first class will be found Anorexia, Pica or Malacia, and Bulimy; in the second, Nausea and Vomiting, Pyrosis, or Heartburn; in the third, Constipation, Hemorrhoids, Diarrhœa.

I. Variations of Appetite.

Anorexia, or want of appetite and even disgust for food, very frequently make its appearance at the commencement of gestation; less often it is seen only towards its close. In some cases there is a loathing especially for some particular kinds of food; especially meats; in other cases there seems to be simply a general loss of appetite. These symptoms are usually supposed to be the results of the sympathetic relations existing between the stomach and the

uterus; but their deeper meaning, already referred to, will be particularly stated in the connection with that of the other varieties of appetite.

Malacia, another not uncommon affection of pregnant females, consists in a depravation of taste, in which an almost universal loathing is combined with an exclusive longing for some particular article of food. Where something injurious, or not used for food, is desired, the abnormity is termed *Pica.* Chalk, charcoal, pepper, salt food, acids, alkalies, are sometimes very strongly and persistently craved, and eaten. The desire for particular articles of food should be gratified to a reasonable extent. "The common tendency of the appetite in pregnancy is to prefer fresh vegetables, fruits, and cooling drinks, and to avoid stimuli of all kinds. In this, the taste of pregnancy accords very well with all its requirements."—*Smith.*

Bulimy, or inordinate and insatiable hunger, is another affection of pregnant women,—which here, as in other persons, generally indicates some disorder of the nutrition or assimilation; although it may be due simply to sympathetic nervous irritation. All these morbid conditions of the appetite are but indications of the various hitherto latent dyscrasia, developed now by the pregnant state. And the careful exhibition of the appropriate remedies will not only relieve the sufferings of the patient; but will also greatly improve her general health, as already stated.

We give the various remedies which have been found useful in these complaints—these should be compared with those more fully stated under Gastric Derangements; and carefully studied in the Materia Medica, in order to determine which is the appropriate remedy in each individual case.

NOTE.—In arranging these remedies for study, we have followed the very valuable Therapeutic Pocket Book of Bönninghausen,—now unfortunately out of print in English,—and it will be observed that the higher the numbers the more strongly marked is the remedy for the symptom to which it is affixed. Thus I. corresponds to the ordinary type of Bönninghausen; II. to the italics; III. to the small capitals, and IV. to the large capitals or most strongly marked of all.

But while these indications of the relative prominence of particular symptoms in the *confirmed pathogensis* of particular remedies are of great value, they will be found infallible only when they lead to the determination of a medicine in accordance with the totality of the symptoms. *And yet the totality of the symptoms will often* BE INDEXED

by the characteristic symptom on the side of the patient, and by the corresponding key-note on the side of the remedy.

Finally, and as elsewhere observed in the present work, the characteristic symptom of a particular case may not be the most prominent or even the most distressing symptom,—especially is this seen to be the case where it consists in the time of aggravation, or other similar circumstance; nor yet will the key-note often be the most violent and painful of the pathogenetic results of the drug. The deepest streams are the most still and silent, and the true vital currents of the human frame are far more subtle, profound and *spirituelle*, than the noisy rivers that rush through the arteries and the veins.

ANOREXIA—WANT OF APPETITE.—I. *Acon., Carb. v., Caust.; Chelid., Cina, Cocculus, Crocus, Caps., Dros., Graph., Mosch., Nux m., Tart. e.*

II. *Agar., Alum., Argent., Borax, Cham., Digit., Dulc., Ferr., Helleb., Hepar, Ipecac., Kali Bi., Kali c., Mag. c., Mag. m., Nitric acid, Pet., Phos., Sulph. ac., Verat.*

III. *Anti. c., Arn., Arsen., Bell., Bry., Calc., Canth., Conium, Ignat., Lycop., Merc., Nat. m., Opi., Puls.*

IV. *China, Cyc., Nux v., Rhus t., Sepia, Silicea, Sulph.*

DISGUST FOR CERTAIN ALIMENTS.

ACID THINGS.—I. *Ignatia.* II. *Cocculus, Nux v.* III. *Bell., Ferr., Sulph.*

BEER.—I. *Alum., Bell., Cham., China, Phos.* II. *Spig.* III. *Cocc., Nux v., Sulph.*

BRANDY.—III. *Ignatia, Merc.*

BREAD.—I. *Agar., Ignat., Kali. c., Mag. c., Rhus t.* II. *Nit. acid, Phos., Sulph.* III. *Conium, Lycop., Nux v., Puls., Sepia.* IV. *Natrum muriaticum.*

RYE BREAD.—I. *Puls.* II. *Kali. c., Nux v., Sulph.* III. *Lycop.*

BROTH.—I. *Bell., Rhus t.* II. *Arsen., Graph.* III. *Arnica.*

CHEESE.—*Oleander.*

COFFEE.—I. *Bell., Carb. v., China, Dulc., Merc., Rhus t.* II. *Lycop., Nat. m., Sulph. ac.* III. *Bry., Calc. c., Cham., Coffea, Phosph.* IV. *Nux v.*

COFFEE WITHOUT SUGAR.—III. *Rheum.*

FAT FOOD—BUTTER.—I. *Calc. c., Crocus, Helleb., Merc., Rhus t., Sepia.* II. *Cyc. e., Hepar, Sulph.* III. *Arsen., Bry., Carb. a., Carb. v., Nat. m., Puls.* IV. *Petroleum.*

FISH.—II. *Graph.* III. *Zinc.*

GARLIC.—III. *Sabad.*

MEAT.—I. *Alum., Arn., Caust., Helleb., Kali. c., Mag. c., Nux v., Opi., Puls.* II. *Arsen., Bry., Ferr., Ignat., Merc., Nat. m., Nit. acid.* III. *Calc. c., Carb. v., Graph., Lycop., Rhus t., Sabad., Sepia, Zinc.* IV. *Mur. acid, Pet., Sulph.*

MEAL AND FLOUR, (Dishes of.)—I. *Arsen.* III. *Phos.*

MILK.—*Arn., Bell., Nux v., Phos.* II. *Carb. v., Cina, Ignat.* III. *Bry., Calc. c., Puls., Sepia, Silicea, Sulph.*

SALT.—I. *Graph.* II. *Carb. v.* III. *Selenium.*

SOLID FOOD.—I. *Merc.* II. *Ferr.* III. *Staph.*

SWEETS.—I. *Graph., Zinc.* II. *Merc., Nit. ac., Phos.* III. *Arsen., Caust., Sulph.*

VEGETABLES.—II. *Mag. c.* III. *Helleb.*

WATER.—I. *Canth., Caust., Chi., Lycop.* II. *Bry., Nat. m.* III. *Apis, Bell., Nux v., Stram.*

WINE.—*Lach., Sulph.* II. *Ignat.* III. *Merc., Rhus t., Sabad.*

LONGINGS—CRAVINGS FOR FOOD.

BULIMY—CANINE HUNGER.—II. *Helleb., Hyos., Kali c., Merc., Opi., Pet.* III. *Bry., Coccul., Nat. mur., Phos., Puls., Rhus, Sabad.* IV. *Cal. c., China, Jod., Lycop., Nux v., Silicea, Sulph., Verat.*

ACIDS.—II. *Ignat., Kali c., Puls., Secale, Sepia.* III. *Anti. c., Arn., Arsen., Bry., Cham., Hepar, Phos., Stram., Sulph.* IV. *Verat.*

BEER.—II. *Opi.* III. *Bry., Caust., Coccul., Merc., Nux v., Petr., Puls., Sabad., Sulph.*

BITTER THINGS.—II. *Digit.* III. *Nat. m.*

BREAD.—*Bell., Ferr., Helleb., Ignat.* II. *Nat. m., Puls.* III. *Arsen.*

BREAD (WHEAT).—*Arn.*

BREAD AND BUTTER.—*Ferr., Ignat., Merc.* III. *Mag. c.*

BRANDY.—I. *Bry., Calc. c., China, Puls.* II. *Sulph. Acid.* III. *Acon., Arsen., Hepar, Nux v., Sepia., Sulph.* IV. *Opium.*

COAL.—*Cicuta.*

CAKES.—*Plumbum.*

CHEESE.—*Ignatia.*

COFFEE.—I. *Mosch., Nux m.* II. *Arsen., China, Conium.* III. *Bry.* IV. *Angust.*

CUCUMBERS.—I. *Verat.* II. *Anti. c.*

FAT FOOD.—II. *Nitric Acid.* III. *Nux v.*

FRUIT.—I. *China, Magnes., Puls.* II. *Alum.* III. *Ignatia, Sulph. acid.* IV. *Verat.*

HERRINGS.—I. *Veratrum.* II. *Nitric acid.*

JUICY THINGS.—*Phosph. acid.*

Lime—Chalk.—III. *Nitric acid, Nux v.*

Liquid Food (Soups).—I. *Merc.* II. *Angust., Ferr.* III. *Staph., Sulph.*

Meat.—I. *Helleb., Sulph.* II. *Mag. c.*

Meal and Flour (Dishes).—II. *Sabadilla.*

Milk.—I. *Magnes., Nat. m., Nux v., Rhus.* II. *Arsen., Bry., Calc. c., Phos. acid, Staph.* III. *Chelid, Merc., Sabad., Silicea.*

Refreshing Things.—II. *Caust., Rheum.* III. *Coccul., Phos., Phos. acid, Valerian.*

Salt Things.—I. *Phosph.* II. *Calc. c., Conium, Nitric acid.* III. *Caust., Verat.*

Smoked Things.—*Causticum.*

Sour Krout.—I. *Cham.* II. *Carbo. an.*

Sweet Things.—*Calc. c., Carbo. v., Nux v., Petr.* II. *Ipecac., Magnes. m., Sulph.* III. *China, Kali c., Lycop., Nat. m., Rhus, Sabad.*

Vegetables.—II. *Alum.* III. *Magn. c.*

Warm Food.—I. *Cyclam.* II. *Lycop.* III. *Ferrum.*

Wine.—I. *Acon., Calc. c., China, Puls.* II. *Bry., Lach., Spig.* III. *Hepar, Sepia, Sulph.*

Raw Potatoes and Dry Flour, each eaten separately and alternately for half an hour, as bread and cheese, *Calcarea carbonica.*

II. Gastric Derangements.

Nausea and Vomiting—Morning Sickness.—In many females nausea and vomiting set in at an early period of pregnancy, and are simply the result of a peculiar reflex irritation of the stomach; in these cases this affection usually continues but a short time. Those forms of nausea and vomiting which principally appear in the later months, result not from sympathetic irritation or reflex action, but from the direct irritation of the stomach and perhaps also of the diaphragm by the upward displacement. Next to the cessation of the catamenia, and especially in conjunction with it, morning sickness becomes one of the earliest as well as one of the most reliable original signs of pregnancy; while for all those who have ever before experienced it, there is little room for mistake in regard to its nature. For in each individual in whom it occurs it has a uniform type and well remembered character.

The nausea may occur at an early period in the morning, with unvarying regularity; or in the evening; or at any period of the day or even of the night. For each individual it maintains also its uniformity as to the date of its first appearance; in some it begins very

soon after conception; in others it appears towards the third or fourth month; and in others again it comes on only towards the close of gestation,—in these latter cases it may have appeared also for a short time soon after conception. In the duration of this affection there is also the same general variety and individual uniformity. Thus in some females it lasts but a few weeks, from six to eight at most; in others it continues for four or five months; while in some few most distressingly severe cases this difficulty assumes the form of a formidable disease and persists through the entire period of utero-gestation, unless relieved by art. And this unfortunate condition has sometimes been still more fully developed and aggravated by sea-sickness, so that even life itself has been lost, where the voyage was tedious.

The nausea and vomiting of pregnancy, as already stated, are most apt to occur on *first rising in the morning;* sometimes these symptoms disappear in a few minutes,—sometimes they last through the greater portion of the day. In some the vomiting is very easy; in others it is attended with very severe retching and even with other painful symptoms. Those who vomit upon waking or rising in the morning, usually throw up some viscid, glairy matters which are generally colored with a little bile, especially if the retching had been very severe. Others vomit only after eating; occasionally after only one of the daily meals, but sometimes after all of them. Again, in some unfortunate cases the vomitings continue even in the intervals of the repasts; every thing taken into the stomach, whether liquid or solid, being immediately rejected. There are cases, finally, in which the mere thought of food, or the sight or the smell of it, is sufficient to induce the vomiting.—*Cazeaux.*

In some cases nearly all the food ingested seems to have been thrown up even for months in succession; and yet a good delivery succeeds at full term; the repeated and severe vomitings seeming to exert comparatively little influence upon the general health. In like manner pregnant women may rise from the breakfast table, vomit, and return to their food as if nothing had happened. Such characteristics, so different from vomiting arising from any other causes, very conclusively indicate the presence of pregnancy. Important complications however arise in the greater number of more severe cases; and the health of both mother and child is often greatly injured through the marasmus and cachectic conditions which ensue. Among the most serious of the symptoms which appear in connection with severe emesis, is to be reckoned the *sense of tenderness at the epigastrium,*—this may be attended by considerable pain which is increased by

pressure. This epigastric soreness and tenderness, whether observed in the earlier or in the later stages of pregnancy, is due to the profound irritation of the ganglia or plexuses of the Sympathetic Nervous System, which are located in this vicinity. And in this centre of organic life, in the very constitution itself, are planted the psoric elements whose active development in pregnancy occasions these sufferings and innumerable others, whose duration and severity but too well indicate the gravity of the miasms from which they are derived. The stomach itself is in no such direct sympathetic relation with the uterus; but the latter organ is in profound sympathy with the organic nervous system which is centered near the stomach and which entirely controls the compound functions of digestion and nutrition. Hence the marasmus and cachexia which succeed severe cases of morning sickness in the old practice; hence too the brilliant successes which in the new school follow the exhibition of *Arsenicum*, and other powerful and particularly indicated antipsorics. Hence too while under the Allopathic regime these cases became worse and worse with each succeeding pregnancy, under Homœopathic treatment they become better and better, until the female finds she can pass through the formerly so much dreaded periods of gestation with little or no suffering and terminate her labors in a delivery as pleasant and easy as it formerly was difficult and painful.

Some of the remoter consequences of the nausea and vomiting, or rather of that morbid condition of the constitution itself which produces these symptoms,—such as chlorosis, anæmia and albuminuria, will be more fully described in a subsequent section. In the same connection it will be shown how the disturbance of the digestion, nutrition and assimilation, is followed by important changes in the constitution and character of the blood and of some of the most important secretions; and how dropsies and other forms of structural disease necessarily supervene.

The diet and regimen of the pregnant female should be carefully attended to; such articles as best agree, should be advised in each individual case; and equal care taken to avoid every unwholesome or irritating influence. It has sometimes been found that the excessive irritability of the stomach in pregnancy is due to the presence of fumes from some neighboring manufactory, which, although insufficient to induce any unpleasant symptoms in the ordinary condition of the female, very powerfully affect her when *enceinte*. Homœopathic remedies may antidote these noxious vapors, if they are not too

powerful; but in the greater number of such cases a temporary removal from the neighborhood may be necessary.

One eminent Allopathic author, after having advised Opium, Calomel, Magnesia, Soda, Rhubarb, "Stomachic Bitters" combined with carbonic acid gas, and even Ipecac., or some other "mild emetic," in morning sickness, very naively remarks, "Abstinence from the use of medicines may occasionally be had recourse to with much advantage." But then, as if conscience stricken for having made such an admission, and fearing lest he be deemed heterodox, he concludes with the following remark, which at once exhibits the Allopathic orthodoxy and illustrates its wonderful wisdom: "*A moderate general bleeding is seldom to be rejected* (in the Sickness and Vomiting of Pregnancy) *as being either injurious or worthless!*"—*Davis.*

The following remedies will be found to cover the principal forms of gastric derangement in pregnancy; and the indications given should be confirmed by finding, in the Materia Medica, a full correspondence with the totality of the symptoms and accompanying conditions.

Aconite. Nausea and perhaps vomiting, with thirst and fear of being in crowds, or of being in busy places; fear of death. Every thing tastes bitter, except water. Burning sensation, extending from the stomach all the way to the mouth, and along the dorsum of the tongue.

Agaricus. Gastric derangements with itching, burning, and redness of various parts of the body as if frost-bitten,—of the ears, nose, cheeks, fingers, or toes. Much hunger but no appetite. Constipation; the first part of the stool is very hard, the latter part liquid.

Alum. In gastric derangements with inactive states of the rectum, so that even a soft stool has to be urged with much force to cause it to pass off; at the same time, a similar condition often prevails in the œsophagus,—somewhere in its course, it may be in the chest, it seems constricted; even small portions of food are swallowed with difficulty. She has to strain at stool in order to urinate. Tingling-itching on the tongue; she must scratch it. Potatoes particularly disagree with her. Loss of taste, heartburn. The peculiar Alumina constipation.

Angustura. Nausea when walking, as if she would faint; she has to sit down. Stitches in the tip of the tongue, painfully aggravated on moving it.

Antimonium c. Nausea and vomiting, or only nausea, with white

tongue, watery evacuations with occasional hard lumps. Nausea with vertigo. Frightful vomiting with convulsions. Very persistent vomiting which nothing stops.

Argentum n. The head sympathizes very much; pain, vertigo, &c. The time seems to pass very slowly. The stomach seems as if it would burst with wind, accompanied with great desire to belch, which is accomplished with difficulty, when the air rushes out with great violence.

Arnica. The derangement has been developed by means of a concussion. Sensation of soreness in the stomach, and belchings tasting of rotten eggs.

Arsenicum. Very great debility and exhaustion. *Very pale, white look.* Bitterness in the mouth, particularly after eating or drinking; sensation as of a stone in the stomach. Cold water seems to lie in the stomach as if it did not assimilate, therefore she cannot drink it, although she desires it. Nightly vomiting. Vomiting of fluids as soon as she takes them. Lienteria; exhausting diarrhœa.

Belladonna. Face flushed, or very pale, eyes red; throbbing of the carotids; dread of light and of noise. A putrid taste arises from the fauces, also while eating and drinking, although the food tastes natural. Nausea in the throat.

Berberis. She dreads all downward motions. Bitter taste of every thing, even of the saliva; distension with flatulence after every meal.

Bryonia. Nausea on waking in the morning. Her nausea is usually relieved by keeping quiet. Dry parched lips; dry mouth and tongue. Splitting headache. Vomiting of food immediately after eating. She desires to keep still. The gastric derangement is ameliorated by keeping quiet. Constipation of hard dry feces as if burnt.

Calc. carb. She cannot sleep after three in the morning. Heartburn and food eructations. Vertigo on running up stairs. Cold, damp feet. Leucophlegmatic temperament. Soreness of the tongue, either on the tip, sides or dorsum,—so that she can scarcely talk or eat. She cannot bear tight clothing around the hypochondria. Stitches in the liver during or after stooping.

Cantharis. Gastric difficulties accompanied with very frequent micturition, with cutting and burning pains, only a few drops being emitted at a time,—and sometimes with blood. Sensation of fulness extending into the chest and abdomen, after taking coffee. Burning in the region of the pylorus. Vomiting with violent retching and severe colic.

Carbo veget. She has to eructate frequently, which affords only

temporary relief of her many sufferings. Sensation as if the œsophagus were contracted or entirely closed. Even the most innocent kind of nourishment disagrees with her. Sensation as if the stomach and abdomen would burst, when eating or drinking.

Causticum. Phlegm in the throat, which she is unable to hawk up, and which sickens her. She sits down to the table with some appetite, but can eat scarcely a morsel. Constant sensation as of lime being burned in the stomach with rising of air. Stitches in the liver for hours in the afternoon. Hemorrhoids, which cause great suffering on walking. Her upper eyelids are nearly paralyzed, she can hardly keep them open.

Chamomilla. The existing pain is increased by eructations. Nausea as if she would faint. Great irascibility of temper,—she can hardly return a civil answer. Burning all across the stomach into each hypochondria. The epigastrium is painfully bloated in the morning, with a sensation as if the contents were passing into the chest. The belching of wind is now painful. She cannot compose herself to sleep; she imagines she hears the voices of absent persons.

Chelidonium. There is a constant pain under the lower inner angle of the right shoulder-blade. Her nausea causes great heat of the body. Great desire for milk, the drinking of which ameliorates all her symptoms.

China. The abdomen feels full and tight as if stuffed,—eructations afford no relief. There may be diarrhœa and dejection of much flatus, but no relief is obtained. In connection with the tightness about the abdomen, she often feels as if her garters were too tight and loosens them, and as if her waist were too tight; she must loosen that, &c. Bitter taste in the back part of the throat, bitter taste of every thing. She craves dainties, but hardly knows what.

Cina. Grinding of her teeth, tumbling and tossing during her sleep. Diarrhœa always after drinking; (or else Arsenic.) Inclination to vomit, with a weak, hollow, empty feeling in the head. Constant pressure in the stomach at night, causing restlessness.

Cocculus. Burning in the œsophagus extending into the fauces, with a taste of Sulphur in the mouth. She is scarcely able to raise herself in the morning from nausea and inclination to vomit; it makes her so faint. Metallic taste in the mouth. Sensation in the abdomen as if sharp stones rubbed together on every movement, and the lower extremities seem almost paralyzed.

Conium. Much vertigo develops itself, particularly on turning over in bed. The urine intermits at every emission. Stinging in the

neck of the uterus; scirrhus of any part. Terrible nausea and vomiting in women having scirrhosities during pregnancy. Where the history of the case of nausea and vomiting reveals the fact of swelling and soreness of the breasts with some menstrual periods.

Crocus. Sensation of fermentation in the stomach, or of motion upwards and downwards, hither and thither. Feeling of nausea in the chest and throat as if she would vomit.

Cuprum. Violent vomiting of frothy mucus. When drinking the fluid descends with a gurgling noise. Sensation in the stomach as if she had something bitter in it. The violent nausea and vomiting are relieved by drinking cold water.

Cyclamen. After eating the least quantity, disgust and nausea in the palate and throat. Much dimness of vision with fiery specks and sparks before the eyes. Intermittent thirst.

Digitalis. Nausea as if she would die. Very slow pulse and light-colored stools. Intermittent pulse. Very persistent nausea and vomiting—nausea even after vomiting. Burning in the stomach extending up the œsophagus. Want of appetite, with clean tongue and empty stomach. Very much nausea in the morning.

Drosera. Nausea after eating fat. The nausea is worse after midnight till morning. The mouth seems in a bitter state when eating.

Dulcamara. The sufferings are made worse by every cold change in the weather. Empty eructations with throbbing, as from disgust. Frequent eructations while eating. Sensation of retraction in the pit of the stomach with burning.

Ferrum. Vomiting of food with a fiery red face. Renewed vomiting after eating. Vomiting at midnight. Every thing she vomits tastes sour and acrid.

Graphites. Itching blotches here and there over the body. Vesicular eruptions from which oozes a glutinous watery fluid. Sore varices. Constipation or diarrhœa. Nausea with vertigo, so that she is afraid to walk. Rancid heartburn, particularly after eating. Taste in the mouth as of rotten eggs every morning, which nauseates her.

Helleborus. Urine scanty, dark, and depositing a coffee-ground sediment. Nausea, yet hungry; still the food is repulsive, although the taste is natural. Intensely painful burning in the stomach, extending into the œsophagus.

Hepar. Itching rash in the bend of the arms; under the knee; in the popliteal space. Frequent and momentary attacks of nausea. Vomiting every morning. Inclination to vomit with flow of saliva

from the mouth. Constant sensation of water rising in the œsophagus as if she had eaten sour things.

Ignatia. Great sense of emptiness at the pit of the stomach, with sighing and great depression of spirits. Full of suppressed grief, as it were. Sensation as if she had been fasting a long time with flat taste and languor in the limbs.

Ipecac. One continual sense of nausea all the time, not a moment's relief. Vomiting of large quantities of mucus.

Jodium. Continual empty eructations, from morning till evening, as if every particle of nourishment were turned into air. Nausea and vomiting of saltish-tasting substances. A continual taste of salt in the mouth.

Kali bi. Discharge from the stomach, throat or mouth, or from any of the mucous membranes, of a tough, stringy mucus, inclining to stick to the parts and drawing out in long strings.

Kali c. Very sleepy during a meal, with strong desire to sleep. Nausea as if she would faint, relieved by lying down. Vomiting with a swoon-like failing of strength. With much colicky pain in the abdomen of a stitching character.

Laurocerasus. Attacks of suffocation with palpitation and a sort of gasping for breath,—a feeling as if she was not going to breathe again, yet she does,—she must sometimes lie down to find relief. Eructations tasting as if of bitter almonds or Prussic acid. Violent pain in the stomach, with loss of speech.

Lycopodium. Much rumbling and working in the abdomen;—gurgling in the left hypochondrium. Sensation of satiety, on account of which she cannot eat. Red sand in the urine. Great pain before urinating, and relief as soon as the urine begins to flow. Immediately after a meal sensation as of fasting, but no hunger. Much heat in the face after eating, particularly in the left cheek. Heartburn from the stomach, the acidity rising into the stomach.

Magnesia c. Much sour taste and sour vomiting. All her symptoms are aggravated every third week. Much roughness, or stinging or burning in the throat, with desire to vomit. Much loathing without desire to vomit.

Magnesia mur. Constipation of large, difficult stools, which crumble as they leave the verge of the anus. A continual rising of white froth into the mouth. Eructations tasting like onions. Fainting nausea succeeded by coldness and weakness in the stomach and gulping up of water.

Mercurius. Much salivation, ulcerated gums, sore and elongated

teeth. Mucous stools, followed by tenesmus. Rancid heartburn after a simple supper. Heartburn all night. Ptyalism with nausea, waking her from sleep, particularly after twelve at night. The pit of the stomach is very tender to the touch.

Moschus. Violent eructations tasting like musk, sometimes of garlic. The sight of food makes her sick. Eructations with hot saliva in the mouth. Vomiting of the food, then subsequent vomiting and more vomiting.

Natrum mur. Waterbrash, like limpid mucus, profuse and constant. She always awakens in the morning with headache. She craves salt. Has a strong aversion to bread. Clawing in the pit of the stomach. Feeling of great hunger, as if the stomach were empty, but no appetite. She always has heartburn after eating. Very much nausea, particularly in females using much salt food. Dreams at night of robbers being in the house; she must have the house searched in order to be satisfied.

Nitric acid. Much nausea and gastric trouble, relieved by moving about or riding in a carriage. Constant nausea with heat in the stomach, extending to the throat. Fat food causes nausea and acidity. Exceedingly strong and offensive urine, smelling like that of horses.

Nux mosch. Mouth, tongue and throat very dry, so that they stick to one another, particularly at night. Sensation of fulness of the stomach with tightness of breathing. Very useful for this symptom in the last months of pregnancy.

Nux vom. Feels as if she would feel better, if she could vomit. Nausea and vomiting every morning, with constipation of large, difficult feces. Putrid taste lower down in the pharynx, when hawking up mucus. Food and drink have a fetid smell to her. She cannot bear the odor of tobacco. Stools very small and frequent, with frequent and painful urging. Not much appetite, restless sleep, particularly after three A. M., with nausea and vomiting in the morning and great depression of spirits. She cannot enjoy reading or conversation. She is irritable and wishes to be alone.

Opium. Will be found very useful where occurs the grand keynote for this remedy,—*constipation of round, hard, black balls.*

Petroleum. In females affected with diarrhœa only in the daytime; nausea when riding, she cannot ride in her carriage. Particularly applicable in all gastric troubles of pregnant females.

Phosphorus. With constipation of narrow, long, hard, dry feces, which are difficult to evacuate. Very weak feeling in the abdomen. Heat up the back. Profuse watery diarrhœa, pouring away as if

from a hydrant. Sour eructations and sour vomiting. Very sleepy all the time.

Phosphoric acid. Sensation as if the stomach were being balanced up and down. Bread tastes bitter. Nausea, as if in the palate. She frequently rises at night to pass large quantities of colorless urine. Much debility.

Pulsatilla. Pulsations in the pit of the stomach. Vomiting of mucus. Bad taste in the mouth every morning on awaking; she has to wash it out soon, it is so bad she cannot bear it. Nothing tastes good to her. Absence of thirst; she does not relish as much water as usual. Nightly diarrhœa.

Rhus tox. No appetite. Putrid taste after the first mouthful. Pain between her shoulders on swallowing food. Very restless at night, particularly the latter part of the night; she must turn frequently in order to find an easy position.

Sabadilla. No relish for food till she takes the first morsel, when she makes a good meal. A kind of heartburn, the heat commencing in the abdomen and extending upwards clear to the mouth. Much nausea and vomiting with heat in the abdomen. Vomiting of ascarides. Horrid burning in her stomach, as if it would burn up through into her throat.

Selenium. Violent beating of the pulse in the whole body after eating, particularly in the abdomen.

Sepia. Vomiting of milky water, or milky mucus. Sense of emptiness at the pit of the stomach; the thought of food sickens her; and sense of weight in the anus. Eructations tasting like spoiled eggs. Taste of manure. Aversion to meat. In the morning, nausea as if all the viscera were turning inside out. Inclination to vomit in the morning when rinsing her mouth. She cannot take her accustomed ride in the morning, on account of nausea. Painful feeling of hunger in the stomach.

Silicea. Hungry; but she cannot get down food, it is so nauseous. Prolonged after taste of food. Nausea, with violent palpitation of the heart. Nausea after every exercise that raises the temperature of the body. Constipation, as if from inactivity of the rectum, the stool receding after partial protrusion. Taste of blood in the morning.

Staphysagria. Sensation as if the stomach were hanging down relaxed. Shortly after a full and substantial meal, she feels very hungry. Extreme hunger, even when the stomach is full of food.

Stramonium. Troublesome thirst, even with very much saliva.

Every kind of food tastes like straw; in fact, she has no taste. Nausea, with flow of very saltish-tasting saliva.

Sulphur. Profuse salivation, the taste of which causes nausea and spells of vomiting. All the trouble seems to be caused by the nauseous salivation. Flushes of heat; heat on the top of the head; cold feet; short sleep at night,—she wakes very frequently. Profuse waterbrash.

Sulphuric acid. Coldness and relaxed feeling in the stomach; loss of appetite and great debility.

Tartar em. Vomiting of large quantities of mucus.

Valerian. Heartburn, with gulping up of rancid fluid, which, however, does not rise into the mouth. *Nausea,* as if a thread were hanging in the throat, exciting attempts to vomit. She feels nauseated, faint, with white lips and body icy cold.

Veratrum. Much thirst for cold drinks. Craves fruits and juicy articles of food. Wants every thing cold. Violent retching. A grand key-note for Veratrum is a cold sweat on the forehead, with all the sufferings.

Zinc. Taste of blood in the mouth, and sweetish risings from the stomach. Terrible heartburn after taking sweetish things. Great greediness when eating; she cannot eat fast enough, from canine hunger. Much nausea and vomiting, and fidgety feet.

Pyrosis—Acidity—Heartburn.—These distressing forms of gastric disturbance sometimes make their appearance soon after the conception; in other cases they may not appear until after the fourth month. Some women are remarkably subject to these symptoms when *enceinte;* in others they are manifested with less violence; in others not at all. There may be merely a burning sensation,—heartburn in the throat,—which indicates sympathetic irritation, or the severer forms of pyrosis, with acidity, which arise from more fully developed gastroses. As in the nausea and vomiting of pregnancy, so in pyrosis, heartburn and acidity, every degree of intensity and variety of manifestation and complication may be seen in different individual cases. Sometimes these disturbances are found accompanied with and greatly aggravating the nausea and vomiting; at other times they seem to appear instead of the vomiting.

As in ordinary cases of dyspepsia, these sufferings are worse after taking particular articles of food or drink, such as meats, fat meats or gravies, milk, fruit. In the more severe cases, nearly

every thing that is ingested becomes but an added fuel to the burning of the pyrosis and acidity. Still, a careful avoidance of all those articles which, whether solid or liquid, are found most to disagree, and a careful administration of the truly indicated Homœopathic remedy will, as in cases of nausea and vomiting, go very far to remove the most distressing symptoms, and eventually to secure a great improvement in the general health. For these difficulties, when not merely the aggravations by pregnancy of already existing forms of chronic gastritis, are but the developments of constitutional miasms hitherto latent, as explained in the case of morning sickness. And while the classes of hereditary miasm are but few, still modified as they are, in their actual development, by *individual* peculiarities, they require a great variety of remedies for their proper treatment. Not indeed many remedies for each individual case,—for the more skilful the physician, the fewer will be the remedies which he will be obliged to administer in any given case; and the greater the number of cases which he will cure with a single remedy,—sometimes even with a single dose. But a variety of remedies will be necessary to correspond to the variety of disorders which result in different persons, even from the same cause.

The doctrine of individual specifics is based upon the most profound analysis of the human system and of the law of cure, and is confirmed by the radical and constitutional improvement,—an improvement which is found to be the more radical and permanent the higher the potencies of the remedies which are administered. The doctrine of individual specifics is therefore truly scientific, since it harmonizes the results of practical experience with well-established principles, and even with those profounder explorations of our being in which matter is seen to fade into spirit, and physiology to be replaced by psychology. The doctrine of general specifics leads to just the reverse of all this, as well in principle as in the ratio and extent of actual success. For our Allopathic and Eclectic brethren, and even those of the so-called physiological school among the Homœopaths, are so manifestly blind, that they totally ignore in therapeutics that predominance of mind over matter which they do not hesitate to admit in all other branches of scientific inquiry. They prove themselves materialists and chemists,—any thing but true physiologists;—while as to psychology, or the doctrine of the connection of the body with the soul, and of the influence of the latter over the former, they seem to regard it as entirely beneath their attention. Hence, what do we see in the practice of all these

classes alike, but temporary expedients,—which often result in manifest disaster, and which always occasion more injury than they are capable of discerning,—instead of radical cures. We see chemical antidotes which, if they sweeten the streams, do it at the expense of the fountains; and the mechanical appliances, which not only fail to assist nature, but in many cases effectually prevent her from helping herself. Those who thus pride themselves in indulging in Allopathic and Eclectic modes of thought, are greatly to be pitied; they know not what they do. All the advancing progress of modern scientific thought is against them; and the more enlightened of those whom they profess to admire, despise them as foolish rejectors of the higher light held up before them.

In order to determine the choice in each individual case of pyrosis, heartburn, or acidity, study the following remedies, and compare them with those already more fully stated under *gastric derangements*.

I. *Agar., Anti. c., Arn., Arsen., Cham., China.* II. *Alum., Ambr., Argent., Baryt., Bell., Borax, Canth., Caust., Graph., Helleb., Hepar, Ignat., Nux m., Petr., Phos. acid, Sabad., Silicea, Sulph., Sulph. acid, Zinc.* III. *Ammo. c., Capsic., Carbo an., Carbo v., China, Dulc., Jodi., Lycop., Merc., Nat. m., Nitric acid, Phos., Puls., Sepia, Valerian, Verat.,* IV. *Calc. c., Conium, Crocus, Nux v.*

III. Intestinal Affections.

Constipation.—This is so frequent an attendant of pregnancy that by some it has been deemed almost its natural consequence. But this affection is much more apt to occur, and is at the same time much more troublesome and inveterate in pregnant females who from habits of life and constitutional peculiarities are predisposed or subject to it in their ordinary condition.

The mechanical pressure exerted upon the rectum, by which its calibre is diminished and its action paralyzed, and the habits of inactivity in which many pregnant females indulge, especially in cities, combine to produce costiveness. And as a final result of the constipation, hemorrhoids, either blind or bleeding, appear in many cases. And the very great amount of vital force consumed in the womb, may also tend to draw away from the intestinal canal some of the energy that might have sustained its regular and daily evacuations.

The indications for hygienic treatment will be suggested by the

more apparent causes of the difficulty. Not only will the constipation itself be avoided in many cases by suitable and active exercise in the open air, but many of the attendant complications and consequences, such as headache and rush of blood to the head, may in the same way be escaped. The remedies will be indicated by the nature of the discharges and by the accompanying symptoms and totality of the patient's condition. The constipation being but one of the forms of development of the constitutional psora, in many instances,—whether the most prominent symptom or not,—requires a careful, radical treatment, by which not only will the present difficulty be relieved, but the general health improved, so that this trouble will not appear in succeeding pregnancies. The following remedies, as well as those detailed under gastric disturbances, should be carefully studied and compared with the totality of the patient's symptoms.

Aconite. Where there is much thirst; a general dryness of the skin; a constant restlessness; and where the same fears appear that are mentioned in this remedy under other gastric disorders.

Alumina. Much effort must be employed for the expulsion even of a soft stool; so great is the apparent inaction of the rectum.

Agaricus m. The stool is very hard and knotty at first, then it becomes soft, and finally diarrhœic,—especially if there are red, itching and burning, frost-bite looking places on the feet, hands or face.

Ammo. m. Stools large, hard, crumbling as they pass the verge of the anus.

Anacardium. Frequent and ineffectual urging, the rectum feeling as if stopped up with a plug; if the stool does not pass soon, she feels colicky pains in the abdomen.

Anti. c. Sensation as if a copious stool were going to pass, when only flatus comes forth,—but finally a very hard stool is evacuated.

Apis. Stools seldom and very difficult, with stinging pains and sensation in the abdomen as if of something tight which would break if too much effort were used.

Arnica. In cases where an obstinate constipation has remained ever since some severe concussion.

Belladonna. Much tendency of blood to the head; flushed face; red eyes; throbbing of the carotids; heat in the head; intolerance of noise and of light. With Belladonna high, I have succeeded in cases like this, when the most violent doses of the Allopathic school had utterly failed.

Bryonia. The stool is mostly dark, dry and hard as if burned;

and is evacuated with much difficulty. The lips are parched and cracked; and there is much thirst.

Calc c. Indicated in leucophlegmatic temperaments. Stools very large, hard; sometimes in part undigested. She does not sleep after three A. M.

Carbo v. Tough, scanty, not properly cohering stool; it seems to break off, and in consequence to become interrupted, and rendered more difficult of expulsion.

Causticum. Constipation, in which the effort to effect a passage causes heat, redness and perspiration on the face.

Chelidonium. In cases accompanied by pain under the inner and lower angle of the right shoulder-blade; stools like sheep's dung.

China. Hard, intermitting stool, with sensation of tightness and fulness in the abdomen; also with burning and heat in the head.

Cocculus. Hard stool every other day, expelled with great difficulty. The lower extremities are nearly paralyzed.

Conium. Frequent and ineffectual urging; or a small quantity is evacuated each time; much vertigo, particularly on turning in bed. The urine intermits in its flow, at each emission.

Graphites. Large, hard, knotty stool, the knots being united by mucous threads, and much mucus after the stool. Itching blotches about the body, which emit a glutinous fluid. Sometimes the stools are only the size of lumbricoides.

Hepar. Constipation resembling that of Alumina: Hepar may be given in preference where the skin-symptoms or others, seem to indicate it more particularly,—for instance, if eruptions appear on the bend of the elbow and on the popliteal space.

Ignatia. Difficult stool, causing prolapse of the rectum. Empty feeling at the pit of the stomach; sighing and full of grief.

Jodium. Constipation with ineffectual urging; but the stool passes with great facility soon after drinking some cold milk.

Kali c. Unsuccessful desire for stool, with a sensation as if the rectum were too weak to expel it. She feels very strangely and badly an hour before stool. Many itching pains in and about the anus and rectum during and after stool.

Laurocerasus. Frequent attacks of suffocation about the heart, so that she must gasp for breath.

Ledum. Great want of vital heat; she can hardly keep warm even with much wrapping; in constipation, where this state of the system prevails, this remedy will be found useful.

Lycopodium. She says her abdomen is like a yeast-pot, so great a

fermentation goes on there. Borborygmus and gurgling, especially in the left hypochondrium. Much red sand in the urine. Distressing pain in the back before urinating.

Magnes. mur. Large, difficult stools, crumbling as they pass the verge of the anus.

Mercurius. Constant and ineffectual desire for stool. Scorbutic condition of the gums. Salivation; sore throat; soreness of the gums and other mercurial symptoms.

Nat. m. Hard, difficult stool; and inactivity of the rectum. Bad headaches, always on waking in the morning. Craves salt. Aversion to bread. Very vivid and fearful dreams. Sore places in the mouth, which are very painful, sensitive even to liquids.

Nitric acid. Hard, difficult, scanty stool. Urine exceedingly offensive, like horses' urine. She sleeps badly in the latter part of the night.

Nux mosch. Great dryness in the mouth and tongue, which sticks to the palate; and slow and difficult stools.

Nux vom. In females of sedentary habits; accustomed to the use of much coffee, wine and rich and high-seasoned food generally. Stools large and difficult, or small, frequent and painful.

Oleander. First diarrhœa, then hard, difficult stool.

Opium. Stools always in round, black, hard balls,—in such cases Opium in the higher preparations never fails.

Phosph. Stools narrow, dry, long and difficult to expel,—more like a dog's stool.

Phosph. acid. She is obliged to rise frequently at night to pass off large quantities of colorless urine. The stools are hard and in pieces.

Platina. The stools adhere to the parts like soft clay, and pass off with difficulty on that account.

Plumbum. Constipation, with violent colic. The stools are usually composed of little balls, compacted together like sheep's dung. Sensation as if of a string drawing the abdomen in towards the back.

Pulsatilla. Obstinate constipation in mild, gentle, tearful females, with very nauseous, bad taste in the mouth in the morning; so very bad that she must wash her mouth immediately on waking.

Ratanhia. Most obstinate and long-continued constipation, with urging feelings in the small of the back, as if a stool would come down.

Rhododendron. She is too rheumatic, and all her pains reappear at the approach of and during the continuance of rough, stormy and

windy weather. The stool is not so hard, but it is very tardy, requiring a good deal of urging.

Rhus. She is rheumatic; has restless nights, on account of not being able to lie long in any position, although she feels so very comfortable for a short time after every change. She has almost constant tenesmus with nausea and tearing in the intestines.

Ruta. Difficult expulsion of stool, with a large protrusion of the rectum; in fact the rectum is very liable to protrude before the stool—immediately on attempting to go to stool.

Sabadilla. Very difficult stools, with much burning in the abdomen, and a sensation as of something alive in the abdomen. Colic, with violent urging to stool and borborygmus.

Sabina. Hard, difficult, painful stools, with pain extending from the back directly to the pubis.

Sarsaparilla. Obstinate constipation with violent urging to urinate. Great desire, with contraction of the intestines and excessive pressure from above downwards, as if the bowels would be pressed out, when a small stool is passed; and then the same phenomena recur again.

Sepia. Sensation of a weight or of a heavy lump in the anus; this is a very characteristic indication. The stool is very difficult, covered with mucus, and sometimes impossible to pass even with terrible, involuntary strainings. Sepia[200] was stated many years ago to be specific in the constipation of pregnant women.

Silicea. Very much urging, the stool often receding after having been partially expelled. The stool is composed of hard lumps.

Stannum. It exhausts her to talk much, or to read aloud. It is more difficult and tiresome for her to descend than to ascend, to sit down than to rise up. Although the stool has been fully accomplished, she does not feel relieved.

Staphysagria. The more trouble she has with her gums and teeth, the more constipated she becomes.

Sulphur. The first effort to stool is often very painful, compelling her to desist. Flushes of heat; heat on the top of the head, coldness of the feet, faintness from eleven to twelve at noon, she can scarcely wait for her dinner.

Sulph. acid. Hard stool, consisting of small black lumps mixed with blood, accompanied by such violent prickings in the anus, that she has to rise up on account of the pain. Sensation of tremor all over the body without trembling.

Thuya. Very violent pain in the rectum during stool, so violent

that she could hardly pass the stool, with sensation as if she could hardly exist any longer.

Veratrum. Costiveness, owing to the hardness and size of the feces, as well as to the inactivity of the rectum. Cold sweat stands on the forehead during the movement of the bowels, and there are much exhaustion and faintness afterwards.

Verbascum. Scanty stool, like sheep's dung, nearly as hard as rocks; expelled with much effort.

Zinc. This remedy is particularly indicated where there is remarkable dryness of the stools, which are insufficient and difficult of expulsion.

Diarrhœa may be developed in pregnancy, like constipation or hemorrhoids, from some constitutional dyscrasia, which is called into action by the profoundly vital function of gestation. How much better then to cure this abnormal condition in a radical manner and thus materially improve the health of the mother and the prospects of the child, than to attempt to suppress these discharges by astringents.

The condition of the bowels in which diarrhœa makes its appearance is more like actual disease, than where constipation is present. The diarrhœa may alternate with constipation; and this is quite a common complication. Or it may be of that character which naturally accompanies acidity of the stomach, and great weakness of the digestion. Sometimes it assumes the form of lienteria or discharge of undigested food. In other cases the liver seems involved, and the stools have a bilious appearance; such attacks of diarrhœa may occur in consequence of violent emotions of the mind to which pregnant women are peculiarly liable. The discharges may be easy and painless; or accompanied by severe suffering, soreness, cutting pains and even tenesmus, as if of actual dysentery. This latter form, approaching inflammation of the bowels, is apt to come on after exposure to the night air, especially if not clad with sufficient warmth.

It is not necessary to detail all the symptoms of the various forms of diarrhœa which may appear in pregnant women; the most important of them may be found among the indications and characteristics of the various medicines.

There are three directions which should be insisted upon in prescribing for cases of diarrhœa in pregnancy: First; the patient should carefully abstain from every unsuitable article of food; those which are found by experience to be indigestible or to occasion distress

whether immediately followed by aggravation of the diarrhœa or not, should be particularly interdicted. Second; the patient should take care that her whole body is amply protected from the cold and damp, but especially her feet and abdomen. The former should be warm and dry as a matter of course; the latter will often,—from becoming so prominent,—require extra covering, as of flannel. Third; perfect quiet is absolutely essential in cases of diarrhœa in pregnancy. This condition should indeed be always enjoined in the treatment of diarrhœa, whether it extend to dysentery or inflammation of the bowels or not. But in the case of pregnant women it is if possible still more indispensable. Rest, repose, especially in a horizontal position, will enable the patient to recover her health and strength under the influence of the Homœopathic remedy, in a very short time; when if she continued moving about, those cases of diarrhœa which at first were mild and painless would become inveterate and greatly aggravated in character.

Sometimes the diarrhœa, not very severe and apparently of no great consequence, which makes its appearance in pregnancy, is but the insidious forerunner of phthisis pulmonalis, otherwise held in abeyance by the influence which the state of pregnancy exerts upon the entire economy of the female system.

We give the chief indications for the remedies which are oftenest called for in the diarrhœa of pregnancy; the remedy should always be made to correspond to the totality of the symptoms; and if the simile is not found in one of those, a more extended search must be instituted in the Materia Medica.

Agaricus m. The diarrhœic stools are accompanied with abundance of flatulency, with painful drawing in of the abdomen. The itching, burning and red places upon the skin fade away as the diarrhœa improves.

Alumina. Diarrhœa with tenesmus; *she has to strain at stool in order to pass water; she cannot pass her urine without straining at stool.*

Ammo. mur. Diarrhœa with soreness of the anus, several pustules are discovered near it.

Angustura. Diarrhœa with shivering over the face and goose-flesh.

Anti. c. Diarrhœa at night and early in the morning, with white tongue. Watery diarrhœa containing hard lumps.

Arnica. Involuntary stools with sore and bruised feeling all through her.

Arsenicum. Exhausting diarrhœa containing undigested food.

She is very weak, the least motion fatigues her very much. The diarrhœa is renewed after eating or drinking. Very offensive diarrhœa.

Asafœtida. Watery, liquid stools of the most disgusting smell imaginable;—also the same in infants and children.

Aurum. Nightly diarrhœa, with much burning in the rectum.

Belladonna. Involuntary diarrhœa. The diarrhœic stool is followed by frequent urging, no more stool being passed. Flushed face; red eyes; throbbing carotids, &c.

Borax v. Frequent soft, light yellow, slimy stools, with faintness and weakness.

Bryonia. Burning diarrhœa. The diarrhœa is worse or aggravated by warm weather. Lips dry and parched; thirst; nausea after eating; *nausea on sitting up in bed.*

Calc. c. Much crawling and itching, like ascarides, in the anus. Leucophlegmatic temperament. Does not sleep after three A. M.

Cantharis. A constant desire to urinate, with cutting burning pain. Dysenteric diarrhœa.

Capsicum. Much burning and smarting in the anus, as if of Cayenne pepper.

Carbo v. Much flatulency, with belching which affords only temporary relief.

Causticum. Hemorrhoids or fissures, rendering walking almost intolerable.

Cham. Hot diarrhœic stool, smelling like rotten eggs. Painless, green, watery diarrhœa, a mixture of feces and mucus. Nightly diarrhœa with colic, causing her to bend double. In all Chamomilla cases the mental symptoms are about the same, quarrelsome, obstreporous.

Chelidonium. Diarrhœa with pain under the inner and lower angle of the right shoulder-blade.

China. Diarrhœa of yellow, watery stools, undigested, and with much flatulence. Sensation of distension in the abdomen, which is not relieved by eructations or dejections.

Cocculus. Diarrhœa with a sensation in the abdomen as of sharp stones rubbing together.

Colocynth. Diarrhœa with colic drawing one double. The abdomen and thighs must often be approximated as much as possible during the stool. Aggravation after eating or drinking.

Conium. Heat and burning in the rectum during the stool, and tremulous weakness afterwards. Frequent stitches in the anus

between the stools. The urine intermits during its flow; and there is much vertigo, particularly on turning in bed.

Crocus. Long, dull stitches near the anus, from time to time,—continuous, and painfully affecting the whole nervous system.

Cuprum. Violent diarrhœa, with cramps in the stomach and chest. Ineffectual desire to urinate.

Digitalis. Violent diarrhœa, the stools being ash-colored, or very light; and very slow pulse.

Drosera. Loose stool almost continually, rather worse after twelve at night.

Dulcamara. Always worse after every cold change in the weather.

Euphorbium. Stools like glue prepared for use.

Ferrum acet. Frequent diarrhœic stools, corroding the anus, the face being fiery red.

Graphites. Diarrhœa with varices and a smarting sore feeling after the stool when wiping.

Helleborus. In cases of diarrhœa in which the urine is found to be scanty, and to contain a deposit like coffee-grounds.

Hepar. Diarrhœa, with tenesmus and an itching rash in the bends of the elbows.

Hyoscyamus. Diarrhœa, with involuntary jerks of the muscles, immediately before, during, or immediately after the stool. Involuntary stools.

Ignatia. Empty, weak feeling at the pit of the stomach, with disposition to take a long breath frequently, a sort of sighing inspiration.

Ipecac. Diarrhœa with one continual sense of nausea—not a moment's respite.

Jodium. Diarrhœa of watery, foaming, whitish mucus, with pinching around the navel, and pressive pain in the vertex.

Kali c. Diarrhœa with sharp, shooting, and stitching pains all over the abdomen.

Lachesis. Diarrhœa always worse after sleeping,—and with frothy urine.

Laurocerasus. Diarrhœa with peculiar suffocating spells about the heart. She is often obliged to lie down on account of this peculiar sense of suffocation.

Ledum. Diarrhœa with a sensation of great coldness; she has great want of vital warmth, and can hardly keep warm. Between the anus and coccyx a red humid spot, smarting and sore-itching.

Lycopodium. Diarrhœa with a constant sense of fermentation in the abdomen, like a pot of yeast working.

Magnes. c. A green, watery diarrhœa occurs regularly every three weeks.

Mercurius. Morning diarrhœa, composed mostly of slime and fecal matter, with tenesmus before and during the stool. Diarrhœa preceded by a faint sickish pain in the abdomen, entirely relieved by stool. The stools are often mixed with slime and blood, attended with tenesmus. Yellow stools of the color of Sulphur. Salivation; sore, ulcerated gums; loose and sore teeth; aching of the jaw-bones, &c.

Mezereum. Diarrhœa with prolapse of the rectum; the anus becomes constricted about the prolapsed rectum, which is very painful to the touch.

Muriatic acid. Diarrhœa with intolerable itching of the anus, which is sometimes so sore that it can scarcely be touched.

Nat. mur. Diarrhœa like water. Disgust for bread. Severe headache on waking in the morning. Very vivid dreams, they seem like a living reality.

Nux mosch. Chronic diarrhœa from pregnancy, with unusual sluggish flow of ideas, so much so that it takes her a long time to answer any simple question. Diarrhœa with fainting.

Nux vom. The stools are very frequent, but small in quantity, with sore pain in the anus. She often feels as if something yet remained to pass, although a fair quantity may have been evacuated.

Opium. Black, watery diarrhœa, sometimes frothy.

Petroleum. Diarrhœa only in the day-time.

Phosph. Watery diarrhœa, pouring away as from a hydrant, with great sense of weakness in the abdomen, and general debility.

Phosph. acid. White, gray diarrhœa; copious, yellow, watery diarrhœa, with rumbling in the abdomen.

Pulsatilla. Watery diarrhœa, only, or usually, at night,—sometimes unconsciously evacuated. She has no thirst; a bad taste in the mouth; nothing tastes good. Blue eyes; tearful disposition.

Rheum. *Sour diarrhœa,* with cutting and colicky pains about the navel.

Rhus. Diarrhœa with drawing and tearing down the legs with every evacuation.

Sabina. Diarrhœa with pain extending from the back to the pubes.

Secale c. Painful diarrhœa with great prostration. Putrid, fetid, and colliquative diarrhœa.

Sepia. Sense of weight in the anus, and an empty, sore feeling at the pit of the stomach; much burning at the anus and rectum.

Stramonium. Diarrhœa of a cadaverous smell.

Sulphur. Diarrhœa in the morning, driving her out of bed; she must always go in a hurry; she has hardly time to save herself from being soiled.

Sulph. acid. Diarrhœa with great debility, sensation of tremor all over her, without any trembling.

Tartar em. Colliquative diarrhœa, with meteorism.

Veratrum. Very exhausting diarrhœa; she feels very weak after every passage, with cold sweat on the forehead, and sometimes all over her.

CHAPTER TWENTY-SEVENTH.

DISORDERS OF PREGNANCY—CONTINUED.

AFFECTIONS OF THE RESPIRATION; CIRCULATION; SECRETION, AND EXCRETION. FISSURES OF THE ANUS.

Among the disturbances of the function of respiration which may be occasioned by pregnancy, we mention particularly *cough* and *dyspnœa;* among the morbid affections of the circulation, are found certain changes in the blood and the varicose and hemorrhoidal enlargements of the blood-vessels. Of disturbances of the function of secretion, *ptyalism* alone requires especial mention; while the morbid affections of the excretory function will all be found connected with the urinary apparatus.

Cough and *dyspnœa* are the principal forms of disorders of the respiratory organs, which occur in connection with pregnancy. There may also be oppression of the chest, palpitation of the heart, and other similar symptoms; but these belong rather to the circulation than to the respiration. And so intimate is the connection between these two grand vital functions, that it would be difficult in any given case to determine whether the disturbance of the respiration affected the circulation, or whether the disturbance of the circulation affected the respiration. For our purpose, it is sufficient to remember that both these functions are under the immediate and absolute control of the nervous system of organic life, which,—as we have already explained,—is most intimately connected with the uterus, and sustains all the development of utero-gestation.

From reflex, sympathetic irritation of the pneumogastric,—either in connection with gastric disturbances or *in lieu* of them,—the cough of pregnancy may arise in the earlier months; or it may be the *direct result* of irritation of the diaphragm from the upward displacement in the later months. In either case the cough is short, frequent, irritating; and it may be perfectly dry, or attended with some expectoration. Influenza may also set in as a complication,—in this case prompt attention should be rendered, and a cure effected at once,—since otherwise abortion itself may result.

A certain spasmodic form of cough sometimes makes its appearance, resembling hooping-cough, and arising from an apparently similar irritation of the pulmonary nerves. Such cough as may be connected with a tuberculous condition of the lungs, as in cases of incipient phthisis, is more apt to disappear under the influence of pregnancy; should the pulmonary difficulties be so far developed that a purely phthisical cough maintains itself during the period of gestation, the state of the patient will require the most serious attention. Since the phthisical symptoms usually appear with far greater intensity after delivery. Another most important indication of this condition in pregnancy, is to be found in the chills, which have been known to occur every day, and which in the entire absence of cough or expectoration were believed to be due to some miasmatic influence. Such a patient was readily delivered of an apparently healthy and full-sized child; but was herself found upon examination to be in the last stage of consumption, never being able to leave her bed or scarcely to speak. *She lived but a few weeks after her confinement.*

Dyspnœa in its various forms, panting respiration, shortness of breath, oppression of the chest, is a not unfrequent accompaniment of pregnancy. The symptoms of this class, as well as those connected with cough, are more apt to appear in persons whose chests are naturally weak, who are constitutionally predisposed to phthisis pulmonalis, or who have a similar predisposition to hydrothorax. A very sad case of a fatal complication of all these difficulties recently came under our observation. A young woman, aged about thirty, of scrofulous constitution, rather short in statue, inclined to hydrothorax,—who probably had some small accumulation of water about the heart for a considerable time,—was married in the fall and found herself *enceinte* in the winter; she consulted her physician, at a distance, for a severe cough with great shortness of breath. She reported herself very much relieved by the remedies advised; but

soon after, taking, as was stated, "a cold on her lungs," she died in a few days, suffocated by the copious pulmonary effusion.

Plethora has also been mentioned as one of the causes of dyspnœa in pregnancy, for which of course venesection is the Allopathic remedy. But a more sound physiological view, which denies that there is ever too much pure blood, leads also in this instance to a more accurate pathology, which attributes the dyspnœa to irregularity or obstruction of the circulation,—to congestion perhaps in the more aggravated cases,—but never to plethora.

The local congestions which arise in such cases from the obstruction of the general circulation, or even from constitutional predisposition to pulmonary apoplexy, are connected with palpitation of the heart and rush of blood to the face and head. These local difficulties, whether dependent upon constitutional dyscrasia or not, are inseparably connected with the other forms of disorder which occur in the pregnant condition; since every part of the system sympathizes with the whole, and the whole with every part, hence the remedy which will cure any one, must also be the one which more or less accurately corresponds to them all. Hence, too, the radical cure of such cases is seen to be a work of time; the disturbance of the harmony of the system by pregnancy, becomes gradually relieved, as the circulation and play of the vital forces are equalized by eliminating from the interior of the organization those subtle, hereditary miasms, which poison the springs of life in their original fountains.

For the treatment of the cough, dyspnœa, palpitation, and other disturbances of the respiratory and circulatory systems in gestation, we recommend therefore no particular medicines; but advise the thorough study of those already detailed under the various forms of gastric disturbance, with reference to the most copious and reliable works on Materia Medica that can be procured. The leading symptoms of the case may be found in connection with the pulmonary difficulties, with the gastric derangements, or with some abnormal condition of the secretions or excretions; and the remedy at first indicated by the principal symptoms, if it do not in time remove the entire train of morbid conditions, will remove some of them. Then a new prescription may require to be made for the case as it then presents itself. But it will sometimes be found that the remedy which is indicated at the first, being Homœopathic to the particular form of constitutional dyscrasia in the patient, and given at intervals and in higher potencies, will eventually remove all the various forms of trouble, and restore the patient to complete health.

Affections of the circulation, during pregnancy, may be made to include two distinct classes of morbid conditions: First, those which relate to changes in the constitution and character of the blood itself; and, secondly, those which regard the alterations in the blood-vessels. In the first class may be enumerated plethora, hydræmia, anæmia and uræmia. The second class includes varices and hemorrhoids.

We give brief notices of the various changes which the blood undergoes in pregnancy, without intending to imply that these pathological conditions are of much value in prescribing, in the present state of our knowledge. Nor, indeed, are we ever likely to be very greatly dependent upon them, since the sensational and other subjective symptoms afford most reliable guides to the remedies which will, at the same time, remove these pathological results and the constitutional causes from which they were derived.

Plethora, in pregnancy, means principally that increased activity of the circulation which corresponds to the increased activity of the nervous system. The volume of the blood may be increased,—and this increase may sometimes be obtained at the expense of the quality of the blood itself. Thus, as the bulk of the circulating fluid is augmented, it becomes more thin and watery. And this condition is expressed by the term *hydræmia,* or watery blood.

Plethora alone is insufficient to account for the vertigo, giddiness, flushes of the face, dimness of vision, ringing in the ears, flashes of heat all over the body, and attacks of fainting, which often annoy pregnant females. Some of these conditions it should, however, be remembered, may arise from the opposite or anæmic condition of the blood. Even in plethora, while some few of the symptoms may be due to the pressure of the apparently augmented quantity of the blood, the greater part must doubtless arise from the influence of the vitiated character of the blood itself,—rendered more serous. Since it is evident how similar symptoms, as of debility, may appear to spring from too much, and also from too little blood. The same thing is seen in cases of severe hemorrhage, where the other fluids in the body are rapidly called upon to replace the quantity which is requisite for the flow of the current. The intimate connection of this hydræmic condition of the blood, which often appears in the latter part of the period of gestation, with the various forms of dropsical accumulation, will be obvious. It is sufficient to remark here, that the common source of all these morbid conditions of the blood, and of the subsequent effusions and œdematous infiltrations, is to be found in the psoric

dyscrasia developed and aggravated by the constitutional excitement of pregnancy.

Anæmia constitutes a still greater degree of depravation of the blood, under the prolonged influence of many of the other morbid conditions of pregnancy. The failure of nutrition from the severe nausea and vomiting which sometimes persist even through the whole course of pregnancy, and from other gastric disturbances and intestinal difficulties, in addition to some original morbid tendency in the system itself, sometimes reduces the pregnant female to a very feeble, almost cachectic condition. This condition is still further aggravated by the constantly increasing demand made upon it for the support of the growing fœtus. And the exhaustion in such cases may prove fatal, either before or after delivery, unless the very root of the difficulty is reached and removed by the appropriate remedy.

Among the more active consequences of such impoverished condition of the blood, in pregnancy,—as in chlorosis,—should be noticed certain local congestions. These are developed in different parts of the body, according to the direction of the constitutional weakness; thus in some persons we see epistaxis; in others, hæmoptysis; in others still, hæmatemesis; and in others finally, certain forms of uterine hemorrhage to be afterwards described more particularly in connection with the other principal causes of abortion. For each of these forms of local congestion the appropriate remedy must be selected in accordance with all the conditions present.

Uræmia, or the retention of the urea in the blood, will be mentioned in connection with albuminuria, with which it is usually a complementary symptom. All these forms of dilution, depravation or poisoning of the blood, may be cured by the exhibition of the remedies indicated by all the attendant circumstances, symptoms and conditions; not by any means failing to consider the mental and moral states and symptoms,—which latter may constitute the most important indications to guide us in the selection of the curative remedy, even for such pathological changes. The same deep-seated constitutional influence that disturbs the harmony of the circulation and the proportions of the constituents of the blood, most powerfully and much more palpably affects the intellectual faculties, the sensibilities and even the affections.

Hemorrhoids and varices are similar affections of the blood-vessels; their principal differences consisting in the different circumstances under which the venous enlargements which constitutes them are placed. Hemorrhoids may make their appearance in the earlier or

in the later months of pregnancy. In the first instance, they may result in part from pressure exerted directly upon the internal iliacs, by the expanding uterus before it has emerged from the pelvis. In the latter case, the gravid uterus exerts pressure upon the common iliacs. Still, this affection of the hemorrhoidal veins is by no means entirely caused by such mechanical pressure,—otherwise it would be much more common than it now is, if not indeed universal.

In females predisposed to constipation, or in whom the internal psoric miasm develops itself in such obstruction of the bowels, hemorrhoids are an almost necessary consequence of this condition in pregnancy. And the inactive habits that aggravate the constipation, at the same time augment the hemorrhoidal enlargements. But whether due to the inactive state of the circulation, which is a necessary attendant of inactive habits, to mechanical pressure, to constipation, to psoric dyscrasia, or, as is generally the case in greater or less degree, to all these influences combined, the piles constitute a very painful condition in pregnancy. They may be blind, that is, never bleed; and inward,—never protruding,—and still occasion much suffering. They may protrude with each evacuation, sometimes become strangulated and difficult of replacement; and by their exhausting hemorrhages may greatly weaken the strength.

Varices are a similar enlargement of the more external veins of the vulva,—sometimes even of those within the vagina also,—and of the lower limbs. These enlargements are scarcely less common in pregnancy than are the hemorrhoids; but, except they appear in the vulva, they are usually far less painful. A brief notice of varicose veins, with the principal remedies indicated in this condition of the system and circulation, may be found on page seventy-second of this work.

Pulsatilla, one of the most frequent indications in this affection, was, however, entirely omitted. This remedy will be called for in females of a mild and tearful disposition who have blue eyes,—in whom the sufferings are all much worse towards evening. Other symptoms and conditions of the patient may lead to this, or some more closely indicated remedy. External treatment, such as bandaging with a roller, is of far less value than internal medication which radically cures the affection. In extreme cases, where the Homœopathist is called late and there appears danger of bursting of the vein, a roller may be applied to support the limb, till the remedies have time to act. In such cases also, placing the lower limbs, which are the seat of the varicose affection, upon a stool or chair,

relieves the over-distended vessels from the downward pressure of gravity. Perfect rest and quiet are indispensable in the treatment of these cases.

Under Allopathic treatment, the constipation, which either causes the piles or is inseparably connected with them, is attacked by purgatives, which are incapable of removing either the cause or the consequence. While the properly-indicated Homœopathic remedy exerts a beneficial influence equally upon the obstruction of the bowels and upon the enlargement of the hemorrhoidal veins. The following remedies should be diligently studied; and that one selected which best corresponds to all the conditions and symptoms of the patient, who should carefully abstain from coffee and from food too much concentrated, and take as much daily exercise as her circumstances and situation will allow with comfort to herself.

Aconite. Where there is shooting and constant pressure at the anus, or pain in the back and sacrum, as if bruised.

Ammo. mur. Continual sore smarting, particularly if a leucorrhœa has been suppressed.

Apis. Much stinging pain in the anus; constipation and scanty urine.

Antimo. crud. Secretion of much mucus, with burning and tingling-itching, so that she can hardly keep still.

Arsen. Burning and shooting pains; heat, agitation, and sometimes a sensation of great weakness.

Bellad. Piles accompanied with a sensation as if the back were breaking, or would break.

Calc. carb. In leucophlegmatic temperaments; feet cold, as if she had on damp stockings; when not pregnant she menstruates too frequently and too much. Vertigo on going up stairs; or palpitation and great weakness on ascending. Swelling at the pit of the stomach like an inverted saucer.

Capsicum. Burning and smarting as though Cayenne pepper were sprinkled on the parts.

Carbo veg. The hemorrhoidal tumors are large and blue, with shooting pains in the loins, stiffness in the back, burning and rheumatic pains in the limbs. Burning feces. Frequent congestion to the head; epistaxis; flatulence. There may also be much burning mucus from the rectum.

Chamomilla. In painful, bleeding, burning hemorrhoids; but the mental symptoms will particularly indicate this remedy. She is

restless, can hardly control herself; gives short answers; she can hardly endure her slight sufferings.

Colocynth. Terrible colic, causing cramping up double, and great restlessness, from or on account of the hemorrhoids.

Graphites. The varices of the rectum feel sore after an evacuation. Itching blotches here and there on various portions of the skin,—(painful burning fissures between the varices.)

Ignatia. When the piles are attended with pains shooting deep into the rectum, seemingly up into the abdomen. Itching and tingling in the anus, and prolapsus recti during an evacuation. Sensation of excoriation and contraction in the rectum.

Lycopodium. Much rumbling in the abdomen; red sand in the urine; itching eruption around the anus; great tendency to excoriations, which bleed easily.

Muriatic acid. Exceeding tenderness of the parts; she cannot bear the least touch upon them,—not even of the sheet.

Nitric acid. Old hemorrhoidal tumors secreting much slime, and bleeding profusely at every fecal evacuation.

Nux vom. This remedy should be thought of for all persons of sedentary habits, and for those who use spirituous liquors or coffee in excess. It is especially indicated when there are shooting and shocks in the loins; contused pains which hinder from rising up; constipation with frequent and ineffectual effort to evacuate, and sensation as if the anus were closed or contracted; no appetite; sleepless in the latter part of the night; headache; loss of energy.

Petroleum. Hemorrhoids with itching about the anus, which compels her to rub and scratch till the part becomes raw and sore.

Podophyllum. *Piles with prolapsus ani;* (prolapsus uteri,) constipation, or *morning diarrhœa;* too frequent but natural passages.

Pulsatilla. Discharge of blood and mucus during stool; pallid countenance, and disposition to faint; dysuria; tearful disposition; mild and gentle; bad taste in the mouth in the morning.

Sabina. The piles discharge bright red blood and cause pain in the back from the sacrum to the pubis.

Sulphur. The indications for this remedy are to be found rather in general characteristics than in local symptoms. Heat on the top of the head; general flushes of heat; weak, fainting feeling; very hungry and faint about twelve o'clock; awakens frequently at night, and feels very weak and faint in the morning; very cold feet; sometimes burning in the soles of the feet at night in bed.

Many other remedies may be indicated in hemorrhoids and varices of pregnant females, but these are the most frequently called for.

Fissures of the Anus.—This very painful and distressing disease is far more common among women than in the opposite sex; and since it is very apt to appear in pregnant females, and is very nearly connected with hemorrhoids, although an entirely distinct affection,—we subjoin a brief notice of the disease itself, and of the remedies which best correspond to its symptoms.

Fissure of the anus in the milder cases only, is confined to the mucous membranes; but in the severer forms it involves also the sub-mucous muscular tissue. This disease is an actual ulceration about the eighth of an inch in breadth, and from a quarter to an inch in length, situated immediately within the anus, with its inferior extremity corresponding to the margin of the sphincter ani. In recent cases the edges of the fissure are soft and pliant; but in chronic cases they are indurated and prominent.

Fissures of the anus should be distinguished from hemorrhoids; they are sometimes, but not always found together. Hemorrhoids are almost always attended with constipation, which acts as a provoking cause; but fissures of the anus are as often accompanied by looseness of the bowels as otherwise. These fissures consist in cracks in the folds of the rectum, and are always very painful after an evacuation,—sometimes even before. They are accompanied by a constriction of the sphincter ani in many cases, which renders the evacuation of the bowel still more difficult and painful, in some instances almost impossible. The pain is increased by forced expirations, as in coughing, sneezing, and urinating; every effort to discharge gas and feces is attended with excruciating torment, which continues for one or more hours, attended with violent spasmodic action of the sphincter ani. So violent is the agony that most persons thus afflicted put off the calls of nature, and maintain the recumbent position,—the pain is also increased by stimulating food and during menstruation.

This disease results from a constitutional dyscrasia; hence the impropriety of attempting its cure by surgical operations,—hence too, the ill success which in most instances attends such efforts. The treatment by Homœopathic remedies is as easy, pleasant, and successful, as the Allopathic method by dilatation and incision is painful and unsatisfactory.

With anal fissure is always present more or less chronic imflammation, which is aggravated of course by each evacuation of the bowels;

constriction of the anus, (sphincter ani,) and, in the worst cases, ulceration of the parts involved. The spasmodic constriction of the anus, and the intensity of the shooting and lancinating pains which follow even a soft stool, enable us readily to distinguish this affection from hemorrhoids. And even if we did not always, in our own minds, thus distinguish the true pathological condition, the severe and often remarkable symptoms will infallibly lead to the right remedy.

The suppression of these fissures, which, like fistulæ, are the developments of constitutional psora, will be followed by disastrous results; just as the healing up of fistulæ by surgical means is known to lead directly to tuberculous disease of the lungs. What have been termed rhagades or cracks of the anus, appear to be a milder form of anal fissures.

Nitric acid. This remedy we mention first, because it is used more frequently than any other. The symptoms which indicate it are: On going to stool, pain in the rectum as if something were torn away; or twitchings in the rectum and spasmodic contraction of the anus, many hours afterwards. Smarting more in the rectum than in the anus, immediately after stool, and continuing two or three hours. Sometimes prolapsus of the rectum or discharge of much blood accompanies some of the above symptoms.

Arsen. On going to stool, painful constriction immediately above the anus, which extends towards the sacrum. After stool the anus burns like fire, causing intense agony, restlessness and exhaustion. Heat and pain in the rectum, with a kind of tenesmus, as in dysentery, with continual pressure.

Causticum. There is great difficulty in walking, for the pain in the anus and rectum becomes intolerable. Much pain in the perineum. Large, painful pustule near the anus, discharging pus, blood and serum.

Gratiola. After stool, painful pressure in the abdomen when walking, relieved by sitting down. Sticking pain about the umbilicus. Tearing in the rectum, or prickling in the anus. Painful cramps in the os coccygis.

Ignatia. Painless contraction of the anus for many days. Soon after stool, pain in the anus,—shooting far up into the anus, or constriction and smarting, like touching a wound. Very easy prolapsus of the rectum. Pain in the anus returning at the same hour each day; worse walking, and still worse standing, but relieved on sitting down.

Lachesis. On going to stool the anus feels as if closed. Internal, cramp-like pain in the anus before and after passage. Prolapsus of the rectum, which is thick and tumefied; and when it returns it contracts spasmodically.

Mezereum. Painful constriction, tearing and drawing at the anus, in the perineum, and from thence through the urethra. After stool the anus contracts upon the prolapsed rectum,—which remains strangulated, causing, when touched, a pain like a wound.

Natrum mur. On going to stool, the rectum seems contracted, then is voided, after great effort, only a small quantity of hard feces, with tearing, bleeding and smarting at the anus, and finally, some soft matter. Ripping up sensation in the anus after stool. Much sticking and sharp pains in the anus and rectum between the stools; and at night in bed.

Nux vom. Sore, painful stools, either much too large and difficult, or too small and insufficient, with a sensation as if something remained in the rectum still to be discharged,—but with an entire inability to do so.

Phosphorus. The pains for Phosphorus are mostly lancinating in the anus and up the rectum,—sometimes attended with smarting. After stool, strong desire to urinate. Acute smarting pains after a soft stool, extending into the abdomen.

Plumbum. A sensation as if a rough body were traversing the rectum during stool. Sensation as if the anus were drawn strongly upwards. Much trouble with the urine, in not being able to pass it, —apparently from want of sensation to do so; the will to do so cannot effect it, as if from paralysis.

Sepia. Constrictive pain in the rectum, extending to the perineum and into the vagina. Pain in the rectum on going to stool and which persists for a long time after sitting down, and finally an imperfect stool is voided with sore, smarting pain. There is a sense of weight in the anus, like a constant drag.

Silicea. Painful effort to stool for some time and finally the stool recedes into the rectum; such efforts are repeated several times before a passage is effected,—with sore, sticking, shooting pains.

Sulphur. Tenesmus for an hour after having been to stool. On attempting to sit down for stool, the pain in the anus prevents her from doing so. After stool a pulsating pain continues in the rectum the whole day. Lancinating pains from the anus upwards, after stool, so violent as to cause syncope. At night there is much diffi

culty in lying in bed, from lancinating and uneasiness in the rectum, tenesmus, &c.

Tabacum. Violent pain in the small of the back during soft stool, and much tenesmus and burning.

Thuya oc. During an attempt at stool, the pain in the anus and rectum is so great that she has to desist; she cannot then pass the stool. Violent contraction in the anus and rectum, followed by tearing as if in the bowels. Burning pricking in the anus between the stools. Violent burning in the anus while walking.

Zingiber. Hot and painfully sore feeling in the anus continually.

Ptyalism.—The profuse flow of saliva, which sometimes occurs in the earlier months of pregnancy, usually lasts but two or three months; although cases are recorded in which it continued during the whole period of gestation.

Where this discharge is excessive, it must necessarily prove very exhausting. Its source must be found in some peculiar constitutional dyscrasia,—which ultimates itself in this direction,—under the stimulus of pregnancy. Hence the Homœopathic remedies are found to relieve the difficulty and at the same time benefit the whole system of the patient. This is just the reverse of the experience derived from the Allopathic use of astringent gargles. Two cases are referred to by Cazeaux, in one of which the sudden suppression of the ptyalism was followed by apoplexy, in the other symptoms of suffocation appeared. This eminent Allopathic authority is unwilling to admit that these results were the actual consequences of such suppression; but the intelligent Homœopath would expect nothing less.

The salivation, if unattended by other symptoms, may require *Mercurius;* but in most cases there are other gastric disturbances,—all of which must be duly considered. For remedies, therefore, consult those mentioned in the preceding chapter.

Urinary Difficulties.—As gestation advances, the increasing size of the uterus causes it to press more and more upon the bladder. Thus the capacity of the latter organ is diminished by the *lateral* pressure, which necessitates a much more frequent discharge of urine. The same frequent micturition results also from the direct irritation of the neck of the bladder. Thus there may be hourly calls to pass water,—which are sometimes but partially relieved by the flow of a few drops only at a time. Or the irritation may amount to dysury; an actual strangury, or even to a complete retention of urine.

These difficulties may arise in the earlier stages of pregnancy, especially where the unusual size of the pelvic cavity allows the fœtus to remain too long within it. Or they may appear in consequence of some displacements, such as prolapsus, anteversion or retroversion of the uterus. Where some displacement appears to be the cause,—which may sometimes be known by the suddenness of the onset of the difficulty, especially if it follows some accident or over-exertion, the case should receive the treatment recommended in a preceding chapter for uterine displacements. If it prove to be retroversion, the use of the elevator may be necessary to replace the organ. The other varieties of displacement scarcely ever require manual assistance; since perfect rest in the horizontal position and the exhibition of the Homœopathically indicated remedy will in most cases readily relieve the uterine and the urinary difficulty at the same time. The catheter may sometimes be required, in order at once to relieve the patient of the great distress under which she may be laboring from enormous accumulation of urine.

Incontinence of urine sometimes appears, especially in the later stages of pregnancy. When it appears in the early months it results from the pressure of the womb upon the neck of the bladder, before it rises out of the pelvic cavity,—causing a loss of tone of the part. This difficulty will often yield to the indicated remedy; but if not, where it comes on in the early stage of pregnancy it may be expected to disappear upon the emergence of the uterus from the cavity of the pelvis.

For the medical treatment of these difficulties, the following remedies should be carefully studied according to the indications here given, and compared in the Materia Medica with reference to any concomitant and constitutional symptoms which may also be present in the case.

Aconite. Retention of urine with stitches in the region of the kidneys. Difficult and scanty emission, with pinching around the umbilicus. Bright red, hot urine. Enuresis accompanied with profused perspiration. Desire to urinate accompanied with great distress, fear and anxiety.

Apis. Burning smarting pain before and after urination. Stitching pain in the urethra during enuresis.

Arnica. After passing a little urine, she wishes to pass more, but is unable for the present. Brown urine with brick-red sediment.

Belladonna. Much difficulty in passing a small quantity of urine;

it flows in a very feeble stream or in drops. The urine is often as yellow as gold. There is a constant dribbling of urine, wholly involuntary. Also enuresis with profuse perspiration.

Camphor. Retention of urine with constant pressure on the bladder and desire to urinate. Burning in the urethra during emission of urine.

Cannabis. Burning during and after emission.

Cantharis. Very frequent urination, even sixty times an hour, with violent cutting pain so severe as to make her scream. The urine is often bloody. *Very frequent micturition,* with cutting and burning-cutting pain. Strangury with frequent urging.

Capsicum. Burning smarting after micturition as from the application of Cayenne pepper.

Causticum. Frequent desire to urinate, a small portion passing involuntarily. Involuntary passing of urine at night.

Coccus cacti. The urine does not form the usual jet, but runs down over the surrounding parts.

Conium. The urine flows and stops, and flows and stops again, and so on.

Graphites. Urinary troubles with burning in the urethra between the acts of micturition.

Hepar. Intense soreness in the urethra during the emission of urine.

Laurocerasus. Acrid urine, corroding the labia.

Lycopodium. Much pain in the back previous to the emission of urine, so that she even screams out. Itching in the urethra during and after micturition. Violent jerking, sharp-shooting, tearing or cutting pains in the urethra not long after urinating. Red crystals are deposited in the urine, the urine itself being clear.

Merc. corr. Constant desire to urinate, the desire not lessened by urinating. Pieces of filaments, flocks and hard pieces of mucus resembling pieces of flesh are passed in the urine. Burning and scalding sensation of the urine, from raw surfaces and otherwise.

Nux vomica. She wishes to urinate very frequently, only a little at a time being passed with a sore burning pain,—usually accompanied with constipation. Strangury. Bloody urine.

Pulsatilla. Retention of urine with redness, heat and soreness of the vesical region externally. Continued pressure on the bladder without desire to urinate. Desire to urinate with drawing in the abdomen. Involuntary emission of urine when sitting or walking. After urinating, spasmodic pain in the neck of the bladder extending

to the pelvis and thighs. Frequent and almost ineffectual urging to urinate with cutting pain.

Rhus tox. Involuntary urination, particularly during rest. Dysuria with discharge of drops of bloody urine. Snow-white sediment in the urine.

Ruta. At every step after micturition, she feels as if the bladder were full and moved up and down. She feels as if she could not retain the urine, so urgent is the desire, although she can pass only a very small quantity. Involuntary emission of urine whether at rest or in motion.

Stramonium. The urine dribbles away very slowly and feebly.

Sulphur. This remedy is very often called for and useful in the dysuria of pregnancy.

ALBUMINURIA, or the presence of albumen in the urine constitutes one of the most interesting of the pathological changes induced by pregnancy. Healthy urine contains no albumen, and the urine of healthy females in the pregnant state is equally destitute of this element. This change in the urine is not always constant or equal in amount; in proportion as females are constitutionally healthy, they will be found free from albuminuria in pregnancy. And in proportion as their systems are affected by some psoric dyscrasia, the derangement of the vital fluid will be greater; for it must be borne in mind, that albumen must be diminished in the blood in the same ratio that it is increased in the urine. Cases of albuminuria might be cited illustrating all the different degrees, from the slightest and scarcely perceptible trace of albumen which appears in the urine for a brief period only of pregnancy, up to those forms of anasarca which involve the entire system, and in which the urinary secretion, almost totally suppressed, is so loaded with albumen as to become entirely solid on boiling.*

Albuminuria may be either temporary or permanent. In the former case it may arise from a great variety of morbid influences and in connection with various forms of disease. And it may be occasioned by pregnancy, which, although not itself a morbid condition, seems to develop in some form or other any latent dyscrasia which may have been lurking in the system; just as scarlatina develops any scrofulous taint which may belong to the constitution of children whom it attacks. And, in fact, scarlatina does actually

* Am. Hom. Review, vol. v., p. 492.

develop an albuminuria,—in post-scarlatinal dropsy,—which must be deemed a purely psoric affection, since it appears only in a particular variety of constitution; although the presence of the albumen is partially accounted for by the temporary failure of the functional action of the skin during its desquamation.

Permanent albuminuria is principally found in connection with chronic disease of the kidneys,—whether in the pregnant or in the unimpregnated condition. In that form of hypertrophied degeneration in which the kidneys become white and enlarged, the urine is greatly diminished in quantity and contains a large amount of albumen. This nephritic affection never proves fatal without the previous occurrence of dropsy, which is one of its most usual and prominent symptoms. Such cases belong to strongly-marked psoric diatheses, of which instances have been observed in three successive generations,—in which the albuminuria, morbid affection of the kidney, almost total suppression of the secretion of the urine, and general dropsy, were the unavoidable attendants of every pregnancy. This intimate connection of albuminuria with psora is well illustrated in the report by an Allopathic physician of the treatment, with Arsenic of this disease complicated with psoriasis and lichen.* The Arsenic chanced to be the true Homœopathic similimum to the entire case; and, although given in Allopathic doses, both albuminuria and skin disease were thoroughly cured.

The prompt disappearance of the albuminuria at the termination of pregnancy, in many cases, gives rise to the belief that some local influence, such as pressure of the gravid uterus upon the emulgent veins, may be an important cause of this condition. But, as already stated in the case of varices and hemorrhoids, such results can occur from local pressure only in persons constitutionally predisposed to this affection. Thus, in the milder cases particularly, we see all the abnormal symptoms removed by the recuperative energy of nature alone on the discontinuance of the provoking cause. Thus, too, even during the continuance of pregnancy, the Homœopathically indicated remedies are so far capable of antidoting the constitutional dyscrasia, that the albuminuria in many instances may be made to disappear entirely in spite of the persistence of the provoking cause. And these remedies may even then have been selected under the prevailing influence of other (sensational) symptoms,—remedies perhaps in which we have hitherto discovered

* Braithwaite's Retrospect, July, 1862, p. 95.

neither pathogenetic nor clinical evidences of their adaptation to albuminuria.

The important relation which albuminuria bears to puerperal insanity and convulsions, ought not to be overlooked in this connection. "Albuminuria precedes and attends the first access of puerperal insanity in a large proportion of cases; but not perhaps so frequently nor so constantly as it precedes and attends upon attacks of puerperal convulsions. The coagulability of the urine generally disappears within a short time after an attack of puerperal insanity commences. When the insanity recurs in the form of successive attacks or explosions, each attack is connected with a new attack or advent of albuminuria."

The albuminuria mostly appears in the later months of pregnancy; and its presence, especially if accompanied by anasarcous conditions,—will serve to place the physician on his guard against puerperal convulsions. And while on the one side the albuminuria seems to predispose to severe nervous affections,—on the other, excessive nervous excitement appears to cause albuminuria.

The *uræmia*, or retention of the urea in the blood, which usually forms a part of the albuminuria, is probably the direct cause of the convulsions and other nervous affections. And it is remarked that these difficulties are more apt to occur in primiparæ than in multiparæ.

This affection has been mentioned as a powerful and frequent cause of abortion, of premature labor, and of the death of the fœtus; this however is more apparently than really correct. For the presence of albumen in the urine forms but a single one of the symptoms of a general psoric dyscrasia, which pervades the entire system, and whose radical cure forms one of the most remarkable and gratifying proofs of the value of our Homœopathic science and art.

The anæmia, œdema, ascites and anasarca, which appear in connection with albuminuria, will be subsequently considered. The following remedies, as well as those mentioned under dropsy, may be particularly studied in cases of albuminuria:

Allium cepa; Aurum mur.; Ononis sp.; Glonoine; Cobalt; Ammo. carb.; Nat. mur.; Cinnabar and *Lachesis.*

Aurum mur., pains in the regions of the kidneys, urine pale, and clear.

Ononis sp., urine turbid, with ammoniacal smell.

Glonoine, albuminuria with congestion to head.

Lachesis, albuminuria with hydrothorax and very great dropsical enlargement of the left side and left lower limb.

Œdema—Anasarca—Ascites.

We have ranged here the names which belong to the various dropsical affections,—in the order in which they may necessarily appear in cases of pregnancy. As the gestation advances, what at the first was merely an œdematous enlargement of the feet and ankles, may be developed into a general dropsy; the primary infiltration into the sub-mucous cellular tissue, being finally accompanied by extensive effusion into the great serous cavities.

Œdema of the lower extremities is a very common attendant of pregnancy; often occasions no great inconvenience, and is usually confined to the seventh, eighth, and ninth months. It is supposed to arise in most instances from mechanical pressure alone; and to be entirely independent of constitutional disease. This may be true in those cases where it is not accompanied by other dropsical affections. Standing and walking serve to aggravate this condition; it becomes worse towards evening; gradually increases as pregnancy advances, and is often combined with a varicose state of the veins.

In some instances the œdema becomes very great; the integuments of the lower limbs become enormously distended; and a certain angry redness appears, as if erysipelas would set in. In such cases there is reason to suspect the presence of some more deeply-seated cause than mechanical pressure upon the veins, or even upon the lumbo-sacral nerves; nor will the dropsical infiltration be restricted to the inferior extremities.

Œdema of the vulva will nearly always be present when that of the lower limbs is so largely developed; and this will often cause much suffering in the latter months of gestation; and even render the patient unable to lie on either side. Cases are on record in which the œdema of the external genitals was so enormous that the patients were obliged to lie on their backs with their lower limbs widely separated. In the worst forms of this affection, the tumefaction may occasion considerable difficulty in the dilatation of the perineum and passage of the child's head. Acupuncture has sometimes been resorted to, in advance of parturition; with considerable relief of the pain arising from the excessive distention of the delicate and sensitive tissues.

Anasarca represents the extension of the œdema, from its original local seat in the lower extremities, over the entire surface of the body. Both œdema or partial dropsy of the cellular or areolar tissue, and anasarca or general dropsy of the same tissue, belong to the class of

infiltration,—as contradistinguished from ascites and hydrothorax, which are effusions respectively into the abdominal and thoracic cavities.

The more the œdema comes to resemble anasarca, the more we realize the existence of general, constitutional causes of the affection, and are thus led to look for the means of curing it, in corresponding, constitutional remedies. The attendant symptoms in each case will aid us in the selection of the remedy; since we must prescribe for the patient, not for a particular pathological condition alone,—however distressing it may be, or however thoroughly we may understand it. Much experience proves the truth of this.

Ascites, or dropsical effusion into the cavity of the abdomen, may make its appearance in the first half of pregnancy; although it is more usually developed about the fifth or sixth month,—then continuing during the remainder of the period of gestation.

This affection is attended with more or less œdema of the inferior extremities; of the labia, and infiltration of the abdominal walls. The accumulation of fluid in the abdomen may be slow and gradual; or it may be very rapidly effused, especially after a certain degree of general œdematous infiltration has been reached. In pregnant females, this disorder cannot fail to cause much greater inconvenience and even positive suffering, than in other persons; since it will cause greater obstruction of the movement of the thorax. So great is the dyspnœa in the advanced stages of pregnancy, from this cause, that the respiration becomes as difficult and distressing, and the erect position almost as necessary, as in ordinary cases of hydrothorax. There are frequent attacks of faintness, and a constant sense of suffocation, from the insufficient aeration of the blood. And these sufferings are often aggravated by difficulty of sleeping, headache, thirst and disgust for food.

The presence of water in the abdomen may be determined by percussion; the fluctuation being usually more perceptible in the left hypochondrium just below the false ribs. The existence of any large accumulation of water in the cavity of the abdomen will usually prevent conception, by impeding the action of the fimbriated extremities of the Fallopian tubes; and the same cause tends to prevent the full and healthy development of the fœtus, although women with dropsy are said to have had often very lively and healthy children. Ascites should be treated by Homœopathic physicians with medicines alone if possible; since tapping, either in the earlier or in the later months of pregnancy, is very apt to be followed by the expulsion of

the fœtus. The severity of the dropsy itself, and the consequent danger of its interfering with gestation, may be measured by the earlier or later period in which it makes its appearance. When the effusion is evident in the first half of the pregnancy, if its increase cannot be arrested, or the disease removed by the use of the appropriate remedies, it may even be necessary to resort to paracentesis.

The causes of ascites, and in fact of all forms of dropsical disorder,—except perhaps the most trifling, which may be considered to result from pressure and general weakness,—must be found in the same constitutional dyscrasia, that have already been referred to in connection with disorders of the blood and its excretions. The morbidly serous condition of the blood forms but a single link in the chain that terminates in cellular infiltration and dropsical effusion. Still farther back we may trace the fault of nutrition, by which the blood is impoverished, rendered watery, and the receptacle of uræmic poisons.

It is important to be familiar with these pathological changes, so far as they can be detected; and some of their objective manifestations may afford valuable aid in selecting the appropriate remedy. Especially, if not only, is this true, where the pathogenesis of the remedy has furnished us with similar pathological symptoms. But that physician will be most successful in his prescriptions, who carefully avoids encumbering his mind with theoretical generalizations; most patiently studies his Materia Medica, and never allows himself to rest satisfied till he has found the remedy which constitutes the most complete simile to all the mental, moral, sensational and physical symptoms of the case.

For the remedies which may be indicated in the various forms of dropsical affections liable to appear in pregnancy, consult those previously mentioned under Dropsy.

And for Dropsy of the Amnion and Hydrorrhœa, see Affections of the Uterus and its Appendages, in the following chapter.

CHAPTER TWENTY-EIGHTH.

DISORDERS OF PREGNANCY—CONTINUED.

AFFECTIONS OF THE UTERUS; OF ITS APPENDAGES; AND OF THE PELVIC ARTICULATIONS.

The morbid affections to which the uterus is liable in the pregnant state may be arranged in three classes: First, those which are principally sensational, such as cramps, pains, and excessive sensibility; second, displacements; and third, abnormal secretions, such as leucorrhœa, dropsy of the amnion and hydrorrhœa.

I. Pains; Cramps; Sensibility of the Uterus.—The uterus in pregnancy, even if it does not experience an enlargement of its nerves corresponding to that of the arteries and veins, still partakes in a remarkable manner of the increased sensibility of the nervous system in general. Hence all influences, from within or from without, are very acutely felt,—many of them very painfully,—which, in the unimpregnated condition, would scarcely be noticed. In addition to this excessive sensibility, there are actual uterine pains, seated apparently in the walls of the uterus, which are doubtless the result of the contraction of the uterine muscles. These may appear at any time after the first three months of utero-gestation; they may return at intervals, in paroxysms, and increase in severity as the pregnancy advances. These pains may even become so severe as to resemble uterine cramps. The excessive sensitiveness of the uterus renders the ordinary motions of the fœtus very painful to the mother. And, at the same time, the morbid irritability of the mother's state in general renders the movements of the fœtus much more active and violent. All these morbid conditions may be greatly ameliorated by the exhibition of the appropriate Homœopathic remedies; thus rendering the patient more comfortable, and at the same time removing influences which might otherwise terminate in abortion.

II. Displacements of the Uterus.—Conception may occur in women who are subject to prolapsus uteri, in cases where the womb is temporarily replaced. Or the already gravid uterus may become subject to either of the different forms of displacement, under the influence of accidental causes connected with its own weight, or with the disproportionate size of the pelvis. In the former case the pro-

lapsus, while it affords no bar to conception, greatly endangers the safety of the fœtus until after it is established above the superior strait. In the latter case, the already gravid uterus may be projected so far over the pubes as to constitute anteversion; or turned back in such a manner as to undergo that most formidable displacement called retroversion, by its fundus being lodged beneath the promontory of the sacrum.

Prolapsus uteri in pregnancy, as in the unimpregnated condition, may come on gradually or suddenly; it may also be a partial descent or a complete procidentia. This is especially apt to be the case when the pelvis is unusually large. In all cases of prolapsus uteri in pregnancy, whether the result of a previous habit or of more recent influences, it is simply necessary for the patient to remain quiet, and take the remedy indicated according to the conditions and symptoms of her case. The appropriate remedy, together with the increasing size of the ovum, will in a short time render any return of the prolapsus impossible.

For this, as well as for the other forms of uterine displacement in pregnancy, consult the remedies indicated in a preceding chapter for displacements of the unimpregnated uterus.

Anteversion is principally apt to occur in the more advanced stages of pregnancy, when the uterus has become very heavy; although some few instances are recorded in which this accident happened in the second and third months of pregnancy. In the milder forms of this displacement, the term *obliquity* is more applicable; while in complete anteversion the fundus uteri may even be engaged below the symphysis pubis.* Perfect quiet; a recumbent position, and the judicious exhibition of the remedy indicated by the symptoms of each case, will almost always suffice to effect a complete cure. In cases where the fundus is actually engaged beneath the symphysis, the addition of a little manual assistance may be needed in order to replace the organ,—the patient lying on her back.

Retroversion of the uterus, in the pregnant as even in the unimpregnated condition, forms a very serious complication, whether it occur suddenly or slowly. In many cases the symptoms will scarcely lead us to suspect the presence of this form of displacement until the fundus is actually engaged beneath the promontory of the sacrum. In this condition the use of the elevator, described in a preceding chapter of the present work, may be found necessary. Retroversion is most

* Compare Ashwell's Diseases of Females, p. 147; and Boivin and Dugès, p. 63.

apt to occur in the third and fourth months; but it may occur in the fifth, or even as late as the seventh month of gestation. It may take place very slowly, so as to become complete by the third month of pregnancy,—aided very much by the gravity of the ovum, when once it has become deflected from its proper position. This first beginning of the mischief may result from a too great and too long-continued distention of the urinary bladder. The complete or partial retention of the urine forms one of the most characteristic indications of the retroversion itself.

In order to facilitate the restoration of the retroverted uterus, it may be necessary to place the patient prone upon her face; thus as soon as the fundus uteri is disengaged from beneath the promontory of the sacrum, its own gravity will enable it to resume its proper place in the pelvis. It will be necessary to distinguish this form of displacement from extra-uterine pregnancy, since very disastrous consequences must otherwise speedily result. And this will be best accomplished by a careful study of the conditions and symptoms of the case, and of the causes which have apparently produced the mischief,—in addition to the most careful exploration per vaginam and, if necessary, per anum. Retention of urine in the bladder, from want of opportunity to discharge it, as sometimes in travelling; accumulation of feces in the rectum; violent straining to lift a heavy weight; a fall backward; blows or other accidental pressure upon the navel, may occasion the retroversion; hence the presence of any one of these powerful causes of backward displacement would lead to the suspicion of retroversion in the case.

A previous retroversion is no doubt the most frequent cause of the retroversion of the uterus in pregnancy. In such cases the trouble is at first entirely unsuspected; as in the first weeks of gestation the increased size of the uterus scarcely occasions any more inconvenience than before conception. But after a while the os uteri begins to press upon the bladder and hinder its evacuation. Then the sudden and severe symptoms, which are really the consequences of the gradual enlargement of a previously retroverted uterus, are supposed to result from a sudden displacement. Careful attention to the calls of nature, as well in respect to the bowels as to the bladder, will be important, in order to obviate any disposition to this displacement, particularly in persons who have suffered from it in former pregnancies. And where retroversion has either suddenly set in, as in consequence of an accident, or gradually developed from partial displacement of this kind existing previously to conception, it may be necessary to evac-

uate the bladder before any progress can be made in restoration. Then perfect rest, in a recumbent condition, for a longer or shorter time, according to circumstances, will greatly aid the proper remedy to effect a complete cure of this difficulty. The various pessaries proposed and used in such cases, we consider entirely unnecessary, and in many cases positively injurious. With the aid of the appropriate remedies, and of such favorable circumstances and hygienic conditions as are indispensable under any plan of treatment, Nature may be enabled to hold herself up; which she can never learn to do as long as she is propped up.

III. Abnormal Secretions.—*Leucorrhœa* may occur in pregnancy, especially in persons constitutionally predisposed to this affection. The discharge is usually of a mild character; mucous, thick and white in its appearance, and sometimes profuse in quantity. The increased activity of the circulation of the uterus and its appendages incident to pregnancy, extends to the muciparous glands of the vagina and cervix uteri; and an excess of the secretion which closes the cervix may occasion a constant discharge. In connection with this discharge may occur irritation, itching, heat and burning in the vulva and parts adjacent. And where the leucorrhœa is very profuse, other symptoms of debility may follow in consequence of the loss of fluids. All the attendant symptoms should be carefully collated and compared with the indications given of remedies under Leucorrhœa of Unimpregnated Females.

Hydrorrhœa.—In a previous section has been described the disposition manifested by some pregnant women to become affected with dropsy. The dropsical accumulation may be infiltrated into the cellular tissue, partially, so as to constitute œdema of the lower limbs; or generally, so as to result in anasarca. Or the effused fluid may occupy the peritoneal cavity,—forming ascites; it may accumulate within the womb, between its internal surface and the external surface of the membranes of the ovum; or finally there may be an excessive quantity of the amniotic fluid, constituting dropsy of the amnion. The two former, œdema and ascites, having been already considered at some length, it remains for us now to describe in brief the two latter of the dropsical affections; all of which may appear more or less fully developed in the same person, under the influence of constitutional predisposition brought out and aggravated by pregnancy.

Hydrorrhœa, or flow of water, is the name given to such discharges of water as occur from the womb in the course of gestation, without

rupture of the membranes. And by the same phenomena the young accoucheur may be deceived, in parturition; a very considerable flow of water during a pain leading him to suppose the membranes are already ruptured, while upon subsequent examination he finds them still intact.

In the later months of pregnancy this affection is quite common; the uterus from time to time relieving itself of the undue accumulation without special muscular effort, very much as the urinary bladder does. An examination of the os uteri in such cases, will satisfy the practitioner that the discharge does not come from the interior of the womb; and that therefore there is no cause for alarm, as from a threatened miscarriage. The flow appears at irregular intervals, and without any especial provoking cause; neither does it occasion any remarkable symptoms, except where, from ignorance of its real nature, it is supposed to be the precursor of miscarriage.

The concurrence of other dropsical conditions,—such as œdema of the limbs,—the fact that the discharge arises spontaneously, and the almost entire absence of pains or uterine contractions, will enable the physician to diagnose the hydrorrhœa with sufficient certainty. The *false waters* may make their exit without any noticeable provoking cause, and without any more than the very slighest constitutional disturbance; while the membranes which enclose the true amniotic waters, can only be broken by some great bodily exertion, some special accident or positive effort, and their discharge of these waters cannot but be followed by strongly marked symptoms indicating the approach or actual existence of labor. Perfect quiet, freedom from excitement or anxiety, and the exhibition of the remedies indicated by all the attendant symptoms and conditions, will be all that is requisite to prevent serious mischief from this condition,—and to remove as far as possible its constitutional causes.

Dropsy of the Amnion.—The determination of the existence of this disorder of pregnancy is not so easy as that of hydrorrhœa; since there may be an excessive amount of amniotic liquid without any very remarkable distention of the abdominal parietes; and since also the normal amount of the liquid itself is capable of very considerable variation. But generally speaking dropsy of the amnion is an acute disease; and the rapidity of its development together with the distressing constitutional symptoms, afford our best means of diagnosis. This is the more especially the case since, also, ascites almost always complicates this affection.

There does not seem to be any change in the gravity or constitu-

tion of the liquor amnii; only an excess of production. The normal quantity may be estimated at three or four pounds, according to the state of pregnancy; but from forty to fifty pints have been found present in dropsy of the amnion. Thus at the fifth or sixth month the uterus may be more distended than usually at full term. The uterus is rounded; fluctuation is more obscure; there is not much thirst; the urine is natural except in cases complicated with general dropsy, and there is sometimes little or no œdematous enlargement of the inferior extremities. Among the most important diagnostic signs are to be found, therefore, the disproportionate size of the tumor to the period of pregnancy; the feebleness of the movements of the child; the great size of the abdomen,—evidently dropsical,—which is less apt to be accompanied by œdema of the thighs and legs, than in ascites.

Dropsy of the amnion may occasion severe suffering to the mother, sensations of suffocation, and hindrance of the circulation; this is probably due in part to the rapidity of the enlargement itself, and in part to the general constitution of the patient. But this difficulty very rarely becomes dangerous to the mother; since its very excess tends to self-relief by producing abortion.

The most important result of this dropsical affection is found in the injury to the fœtus, whose nutrition is enfeebled by such excessive secretion; in the total destruction of the fœtus, which is sometimes almost entirely dissolved in the amniotic fluid; and in the premature expulsion of the fœtus, at a period when its insufficient age, its enfeebled condition, or both together, render it incapable of viability. This subject, and the kindred one of a dropsical condition of the fœtus itself, will be considered more fully in a subsequent chapter.

The treatment of dropsy of the amnion must be principally prophylactic; and based upon attendant symptoms and such constitutional indications of predisposition to general or particular forms of dropsy as may be discovered, aided and confirmed by the sensational symptoms which may especially characterize the individual case. For when dropsy of the amniotic cavity has become so extensively developed as to be clearly diagnosed, there will be small hope of eventually saving the product of conception. But even if perfect success may not be thus obtained in the first instance, there will still be reason to hope that in a subsequent pregnancy, a constitutional treatment begun at an earlier period, and more intelligently directed by ampler knowledge of the case, its tendencies and its dangers, may enable the practitioner to obtain a decided improvement in the health

of the mother and at the same time secure the safety and the healthfulness of her child. Dropsy of the amnion is always the result of some constitutional dyscrasia, which, under the stimulus of pregnancy, developes itself usually in other directions and in other forms also; for the remedies for this affection consult therefore those mentioned under other varieties of dropsy, and such as may be particularly indicated by the sensational symptoms,—such for example as the sense of suffocation. With regard to the propriety of inducing premature delivery, in extreme cases of this kind, see the subsequent Chapter on Abortion.

Affections of the Appendages of the Uterus.

Pruritus of the vulva forms one of the most distressing disorders to which women are liable in pregnancy. This affection consists in an incessant and intolerable itching in the external genitals. The immediate cause may be found sometimes in an irritated, inflamed condition of the parts involved; or, as described by another, "it commonly depends on follicular irritation of the vulva, which, if unchecked, passes to aphthous ulceration." Sometimes there may be found no abnormal appearance of the vulva, except such as must arise from the violent rubbing and scratching to which they have been subjected; but, on examination, congestion and even superficial granular ulceration of the cervix uteri may be detected.

This affection is most apt to occur in young women. Churchill relates a case the symptoms of which are very strongly marked: when about four months pregnant, she was attacked by the most intense and incessant itching of the vulva; she had no rest day or night; could scarcely ever sleep, but was obliged to walk up and down all night; she was kept in such an irritated condition by this distress and loss of sleep that she became very cross and irritable. In this case no relief was obtained until after delivery, when the pruritus disappeared of itself. In her next pregnancy this woman suffered in a similar manner; the pruritus returning at about the same period of gestation; but it was removed by local applications directed to the cervix, which was found greatly congested, with superficial granulations around the edge of the os uteri. This affection is sometimes accompanied by sexual excitement; or it may have a periodic character, coming on or being aggravated at certain times of the day.

The Homœopathic treatment of this disorder should always be constitutional rather than local; for, whether the pathological seat

of irritation be found in the parts immediately affected, or in the cervix uteri, the true cause of it must consist in the disturbance of the system which is occasioned by pregnancy. For the remedies consult those previously mentioned in pruritus of unmarried females.

Pains, fixed or wandering, irregular or constant, are often experienced by women in pregnancy; and are frequently so severely felt as to cause them to become the subject of complaint to their physicians. These pains are principally felt on the abdominal, lumbar and inguinal regions; they may be considered as myalgic,—whether characterized by cramps or not,—when they result from fatigue of the muscles; and they may be deemed purely neuralgic, when they are caused by (reflex) irritation of the nervous centres.

The pains which are experienced in the lumbar and inguinal regions,—especially in the early stages of pregnancy, when they cannot be attributed to the size or weight of the gravid uterus,—are usually the manifestations of some disordered condition of the uterus itself. Pains felt in the loins, in the advanced stages of gestation, may be purely myalgic, or the result of strain of the muscles so constantly exerted to maintain the equilibrium by bearing the body backwards. Pains felt in the breasts, and the excessive tenderness and sensibility of these organs, are due to sympathetic nervous irritation; and are therefore properly called neuralgic. Those which are felt in the abdominal parietes, usually appear in the more advanced stage of pregnancy, and may be attributed to over-distention of the muscles and tension upon the nerves. Certain pains in the interior of the thighs, numbness, and cramps of one or both legs, have been supposed to result from pressure upon the sacral nerves. But even these may be caused by the severe dragging upon the various ligaments and consequent irritation of the nervous centres in different parts of the abdomen and back.

Where these pains are aggravated by exercise or movement, perfect quiet should be enjoined. But it is believed that, with the help of the appropriate Homœopathic remedies, these pains can be so far relieved as to admit of as much exercise as may be necessary for the general health of the mother, and consequently for the greater vigor of the child. There is no doubt that the greater susceptibility to these various pains,—witnessed in some individuals, like the predisposition to many other morbid affections in pregnancy,—is in a great measure due to constitutional peculiarity, just

as we see in certain constitutions a remarkable facility of straining and laming the muscles and tendons, and of suffering dislocation of the joints, from comparatively slight causes. At any rate, the following remedies, or others that may be especially indicated, are capable of affording very marked relief in these cases,—whether the symptoms appear in the earlier part of gestation, and so threaten to result in abortion, or whether they occur principally in the latter part of pregnancy, and tend to increase the immovability and helplessness of the patient. The same may be said of those pains regarded as the results of a certain constitutional weakness of the muscular organs, or of a corresponding irritability of the nervous system.

Treatment.—For remedies which may be indicated for the various *pains* during gestation, see Appendix, at the close of this work.

CHAPTER THIRTIETH.

DISORDERS OF THE LOCOMOTIVE APPARATUS; OF THE NERVOUS SYSTEM, AND OF THE INTELLECTUAL AND MORAL FACULTIES.

Inflammation of the Articulations of the Pelvis.—This not very common form of inflammation is sometimes seen during pregnancy; but less rarely after parturition. The affection appears spontaneously, with severe, acute and sometimes lancinating pains, in one or several of the pelvic articulations. These pains are necessarily aggravated by pressure; by standing, and by attempts at walking,—which the inflammation may render impossible. In some cases, probably those which were strongly predisposed to suppuration, the inflammation has taken this course, the articular surfaces becoming denuded of cartilage; in two instances, referred to by M. Cazeaux, this affection terminated fatally.

Perfect quiet must of course be observed in such inflammation of parts which are not only immediately engaged in locomotion, but which have to sustain also all the superincumbent weight of the body. The character of the pains themselves, as lancinating or otherwise, together with their conditions of aggravation as to time and circum-

stances, will readily suggest to the Homœopathic practitioner the remedy applicable to each particular case,—by the timely exhibition of which not only will much suffering be saved to the unfortunate patient, but the serious and even fatal consequences just referred to as occurring in the Allopathic practice, will undoubtedly be avoided.

Relaxation of the Articulations of the Pelvis.—In certain constitutions there appears during pregnancy a considerable amount of relaxation of the ligaments which unite the bones of the pelvis, and a consequent mobility of the pelvic articulations. This change occurs in different degrees in different persons; being scarcely perceptible in some, and rendering walking impossible in others.

The precise cause of this affection it may not be easy to designate; although those who suffer in this manner usually appear to possess what is termed a scrofulous constitution. And indeed this temporary relaxation and displacement is in no small degree analogous to the chronic scrofulous disease which goes by the name of Rachitis. The immediate cause of the relaxation is found to consist in a softening of the ligaments, by which the pelvic articulations are usually so firmly bound together. And in this respect this affection differs from the rachitic softening of the bones which so often produces distortion during the period of childhood,—and also from the corresponding softening of the bones in adult years, malacosteon, which occasions so many varieties of pelvic deformity. A certain enlargement of the synovial bursæ and corresponding hypersecretion of the synovial fluid, have been noticed in the more aggravated cases of pelvic relaxation.

This spontaneous relaxation and dislocation, from the very first occasions such an amount of instability in standing and insecurity in attempting to walk, as to indicate at once the nature of the difficulty. The pains which accompany the affection, being felt principally from motion, or pressure,—such as standing or walking,—might be incapable of being distinguished from those of inflammation of the articulations, but for this remarkable sense of instability which appears in the incipient stages, and which is subsequently aggravated to exceeding difficulty of standing and impossibility of walking. In such cases the sensation experienced on attempting to stand, is that which so strongly characterizes Belladonna,—as if her whole body would sink down between her thighs.

This relaxation of the pelvic articulations may,—when not too much developed, render delivery less easy and speedy, by destroying the firmness and stability of the *point d'appui* which the abdominal

muscles derive from the bones of the pelvis. But when farther advanced, this relaxation, by somewhat enlarging the pelvic cavities, may facilitate the expulsion of the child's head,—rendering spontaneous a delivery, which would otherwise have been very difficult on account of the disproportion between the size of the head and the dimensions of the pelvis. After delivery, the relaxation has been known to continue for several months, or even for years or the whole lifetime.

In all cases of relaxation of the pelvic articulations in pregnancy, the most perfect quiet, and even absolute rest should be enjoined, in order to prevent the increase of the difficulty which must result from moving about, and in order to obviate the danger of inflammation arising from undue irritation of tissues already morbidly affected. A careful study should be made of all the indications and symptoms in order to reach the real constitutional dyscrasia which lies at the bottom of the difficulty, and thus at the same time arrest the progress of the present mischief, prevent future trouble, and radically and permanently improve the patient's health.

A disposition to fall sometimes greatly troubles the pregnant female. That which arises from sudden attacks of syncope is not referred to here; but rather that want of firm balance in walking, that danger of stumbling, and that general sense of instability, which often prove a constant source of annoyance. The equilibrium of the body in motion, in the natural state, is only preserved by the incessant, although entirely unconscious effort of the muscular apparatus, which as instinctively regulates the movement and position of the body in accordance with the law of gravity, as the muscles of the eye adapt the size of the pupil to the various degrees of light. In persons afflicted with hereditary muscular weakness,—which is but the particular manifestation of some general and constitutional dyscrasia,—the constant task of maintaining the proper centre of gravity,—aggravated by the awkward disproportion in size and large addition of weight in front which characterize the advanced stages of pregnancy,—is entirely beyond their strength. Hence the severe myalgic and neuralgic pains, already described, as affecting the abdomen, breasts, back and lower limbs; hence too the difficulty of walking, the unsteadiness of gait, and the danger of falling, with which such persons are afflicted.

A careful collection of all the symptoms of such cases, and an equally careful comparison of them with those belonging to the fol-

lowing remedies, and to others which may occasionally be indicated in the rarer forms of lesion of the locomotive apparatus in pregnancy, will enable the Homœopathic physician to prescribe with confident hope of affording to these sufferers, both presently and permanently, a hitherto unexpected relief.

Æsculus h. Where the sacro-iliac symphysis is the point of the trouble. She cannot walk, because that part of her back gives out; and it fatigues her so that she must sit down; and she feels better still to lie down.

Aloes. Where a sense of weight and pressure into the pelvis seems to cause the lameness.

Arnica. Where a sensation of soreness as of a bruise prevails. She can hardly move about at all, from the soreness in the symphysis pubis, or in the sacro-iliac symphysis.

Calc. carb. Will be indicated in leucophlegmatic constitutions; great fatigue on walking even but a short distance, from a general feeling of lameness in the pelvis. Cold, damp feet. Vertigo on ascending. Does not sleep after three A. M. She is clumsy. She stumbles and falls very easily.

Calc. phosph. She is very much worse after taking a little cold. She is liable to rheumatic pains in all her joints after taking cold.

Manganum. The limbs are affected, and are very tender and sensitive to the touch.

Pulsatilla. She cannot walk so well towards evening. She feels worse when warm in bed. She can hardly find an easy position through the night, owing to the pain in the pelvic articulations.

Rhus tox. A sense of stiffness in the pelvic articulations on first attempting to walk; better after getting warm in walking. At night she must change her position frequently, feeling quite easy for a while after every change, then she must change again.

Silicea. In cases where ulcerations take place with fistulous openings, which are very tender to the touch. If pimples make their appearance around the ulcerations, Hepar may be indicated.

Sulphur. With her pelvic sufferings, she has flushes of heat, weak, fainty spells. She is weak and faint from about eleven o'clock till noon. Coldness of the feet.

Thuya. The sufferings are greater in the left sacro-iliac articulation, the pains running into the left groin. The pain from walking is so insupportable that she must lie down.

The sympathetic nervous disorders that affect young girls in difficult ovulation, are but the prototypes of those affections which occur, during pregnancy, in women of corresponding unhealthy constitutions. Hence, in addition to the more strongly-marked disorders of pregnancy, described in the previous chapter, and in addition to the above-mentioned lesions of the locomotive apparatus, we find disturbances of the nerves of special and of general sense; abnormal conditions of the intellectual faculties, and various depravations of the moral sphere. The more important of these affections will be briefly considered in the order in which we have thus arranged them.

Affections of the Senses.—*Loss of Hearing.*—Davis mentions having seen two cases of the advent of entire deafness during gestation. In the one case the abolition of the sense of hearing came on suddenly during one of the earlier months of gestation, and very gradually returned after delivery; whilst in the other it came on by imperceptible degrees in the seventh and eighth months of pregnancy, and returned suddenly and with painful acuteness on the sixth day after delivery, when the lochia entirely ceased to flow. From Paullini the same author quotes the case of the wife of a citizen who was subject to be seized with an entire loss of hearing about four or five days before she is taken with her labor-pains,—which (deafness) however goes off after her delivery.

Study particularly the following remedies:—

Capsicum. The petrous portion of the ear is much swollen, red and painful.

Causticum. Reverberation of all sounds, even of the patient's own voice, in the ears.

Graphites. Great dryness in the ears. The deafness is better when riding in a carriage.

Lachesis. The cerumen is too hard; too pale, and insufficient.

Mercurius. Sensation of coldness in the ears continually.

Nitric acid. Much swelling of the internal ear; it is nearly closed, and sometimes there is much pain within it.

Phosphorus. Difficulty in distinguishing the human voice.

Pulsatilla. Sensation as if the ears were stopped up.

Silicea. Partial relief is obtained by blowing the nose.

Sulphur. Aggravation for a while after eating, or blowing the nose.

Compare also, **Calcarea c.**; **Petroleum**; **Hepar**; **Staphysagria**, &c.

The *eyes* sometimes become the seat of a still more painful affection in pregnancy. Dr. Bezard* relates the case of a lady who, in the fifth month of her ninth pregnancy, was suddenly and without any known cause seized with a deep-seated pain in her right eye. There was no external sign of disease, except that there was no secretion of tears; there was however a sensation of strong pulsation at the bottom of the orbit, accompanied by acute and frequently repeated lancinating pains, by appearances of rapidly-darting specks before the eyes, and by errors of the vision. Pain of the forehead and at the root of the nose, together with a sense of weight and oppression about those parts aggravated the patient's distress. In a short time the rays of light ceased to irritate the retina, the eye became insensible to the contact of the finger; and the patient could intently stare at the sun without producing any painful excitement. Inability to sleep accompanied this local affection for several weeks. The delivery was happily accomplished; in the course of some days subsequently the lady found that she could perceive light with the eye which she considered as lost to her, and after some days she could clearly distinguish objects with it. She gradually improved in this respect for eighteen months, when she became *enceinte* for the tenth time. At about the fifth month, at the same time as in the former pregnancy, she was seized with similar but much more intensely severe pains in the same eye. In this pregnancy the difficulty extended to the left eye also, which after delivery in great measure recovered its functions; but the right eye remained permanently insensible to light.

According to Beer,† amblyopia or amaurosis, accompanied with nausea or with vomiting which cannot be quieted, sometimes occurs early in pregnancy, and ceases after parturition. He saw a young Jewess, who, in her first three pregnancies, which followed in quick succession, began to grow blind in the early period, and became quite amaurotic in the third or fourth month. On the first two occasions she continued blind until after parturition; and the third time her sight never returned. Desmarres also mentions pregnancy among the indirect causes of amaurosis.‡ Exactly opposite to this is the case quoted by Cazeaux,§ of a young woman whose imperfect vision had compelled her to use spectacles, from childhood,—but whose

* Journ. de Med., par Leroux, xxxiii., p. 72.

† Lawrence on The Eye, p. 612.

‡ Maladies Des Yeux, Paris, 1847, p. 715.

§ Traité Théorique et Pratique, p. 312.

sight had so much improved immediately after the beginning of her pregnancy that she had no longer need of magnifying glasses.

In affections of the eyes, study the following remedies:—

Aurum. Objects appear as if divided *horizontally.*

Belladonna. Dim appearance of objects; they appear inverted or double.

Calc. c. All objects appear as if seen through a mist.

Causticum. Sudden and frequent loss of sight, with sensation of a film before the eyes. The dimness of vision is greater after every headache. Paralysis of the upper eyelids, so that they hang down.

China. She can only distinguish the outlines of distant objects. When reading, the letters appear pale, and surrounded with a *white border.* She sees better after sleeping.

Cicuta v. The letters seem to move about when she is reading.

Cina. She can see more clearly for a while, after rubbing the eyes.

Hyoscyamus. Frequent spasms of the eyelids. Strabismus. All objects appear of a red color; or larger than they are.

Natrum mur. Frequent *spasmodic* closing of the eyelids.

Nux v. Heaviness and contraction of the lids.

Phosphorus. All objects appear to be covered with a gray veil.

Pulsatilla. Sensation as if the eyes were covered with a mist, or as if the dimness could be removed by rubbing something off from the eyes.

Sulphur. Dimness of vision and the gas, or lamp lights appear to be surrounded by a halo.

Compare also, **Cyclamen e., Drosera, Mercurius, Ruta, Sepia, Veratrum,** &c.

Headache.—This forms one of the most common and painful affections of pregnancy. It may arise in part from sedentary habits, especially in the more advanced stages of pregnancy; and for similar reasons it may be both complicated with and aggravated by constipation. In persons who are usually subject to headache, the condition of pregnancy may serve to increase the difficulty. The cephalalgia of pregnancy may attack those of an anæmic habit and nervous temperament; or it may appear in connection with a plethoric condition,—indicated by flushing of the face, and giddiness aggravated by stooping. Or again the headache may accompany nausea and other gastric disturbances, with paleness of the countenance and general debility.

The treatment will usually be very simple, since the indications can

hardly fail to be plain. When the disorder appears in connection with constipation,—increasing in severity upon each occasion till the bowels are moved,—and seems also to result in some measure from the sedentary mode of life to which so many women addict themselves even when not *enceinte*, exercise in the open air should be strongly advised, to be taken in the manner best suited to the circumstances of the patient. Among the most important and frequently indicated remedies may be mentioned: *Aconite; Belladonna; Bryonia; Nux v.; Pulsatilla; Sepia* and *Sulphur*. But there are numerous others which may be required by the particular and accompanying symptoms of individual cases.

NEURALGIA.—Facial neuralgia in pregnancy differs but little from headache in its causes and requisite mode of treatment,—except that while like headache it may arise in connection with constipation, it is otherwise more apt to occur in persons of a pale, anæmic or nervous temperament, than in those of a ruddy, plethoric habit of body. According to Tyler Smith, "facial neuralgia from uterine irritation, is a very common affection of pregnancy. It generally affects the dental nerves, particularly those of the upper jaw. In many subjects acute caries of the teeth occurs; in some child-bearing women, a tooth or two is lost in each pregnancy." In neuralgia of the face, in pregnant women, without disease of the teeth, the same author says *a generous diet is called for*, and he advises also wine and porter.* The latter articles we think can hardly ever be needed in this country, unless perhaps temporarily, in cases of *great privation from suitable nourishing food*,—in such instances a little wine may aid in restoring the system from its enfeebled condition and thus enable it the more readily to avail itself of a wholesome and nutritious diet. Great care must be taken in cases of severe neuralgia in pregnancy,—cases which may constitute a true spinal neuralgia,—lest from loss of sleep, inability to assimilate suitable food, and the depressing influence of long-continued suffering, the system may become so much reduced as to induce abortion and even fatal marasmus.

In headache and neuralgia, study among others the following remedies:—

Aconite. In headache or neuralgia, accompanied by vertigo on rising up in bed. Crampy sensation in the root of the nose. Sensation as if the whole brain would press out at the forehead. She fears to be in a place of excitement or confusion.

* Braithwaite's Retrospect, xxxiii., p. 252.

Belladonna. Flushed face and injected eyeballs. Cannot bear noise or bright light. She seems to be in a stunned or stupid condition.

Bryonia. A splitting headache; she wishes to keep very still. Dryness of the lips and mouth.

Calc. c. Headache with an unusual accumulation of dandruff on the scalp.

Cocculus. Her head feels worse after eating or drinking.

Coffea. Intense pain,—the head feeling contracted or too small.

Magnes. c. Much worse from talking or mental exertion. She feels sad and disconsolate.

Nux v. Headache in the forehead, with large, difficult stools. Especially suited to persons addicted to highly-seasoned food; much coffee; wines; sedentary life; keeping late hours, &c.

Pulsatilla. In mild, tearful women. Semilateral headache.

Platina. The pain causes weeping. Objects appear smaller than they really are.

Sepia. Headache with an aversion to all food; sensation of great emptiness in the pit of the stomach.

Sulphur. Heat on the top of the head; flashes of heat all over; cold feet; fainty spells.

Veratrum a. Headache causing delirium, dementia and cold sweat on the forehead.

ODONTALGIA frequently appears in connection with pregnancy,—being in fact only a particular form of neuralgia,—and in many cases it forms the earliest symptom from the presence of which the pregnant state is suspected. Leadam,* strongly advises against extracting the teeth in such cases, since abortion has been known to follow the operation. Tyler Smith states that they ought only to be extracted with caution under such circumstances. But those having in their hands the Homœopathic remedies and blest with even a moderate amount of skill in administering them, will never be tempted to resort to a practice at once barbarous and dangerous. Still it must be borne in mind that neither local applications nor remedies selected with reference to the teeth alone will suffice, in many cases, to remove an affection which it is at once painful, sympathetic and constitutional,—that is connected with some individual idiosyncrasy. Here, as in all other cases of disease, the remedy *must* be selected in accordance with the totality of all the symptoms.

* Diseases of Females, p. 102.

In odontalgia or toothache, study the following among other remedies:—

Alumina. Drawing toothache, extending to other parts, as down to the larynx, neck, shoulder, &c.

Belladonna. Pains as if ulcerated; worse after lying down at night; or in the cold air. The pain causes moaning and weeping.

Calc. c. The pain is aggravated *by the slightest change*,—as from a current of air, cold or warm; drinking any thing cold or warm; noise; excitement of the mind, &c.

Hyoscyamus. Violent tearing and pulsating pain,—causing spasmodic jerks of the fingers, hands, arms, facial muscles, eyelids, spasms in the throat, &c.

Magnesia c. Insupportable pains during repose; she must get up and walk about.

Mezereum. Pains extending to the bones of the face and temples; particularly where they run along the left malar bone to the temple.

Nux mosch. Pains in the front teeth on inhaling cool air, or taking warm drinks; feeling as if the teeth were grasped to be pulled out.

Nux v. In females who live on exciting or stimulating food or drinks. She feels cross.

Pulsatilla. Better from cold things; worse from warm.

Rhus. Better from the application of external heat.

Staphysagria. The teeth grow black; become carious and brittle. She is very sensitive.

CHOREA.—Where this affection occurs in connection with pregnancy, the spinal system of nerves is affected secondarily, through the ganglionic. The symptoms of this disorder are too strongly marked and too well understood to need to be repeated here. The following conclusions arrived at by an Allopathic writer, Dr. Lever, twenty years ago, fully represent the present state of our knowledge in respect to most of the points mentioned.

"In conclusion," says this writer, "I venture to submit the following propositions: 1. That pregnancy is occasionally associated with chorea, or convulsive movements; with paralysis of various parts of the body, of the extremities, and of the nerves of special sense; and with mania. 2. That the varying symptoms of such complications may be produced at any period of pregnancy; but when produced, although modified by treatment, are rarely removed during the existence of gravidity. 3. That the patients in whom these com-

plications exist are women of a highly nervous temperament, of great irritability, or whose constitutional powers have been reduced by some long-continued, but serious cause of exhaustion. Lastly: That, although in most instances the symptoms will continue so long as pregnancy exists, yet, in a majority of cases, *we are not justified* in inducing a premature evacuation of the uterine contents."

To these views of the Allopathic school, let us add what our own teaches in one most important respect. In those cases in which chorea, or epilepsy, appears for the first time during pregnancy, we must regard this latter state as having sufficed to develop a certain morbid element of the constitution which had hitherto remained latent; and we should seize upon the opportunity thus afforded to endeavor, by the exhibition of the appropriate remedies, to *radically cure* this morbid taint, and thus, at the same time, prevent the continuance of the convulsive disorder after delivery, and provide against its return in a succeeding pregnancy. In those cases in which women become pregnant who have been subject to either of these nervous affections, the pregnancy may either render the convulsive attacks less frequent, cause them, during the continuance of this state to cease entirely,—or even render them of much more frequent occurrence than before. But, while it is believed that no instances are recorded of epileptic patients having been permanently benefited by pregnancy,—M. Malgaigne* cites a singular case in which the first attack of epilepsy was developed during pregnancy in an unfortunate young woman, who retained this fearful malady through all her subsequent life. Similar is the case quoted from a German author, by Dr. Davis,† of a lady twenty-six years of age of a bilious constitution, and the mother of three children, who was attacked with a periodical epilepsy whenever she conceived, and who sustained a paroxysm of this malady once a fortnight, during the whole of her gestation. But as soon as she was delivered the disease left her. Its occurrence, therefore, was always a sign to her that she had become pregnant.

Hysteria.—This affection constitutes one of the most frequent, comprehensive, and complicated of all the nervous derangements which may arise in consequence of pregnancy. But in this place we need do little more than refer the reader to the very full discussion of the general subject of hysteria, in the preceding portion of the present work,—similar indications being present and similar remedies

* Traité Théorique et Pratique, p. 368. † Obstetrics, ii., p. 900.

called for in the pregnant as in the non-pregnant condition. Still, in cases of pregnant women, the remedies should be selected, if possible, with still greater care, since, for obvious reasons, much greater importance must be attached to the hysterical condition in the pregnant state.

Dr. Burrowes* states that he has seen two cases in which hysterical symptoms attended during pregnancy, and the patients in each case became insane almost immediately after delivery.

Romberg instances among the debilitating influences which are the most fertile sources of hysteria, "repeated miscarriages, and a rapid succession of pregnancies and lactations."† In most cases of women subject to hysteria, or any other form of general disorder of the nervous centres, the occurrence of pregnancy serves rather to aggravate than to ameliorate the pre-existing morbid condition. And in very many cases the influence which pregnancy exerts in developing the latent disposition to nervous or mental disorders, corresponds in a remarkable manner to that exerted by scarlatina in developing the hitherto latent psoric or scrofulous miasm in young children.

Disturbances of the Intellectual Faculties.—Pregnancy is sometimes accompanied with a partial mental derangement, which may become complete insanity. Esquiral mentions the case of a young woman of a sensitive habit, who had an attack of madness in two successive pregnancies, commencing immediately after conception, and lasting fifteen days. Dr. Montgomery states that he knew a lady who was attacked with insanity in eight successive pregnancies; and another who was similarly affected three times soon after conception, and remained so until within a short time after labor, when she became sane and continued so until the next pregnancy.‡

It should be observed that insanity in pregnancy,—whether arising in connection with the hysterical condition or not,—has two distinct sources; in the one, the disturbance of the intellectual faculties appears to result rather from the physical condition, and to be dependent upon pregnancy physically considered; in the other, the mental powers manifestly give way and the reason loses its balance under the depressing influence of the melancholy and settled gloom which belong entirely to the moral sphere. And at the same time it should be remembered that a certain constitutional dyscrasia may be the real cause of the physical condition which leads up to insanity

* Commentaries on Insanity, p. 364.

† Diseases of the Nervous System, Sydenham, ed. ii., p. 86.

‡ Vide Churchill, Diseases of Women, Bk. ii., chap. i.

on the one hand,—and even of the profound moral and spiritual dejection which leads down to it on the other. There are, however, numerous unfortunate cases, especially of young women who become pregnant while yet unmarried, in whom the agony of disappointed hopes, of affections misplaced and cruelly abused and betrayed, the present scorn of society, and the apprehension of a still increasing shame, suffice to hurl reason from its throne, to destroy the better judgment, and induce such madness as finds its necessary crisis in suicide. These are cases in which the grief of irreparable affliction, the mental anguish and moral suffering, can scarcely fail to derange the soundest mind in the soundest body, and destroy both together.

But while time alone can effectually mitigate the more poignant forms of affliction, the Homœopathic remedies are yet remarkably efficacious in "ministering to a mind diseased,"—whether the mental derangement result from physical dyscrasia, from moral suffering, or from both combined. And the physician should most carefully explore all the symptoms, circumstances and conditions, in respect to the physical system, to the sensorial, the intellectual, and the affectional faculties, in order to discover, in the Materia Medica, the exact simile of his patient's case. And the serious responsibility which rests upon the physician to do all that human science can accomplish in such cases, is not limited to the present condition or future well-being of the mother; regard must also be had to the unborn child, to prevent the predisposition to insanity from being perpetuated in the infant, and in a still greater degree developed in succeeding generations.

Disorders of the Affections, Emotions and Feelings.—In addition to the disturbances of the intellectual faculties already mentioned as incidental to the condition of pregnancy, there are frequently seen certain anomalous variations of the spirits, temper and affections,—for which the physician will be called upon to prescribe,—either in connection with other, physical symptoms, or in their absence. And the special adaptability of the Homœopathic Materia Medica to abnormal conditions of the sensational, intellectual, emotional and affectional faculties of the mind and spirit, give the Homœopathic physician an immense advantage in this class of cases.

The *settled gloom*, the *profound melancholy*, to which allusion has already been made as occasionally productive of insanity, is sometimes seen to appear without any other assignable cause than the general one of pregnancy. When this depression of spirits assumes some particular phase, as, for example, that of a disposition to com-

mit suicide, the appropriate remedy is at once suggested. The limits of the present work restrain us from doing more in this connection than merely to mention some of the most prominent forms of mental and moral derangement; and to indicate the principles upon which they should all be treated. For a fuller exposition of the various mental and moral diseases, and a more detailed statement of the numerous Homœopathic remedies applicable to them, the reader is referred to Dr. Franz Hartmann's very excellent work on *Mental Diseases*,* which, unfortunately, has not yet been reprinted in this country.

Remarkable *changes of temper* also appear, and in a still more numerous class of pregnant women. "Few women are quite as self-possessed, or in as even spirits, during pregnancy as at other times; little things annoy them; trifles depress them. Sometimes the most sweet-tempered women become irritable, cross and quarrelsome. The husband of a patient of mine, whose wife was remarkably good tempered and attached to him, told me that the earliest symptom of pregnancy in her case, was a disposition to quarrel with him especially. Dr. Montgomery mentions the case of a lady who, for the first two or three months of her pregnancy, was so irritable that, to use her own words, "she was a perfect nuisance in the house."—*Churchill.*

Sometimes women whose ordinary dispositions have been soured by the trials of life, or who are characterized by a habit of fault-finding and complaining, experience a very happy change of temper on becoming pregnant. But more often, those usually of a cheerful, lively disposition, become sad, depressed, and even morose; refuse all comfort or encouragement, and persist in the fixed belief of a fatal termination of their labor. Except in a very few and remarkable cases, such gloomy anticipations of impending evil are happily disappointed by a successful delivery, which is therefore succeeded by the restoration of the accustomed cheerfulness. And in those few instances in which the foreboding of a fatal termination of the labor proved prophetic, it is believed that some deep-seated dyscrasia of the physical system gave rise to this instinctive fore-consciousness; such as is sometimes seen in a similar fulfilment of such predictions in cases of ordinary illness.

The *feelings* and *affections* in many instances undergo a distressing

* *Special Therapeutics*, according to Homœopathic Principles, by Dr. Franz Hartmann. Third volume, *Mental Diseases*. Edited by Dr. G. H. G. Jahr. Translated by J. M. Galloway, M. D. Manchester: Henry Turner, 1857.

transformation in pregnancy. It is related of one young woman that she was seized at about the fifth month with an unconquerable aversion to her apartment; so that, after much effort of reasoning and persuasion had been tried in vain, it became necessary to leave her in the country during the remainder of her pregnancy. Another case is recorded of a young lady for the first time pregnant, whose former love for her husband was replaced by an almost invincible antipathy to him. Similar to this is the moral state of those, who from imagining, in their hypersensitive, nervous condition, that they do not receive proper and necessary attention from their husbands and their friends, turn against them and conceive for them a strong dislike. In most cases all such morbid changes of the affectional sphere disappear with the termination of the pregnancy under whose influence they were developed. But it becomes no less important for the physician to do all in his power to relieve such moral disorders, not only on account of the present suffering and distress to all concerned, but also because in some instances at least these disorders may become permanent and even ultimate themselves in disturbances of the intellectual faculties, in subsequent puerperal mania, and finally in some dangerous forms of physical disease. These disorders of the feelings, emotions and affections may be connected with an hereditary predisposition to insanity,—or with some deeply-seated and even malignant dyscrasia; which if not remedied at its most incipient appearance may develop the most serious mischief in the present and in future generations.

In concluding the general subject of disorders incident to pregnancy, it may be proper to remark:—

I. While pregnancy serves in many cases to develop in some form,—physical, mental or emotional,—whatever latent tendency to disease had existed in the system, it does not render the body more liable to be attacked by external diseases; and in some instances, as is often seen in the phthisis of those *enceinte*, it actually retards the development and prevents the fatal termination of pre-existing disorders, until after delivery.

II. The disorders of the mental and moral or emotional and affectional spheres, which so often accompany pregnancy, will always speedily disappear with the successful delivery of the child, unless based upon and representative of some profound constitutional dyscrasia; in this latter case such affections not only tend to perpetuate themselves after parturition, but to become developed in puerperal mania,—and even ultimated in some malignant form of bodily disease.

CHOREA.—This peculiar affection is as perfectly amenable to Homœopathic treatment as any other disorder.

Belladonna. When the tongue is partially paralyzed. Difficulty of articulation. Right side more particularly affected. Red eyes. Much debility. Rather stupid.

Calc. c. Chorea from a fright. In leucophlegmatic temperaments.

Causticum. If the upper eyelids are particularly affected, so that they hang down,—can't keep them up. She is worse in the open air, and in the evening.

Cocculus. She is always worse for a while, after drinking, eating, sleeping or talking.

Crocus. She is worse every evening, with alternations of excessive, happy, affectionate tenderness and *rage*.

Cuprum. When the spasms come on in paroxysms, grouped with other symptoms which always appear grouped with these paroxysms. Or when the paroxysm commences in one part,—the finger or limb for instance,—and gradually extends till the whole frame is involved.

Hyoscyamus. Twitching and jerking of every muscle in the whole body, eyes, eyelids, face and all.

Ignatia. When there is much deep sighing and sobbing, or when the disorder is the result of a long-suppressed chagrin.

Nux v. Very fond of high living; troubled with constipation.

Stramonium. Full of strange, inconsistent fancies.

Study also **Apis mel., Asafœtida, Arsenic, China, Cicuta, Coffea, Dulcamara, Pulsatilla, Sabina, Sepia, Silicea.**

EPILEPSY: See *Eclampsia*.

MORAL, AFFECTIONAL AND INTELLECTUAL FACULTIES.

Aconite. Fear and presentiment of approaching death; she fixes the time of her death.

Aurum. She has no confidence in herself, and thinks others have none in her; this makes her unhappy. She looks on the dark side of every thing; weeps and prays; thinks she is not fit to live, and has a strong inclination to suicide,—to jump out of the window, or from a height.

Anacardium. Estrangement from individuals and society, with fear of the future. Strange temper; she laughs at serious matters; is grave over laughable occurrences. Swears; thinks herself a demon.

Arsenic. Periodical attacks of anguish, inquietude, tossing and inability to lie in bed; fear of death; excessive dread of death; she is sure she will die.

Arnica. Thoughtless gaiety; great frivolity and mischievousness.

Belladonna. Great distress with inquietude. Frightful visions; she wishes to hide herself. She has a wild look, a stunned appearance. She wishes to strike, bite and quarrel. Difficult deglutition.

Calc. c. Excessive mischievousness, with obstinacy. She thinks and talks about murder, incendiarism, rats and mice.

China. She thinks she is very unfortunate, and constantly harassed by enemies.

Hyoscyamus. She fears she will be poisoned, or betrayed, or injured; she wishes to run away.

Ignatia. She wishes for solitude; sighs and sobs; she will not be comforted. She is full of grief.

Lachesis. Excessive loquacity, with rapid change of subject,—talks of one thing, then of another, &c. Jealous; proud; suspicious.

Lycopodium. Very reproachful and overbearing.

Moschus. She complains much,—but of nothing in particular.

Natrum. Estrangement from individuals and society, even from her husband and family. See also **Anacardium, Conium** and **Natrum m.**

Nux v. Loss of mental power; can't read or calculate, because she loses the connection of ideas;—she thinks she will lose her reason.

Opium. Thinks she is not at home; this is continually in her mind.

Phosphorus. Great sadness with tears, alternating with gaiety and laughter.

Platina. Past events trouble her. Contempt for other persons. She thinks all persons are demons.

Pulsatilla. Much weeping even at answering a question.

Sepia. She is very uneasy about the state of her health: constantly worrying, fretting and crying about her real or imagined illness.

Silicea. She is occupied with pins; counts them, hunts for them, &c. She is always worse during the increase of the moon.

Staphysagria is very similar in some of these respects to Sepia.

Stramonium. She is worse in the dark, or in solitude. Full of strange, ridiculous ideas. Talks or prays earnestly and constantly.

Sulphur. She is very happy, and imagines she is in possession of beautiful things. Awakens at night singing, she is so happy; she dreams very happy dreams, &c.

Veratrum. Desire to wander about the house. Erroneous and haughty notions. Disposed to be *very taciturn.*

For other remedies, see *Hysteria, Gastric Derangements,* &c.

CHAPTER THIRTIETH.

ABORTION.

ABORTION is said to consist in the separation and expulsion of the immature ovum from the uterus.* This very comprehensive definition covers the whole period from the moment of fecundation up to any time short of the complete fulfilment of the entire term of normal utero-gestation. In its more general acceptation, the term abortion is made to refer to such degree of immaturity of the ovum as necessarily insures its destruction on expulsion; in this sense the use of the term would be restricted to the period of non-viability. "An abortion may be possible at any time from the commencement of pregnancy to the end of the sixth month."† But since there are successive stages of development, which exactly correspond to definite periods of time in gestation, it becomes desirable to assign more definite terms which may serve to indicate the particular period,—in which the abortion itself occurs. Accordingly the abortion is properly called *ovular*, when the expulsion takes place in the first three weeks, or before the embryo can be distinguished in the ovum. The term *effluxion* was applied by the ancients to those cases in which the product of conception passed off,—or flowed away,—in the first week. The abortion may be termed *embryonic*, when it takes place prior to the third month,—as if before quickening. When the abortion occurs after this time, and before the period of viability, or before the end of the sixth month, the abortion may be termed *fœtal*. After the period of viability, the expulsion of the fœtus,—although more or less liable to be followed by its destruction, according as it occurs at a period more or less remote from full term,—is still not necessarily fatal. Hence the expulsion which occurs at any time after the period of viability, and before the completion of the full term, is called *premature delivery*. The term *miscarriage* is popularly applied to any expulsion, or premature delivery, which results in the destruction of the product of conception.

* Tyler Smith's Obstetrics, p. 177.

† Traité Théorique et Pratique de l'Art des Accouchements, par P. Cazeaux. Sixième Edition, p. 332. Paris, 1858.

Abortions are more frequent in the first two or three months than in those subsequent; and it is believed that many cases of *ovular abortion*,* or *effluxion*, occur unnoticed and unsuspected, as well in those who have borne children, as in those who are always sterile.

Neither the plan nor the limits of the present work admit of any complete and systematic treatise on abortion; nor indeed is this necessary, since it has been so ably done by a recent author of our own School.† Our present object will be satisfied by setting forth the principal *causes* by which abortion is produced; the *symptoms* which forwarn us of its imminence; the *means* to be employed in advance, and the *remedies* by which its attack may be obviated. And in the conclusion of the chapter we shall take occasion to give what seems to us the true doctrine respecting the induction of abortion or premature delivery by physicans.

Causes of Abortion.

The influences which are capable of producing abortion, include almost the entire range of those which injuriously affect the female economy. These causes of abortion may be from without or from within; external or internal,—originating in the system of the woman herself or approaching her from the outer world. But in either case and in every instance, they derive no small part of their efficiency from the delicate and sensitive nature, or psoric condition of the constitution itself. Thus it is well known that some women undergo the severest forms of chronic and even of acute disease, and the rudest accidental or intentional violence without aborting; while in others this misfortune will often occur either spontaneously or from the slightest provoking cause,—such as a misstep or strain in lifting.‡

Since abortion consists in the separation and expulsion of the ovum, as in ordinary labor,—this must result from contraction of the uterus itself. This contraction of the uterine fibres is therefore to be considered as the immediate cause of the abortion in every case: All other causes may be termed either predisposing or exci-

* Abortion is properly restricted to the loss of the product of conception; and it seems but an unnecessary and useless complication of the subject to include under this head such discharges of unimpregnated ovules as may occur in women to whom sexual intercourse is a thing unknown, and such as have already been described under *Ovular Menstruation*.

† A Systematic Treatise on Abortion, by E M. Hale, M. D. Chicago, 1866. While compelled to differ from Professor Hale in some important points of doctrine, we can bear witness to the industry and ability displayed in his recent work.

‡ Mauriceau, quoted by Davis, ii., p. 1031.

ting,* and for convenience in study they may be classed under three heads: I. *Pre-existing Conditions;* II. *Conditions principally developed by the Pregnancy itself;* III. *Independent Influences.*

I. Pre-existing Conditions.—In this class must be enumerated all those disorders which in any given case may seem to determine the abortion,—although the same causes may fail to be followed by this result in other instances. The great majority of cases of abortion, from whatever cause or combination of causes produced, occur from the second to the fourth month of pregnancy.

Disorders of the uterus, or of its appendages, which were existent before pregnancy, often become causes of abortion. But since the most of these disorders have already been described in this work, it will be requisite to do little more than enumerate them here.

Either of the various *displacements* to which the uterus may be subject, and which do not prevent conception, may occasion the subsequent separation and expulsion of its product. In cases of habitual *prolapsus uteri*, the gravid uterus may become impacted in the pelvis before rising above the sacral promontory at quickening; and the irritation consequent upon such impaction will necessarily be followed by abortion. The same is true of *retroversion,*—the most serious of all uterine displacements, and which becomes all the more formidable when complicated with pregnancy. Retroversion in the pregnant state may be gradual in its development, or may have existed to some extent unnoticed till the increasing size of the uterus at the third or fourth month occasions serious difficulty. Or the gravid uterus may become suddenly retroverted by accident, or over-exertion; but this accident can hardly ever result in pregnancy, unless a predisposition to it had been established by former retroversion. *Anteversion,* by irritation of the neck of the bladder, may lead to abortion.

Either of the various forms of inflammation, ulceration, and cancerous disease of the uterus may become the efficient cause of abortion. Severe *leucorrhœa,* especially that which results from chronic inflammation of the cervix uteri; *ulcerations of the cervix; fissures* and *induration* of the cervix; *phagedenic, syphilitic,* and *cancerous* ulcerations of the cervix, or of the parietes of the uterus, while they do not always prevent conception, will, in the great majority of cases, powerfully tend to produce abortion. *Syphilis* in the mother, whether recent or chronic, whether present as an ulcerative

* Ramsbotham's Obstetrics, p. 586.

affection on any part of the genitalia, or existing as a constitutional taint in the system, will more or less invariably lead to abortion; while if the syphilitic poison be imparted to the ovule by the fecundating semen of the male alone, the result may be seen in offspring born alive, indeed, but destined to wither and perish, decreasing in weight from the moment of their birth. In either case, it seems an admirable provision of Providence that, in its severer forms at least, this awful malady should become self-limited, instead of being permitted to extend its destructive influence through all succeeding generations.

Scrofula is stated by some authors to be an efficient cause of abortion; but this must needs be taken with some qualification, since it is well known that many women of most remarkably scrofulous habit are no less remarkably fruitful, raising in some instances large families of children, all of whom show evident marks of the same scrofulous diathesis. When the scrofulous influence has resulted in a condition bordering on cachexia, abortion may result from general debility. And yet it should be remembered that *tubercular consumption,* the most common and fatal form of scrofulous disease, neither indisposes to conception nor predisposes to abortion.

Both *plethora*, or a remarkably full habit of body, and *obesity,* or an abnormal accumulation of fat, may be considered forms of scrofulous development; and either of these conditions may lead to abortion. Plethora may promote abortion by inducing local and destructive congestion. This congestion may be either simply *uterine,* as seen in the menstrual nisus and in the greater tendency to abort at the menstrual periods,—especially the first, second, and third; or it may be *placental,* as in placental apoplexy, or placentitis; or it may be *umbilical* congestion, and destroy the fœtal life, as it were, by strangulating its circulation.

A remarkably excessive *nervous irritability* or *sensibility of the uterus* may be the determining cause of the abortion. The irritability is so called because it forms a part of the constitution; such women will abort from sympathy with affections of the bladder, rectum, kidneys, stomach, and parotid, thyroid and mammary glands, or from disorders in other parts, which in other persons would be followed by no such consequence. *Ovarian irritation* in women who have been subject to dysmenorrhœa, has a strong tendency to produce abortion at the catamenial dates. Lactation usually serves to prevent conception; but where it does not, the irritation of the mammæ from constant suckling,—like any other long-continued

irritation of these glands,—may produce abortion. And, finally, a pre-established habit of aborting may of itself become a powerful cause of abortion in each succeeding pregnancy.

II. CONDITIONS PRINCIPALLY DEVELOPED BY PREGNANCY ITSELF.—Both the first-mentioned and the present class of causes of abortion are included by Dr. Whitehead, under the general head of predisposing causes. "By predisposing causes are meant certain morbid conditions, local or constitutional, already in the system; or a particular susceptibility to morbid action during pregnancy, by the operation of which the process is liable to be prematurely arrested."*

In some constitutions any one of the various disorders incident to pregnancy may threaten to lead to abortion; and in some cases several of these seem to combine to produce this result. Among these may be mentioned the different forms of *gastric* and *intestinal disorder*, from nausea and vomiting to the most obstinate constipation. Although it is not probable that these affections would result in abortion unless there were present some abnormal irritability of the uterus itself, and although they may have their origin in the same psoric miasm that occasions the uterine irritability; still these affections are entirely developed under and by the condition of pregnancy.

Similar in their origin and influence are those local disorders of the uterus and its appendages which appear for the first time in connection with the state of pregnancy,—among which may be enumerated dropsies of the uterus; fibrous and polypous tumors, and all the uterine displacements which result from the pregnant condition. *Placenta prævia* may be the cause of abortion, although this is doubted by Cazeaux; Whitehead says: "When the placenta happens to be implanted with its centre over the os uteri, abortion is inevitable; and this almost invariably takes place before the end of the fifth month."

Disorders of the ovum itself, in its different stages of development, and of its immediate appendages, may also be enumerated in this place as causes of abortion, since almost all of them are directly and necessarily the results of morbid conditions of the mother. The important exceptions to this general remark are found in certain cases in which the morbid condition of the ovum is derived from the fecundating semen of the male. The mother for example may be perfectly healthy; while yet in every instance the product of con-

* On the Causes and Treatment of Abortion and Sterility: By James Whitehead, F. R. C. S. London, 1847.

ception becomes blighted in its earliest development or destroyed by abortion resulting from disease inherent in the ovum itself. In such cases the source of the mischief will be found in some taint in the system of the husband,—syphilitic for instance,—which may thus be imparted to the ovum through the semen; sometimes also the wife becomes in this manner infected with constitutional disease. Suitable treatment directed to the husband will remove this cause of abortion, and the subsequent conceptions may terminate in healthy offspring.

Disease of the ovum may excite the uterus to contraction, before the actual death of the ovum has occurred. *Moles, hydatids*, and in fact every possible form of *blighted ova,* necessarily involve abortion. And the death of the ovum, rendering it a foreign body in the uterus, will be followed by its expulsion sooner or later; except in those not very uncommon cases, in which the ovum is entirely reabsorbed. For a more particular description of these, and analogous cases of abortion which belong to influences principally developed by the pregnant condition itself, the reader is referred to the preceding chapters on Diseases of Pregnancy.

III. Independent Influences.—By this expression we mean simply those influences which appear subsequently to and independent of the pregnant condition.

1. Physical over-exertion of any kind, riding on horseback or in carriages over rough roads; laborious occupations; fatiguing exercises; long walks; violent efforts, such as lifting, running, jumping, by exciting the circulation or straining the parts, may occasion uterine hemorrhage or pains, or both, which, unless arrested, will inevitably produce abortion.

2. Accidental or intentional violence, directly applied to the genitalia, leads to a similar result, by causing such rupture or separation of the membranes, or disturbance of the ovum itself, as arouses the contractile and expulsive action of the uterus.

3. Various drugs, administered intentionally, for other purposes, or accidentally, occasion the same result, either by direct action upon the uterus and neighboring organs, or by indirect action through the spinal cord. Among the most remarkable are, *Secale c.; Cimicifuga; Sabina; Caulophyllum; Apis; Aloes; Cantharis; Borax; Quinine; Mercury.* There are many others, which in larger or smaller quantities are said to have produced abortion. Violently acting emetics and purgatives of any kind may lead to the same result from uterine sympathy with the gastric and intestinal irritation.

4. Excessive indulgence in coition, especially in the earlier months,

by the passional excitation of the uterus and its appendages, disturbs the ovum and occasions its expulsion.

5. Moral over-excitement of every kind; paroxysms of sudden and violent anger; sudden surprises or affiright; horrible sights; situations of imminent danger; violent emotions of grief or despair for the departure or loss of friends, may produce abortion.

6. Local diseases of contiguous organs, such as diarrhœa and dysentery, may produce abortion from sympathetic irritation.

7. Gonorrhœa and inflammation of the uterus, where pre-existing, should be classed in the first order of causes of abortion. In such cases it may give rise to the severest form of purulent uterine leucorrhœa, to erosion, induration, ulceration and even fissures of the cervix uteri,—conditions from which, if they are not remedied by appropriate treatment, abortion will almost necessarily result. In other instances this disease may have been contracted during the existing pregnancy; and may occasion, especially in strong plethoric women, a high degree of excitement and symptoms of inflammatory fever,—which may lead to abortion. Whitehead mentions some remarkable cases illustrative of the influence of gonorrhœa in producing repeated miscarriages. Syphilis as a primary infection may also cause abortion; its powerful influence as a constitutional affection, in destroying the product of conception, has already been noticed.

8. Certain general disorders are very sure to produce abortion,—often with very great danger to the mother. This is the case with Intermittent Fever, especially in its severest forms,—the abortion which it causes being almost invariably fatal. Variola becomes a no less certain and dangerous cause of abortion. The same may be said of Yellow Fever, and Spotted Fever. This is true principally of the Allopathic practice; so far as these terrible diseases are made to yield more readily to their appropriate Homœopathic remedies, just so far the danger may be averted both from mother and child.

Symptoms of Abortion.

The symptoms which may indicate an impending abortion may be as numerous as are those of the various general or local disorders which have been mentioned as its possible causes; and they will necessarily correspond in constitutional character and intensity to the nature and violence of the influences by which the abortion is immediately occasioned. In the earlier stages of gestation the amount of disturbance of the system is less, in proportion to the comparatively trifling amount of force expended in producing the abortion itself.

When this results from pre-existing influences, chronic disease or bad health in the mother, there may be shiverings succeeded by heat, anorexia, nausea, thirst, spontaneous lassitude, palpitations, a sense of coldness in the abdomen, coldness of the extremities, pallid complexion, sadness, tumefaction and lividity of the eyelids, or dark discoloration beneath the eyes, a sense of sinking at the epigastrium or an indescribable deathly feeling, recession of the milk and consequent flaccidity of the breasts from which a serous fluid sometimes exudes, and general *malaise* and profound melancholy. When the abortion results from more active or violent causes, the more immediate and positive symptoms are:

I. A sanguineous discharge together with pains in the loins, the abdomen and the sacrum. The pains which precede abortion are very much like those which precede or accompany a catamenial period. They may also precede the hemorrhage in cases of threatened abortion; and may subside and the danger pass away before hemorrhage appears. But after the occurrence of this latter symptom, abortion will almost always result sooner or later, unless the progress of the mischief is arrested by suitable treatment.

II. Bearing down sensation, or feeling of weight in the abdomen and pelvis. These sensations may be independent of the more positive pains; some women abort without having suffered much if any decided pain.

After the rupture of the membranes by accident, by instruments, and other artificial means,—after the placenta or membranes become separated from the walls of the uterus,—or after the death of the fœtus, chills, or rigors make their appearance, the pains become more frequent and decided, and the hemorrhage more free. But before the expulsion of the fœtus the hemorrhage is seldom very profuse. The placenta almost always remains after the expulsion of the fœtus, and then, as in natural labor, the loss of blood may be severe until arrested by the removal of the placenta and subsequent more complete contraction of the uterine walls. Instances have been observed, however, in which the placenta or membranes have remained for weeks after the extrusion of the embryo, occasioning an almost constant loss of blood during the entire period.

In some instances the placenta remains in the uterus till decomposed; putrid fever, uterine plebitis, and death, may result from the reabsorption of particles of the putrefying mass. In embryonic abortion, however, after the expulsion of the embryo itself, the membranes may remain without danger of the putrefactive decomposi-

tion which usually attacks the retained placenta of later months. In other cases, after the gradual death of the embryo, from imperfect nutrition, organic, ovular disease, or other constitutional cause, the placenta enlarges, assumes unusual forms and a singular structure, exhibiting a cavity in which the remains of the fœtus can scarcely be found; or the entire ovum becomes transformed into a fleshy mole or hydatiginous mass.

Diagnosis of Abortion.

An abortion may be deemed possible, probable, threatening, or inevitable, in any given case, according to the nature and intensity of the influences present and capable of more or less rapidly producing such a result. But it is necessary first to determine the existence of pregnancy; and when, as in the first two months, it becomes difficult or even impossible to ascertain this with absolute conclusiveness, the question arises, whether the pains and discharge of blood result from a return of interrupted menses, or from an approaching abortion. And this question is the less easy to decide in advance, since the pains and other consequences of an impending abortion at this early period greatly resemble those of irregular and difficult menstruation.*

In general, it may be stated that in abortion the os uteri is open; the hemorrhage precedes the pains, and that the pains themselves are not sensibly relieved by the flow. While, in difficult menstruation, the pains usually precede the hemorrhage; the mouth of the uterus is closed; and the pains either entirely cease or sensibly diminish when the discharge is well established. In some instances of dysmenorrhœa the pains continue during the entire period of the flow,—but the fact of the occurrence of such severe dysmenorrhœa as a habit of the individual, either removes at once the suspicion of her being pregnant at any particular period, or entirely neutralizes this exceptional symptom as a sign indicative of pregnancy. Nor, indeed, is it essential for the Homœopathic physician to determine with certainty the exact condition, in any given case, in order to do for his patient all that her case requires, or all that it is possible to accomplish. Since prescribing carefully and accurately for the existing symptoms, he will moderate the violence of the suffering in dysmenorrhœa; or if the case is one of pregnancy and threatened ovular abortion, the same

* "Les douleurs qui accompagnent la menstruation difficile, surtout après une suspension, de plusieurs mois resemblent beaucoup, par leur siège, leur intermittence, à celles de l'avortement." Cazeaux, p. 343.

remedies will be the best to subdue the violence of the abnormal action and thus preserve, if possible, the product of conception.

It is of course unnecessary to recount here the indications already fully stated in a preceding chapter, by which the existence of pregnancy is rendered probable in the earlier months. If these are present in number more or less conclusive,—especially if the patient having formerly been very regular, and having now missed her courses for one or two or more periods, experiences a return of the discharge, accompanied with pains which rather increase than abate as the flow continues,—the flow itself being more profuse than was usual with her in menstruating,—and the mouth of the uterus sufficiently dilated to admit the end of the finger, she has every reason to believe herself suffering from abortion, rather than dysmenorrhœa. And this conclusion will be greatly strengthened, or otherwise, by the comparison of this attack with her usual monthly periods,—and by considering whether, in case she were actually *enceinte*, she had been subjected to any influences capable of producing an abortion. If the patient knows herself to have menstruated while pregnant on former occasions, this circumstance, while it might to some extent predispose to abortion, would require a more particular examination of the condition of the os and cervix uteri, and of the coagula or other matters discharged. And the final detection of portions of an aborted ovum, in such cases would become an important point of reference in the future conditions of the patient.

So much for the diagnosis of abortion in the earlier months, as distinguished from dysmenorrhœa, where the existence of pregnancy had not been definitely ascertained. The diagnosis of abortion, in the more advanced stages, where there is no doubt of the existence of pregnancy, is a very different matter. Here an opinion must be given, usually, with the same caution that we should employ as to the recovery of a sick person in critical circumstances. The question being, not whether it is impending or actual abortion, or dysmenorrhœa, but whether the threatened abortion must necessarily become absolute destruction of the product of conception. Here, except in cases already very far advanced, we should never affirm an abortion to be inevitable until we have faithfully employed all the means within our knowledge to arrest the destructive process. Dr. Whitehead relates some remarkable cases of successful treatment, in which the abortion seemed necessarily inevitable; one of them, a woman who had aborted in six successive pregnancies, and who was enabled to go through the seventh successfully, in spite of repeated attacks of

venous congestion to the pelvis with apparent death of the fœtus, by repeated bleedings and the employment of extract of hyoscyamus and camphor. And where such apparently desperate cases are rescued under the Allopathic regime, how much more ought we not to expect with the more varied and efficient resources at our command?

A certain dilatation of the internal orifice of the uterus, in which, under the influence of the uterine contractions, the cervix gradually tapers from the os externum up to the body of the uterus, and can no longer be distinguished from the uterus, is mentioned by Cazeaux as having been originally observed by him to be a sign of inevitable abortion.

But generally speaking, abortion is only inevitable when the fœtus is already dead; or when the separation of the placenta is so great that the remaining utero-placental attachments are incapable of supporting the fœtal life. Thus the diagnosis of abortion in the earlier periods of gestation is dependent upon the determination of two "unknown quantities;" that of pregnancy on the one side,—which may or may not be actually present; and that of the power of the remedies used to arrest the progress of the mischief,—remedies whose success or failure in any given case can only be determined by the experiment. But in the more advanced stages of pregnancy we escape, in many instances, both these sources of doubt, since the existence of the pregnancy itself is undoubted on the one hand, and the determination of the death of the fœtus,—which is often possible with sufficient certitude,—on the other hand removes all hope of change from the action of medicines. In all cases of threatened abortion, however violent the symptoms, we may still find some ground of hope in the administration of the indicated remedies, so long as the fœtus continues to live. But the condition is manifestly different where the symptoms either result from, or indicate the death of the child. The principal circumstances which indicate the death of the fœtus, are: 1. The diminution instead of the increase of the size of the abdomen; 2. The flaccidity and shrinking of the breasts; the dragging sensation in the loins and sense of weight in the hypogastrium; 3. The cessation of motion formerly perceived in the uterus; 4. The impossibility of hearing the sound of the fœtal heart becomes, after the fifth month, an almost infallible sign of the death of the fœtus. And where this death occurs as a consequence of disease or failure of nutrition on the part of the mother, and so takes place in a gradual manner, the danger which the fœtus is undergoing, may be detected by observing the gradually increasing faintness of the beating of its

heart. But this means of judging of the health and death of the fœtus, since it is hardly applicable before the fourth month of pregnancy, is of no use in the majority of cases of threatened abortion.

The Induction of Abortion, or Premature Delivery.

The practice of abortion in some so-called Christian nations, and not the least in our own country, is as extensive as infanticide ever was among the most degraded heathen nations. And while the former custom is in reality no less wicked than the latter, and should be no less revolting to the maternal feelings, it obviously exerts a much more destructive influence, often upon the life, always upon the health of the mother.

The civil law, in making a distinction between the criminality of the production of abortion before and after the period of quickening, opened the door for a very low estimate of the moral turpitude of the former act. And while in fact the spirit of the law seems now to be improving, the tendency of the practice of many otherwise most estimable physicians, and of some recent publications on this subject, serves rather to lower than to elevate the standard of moral sentiment in this respect. But since we are permitted to look into the most secret recesses of reproductive vitality, and to understand the true nature of conception, *as the wonderful marriage union of two distinct living forms into one which, though still dependent, is not more so at that moment than it is after the period of quickening,*—and since we realize that this new creation will, if undisturbed by the ruthless hand of the destroyer, *become a new creature,* we must reverence the higher law, and assume for ourselves, in this most important respect, the highest ground!

Those were noble words of our colleague, "from a child still-born we can hope nothing, *but a child born alive, however feeble,* MAY BECOME A MAN!"* "Modern physiological researches have left us in no doubt as to the precise point and time where and when the work of independent organization begins, which constitutes the distinct individuality of the new being. It is from the fusion or junction of the male and female principles, represented by the ovule and the spermatozoa. From that hour, soul and body, the subjective and the objective, in their mysterious union, are being created. The pure instinct of primal Christianity voiced itself in the grand words of Saint Augustine,—"*Homo est, qui futurus est:*" "What will be a

* Dr. C. Hering.

man, is one." The old civil laws taught it in their axiom,—"*Infans jam conceptus, pro jam nato habetur:*" "A child conceived is to be considered a child born." Modern science teaches it beyond all doubt. The British Parliament, in the new Salmon Act, discarding the old absurdities about quickening and viability, declares conception to be the proper date from which human life, in its entire sanctity, is to be estimated."* These remarks and quotations are intended to show that there is the same moral guilt, as there is the same destruction of a living child, in the improper production of ovular, embryonic and fœtal abortion, as there is in such unjustifiable induction of premature labor as would be acknowledged to be equivalent to infanticide.

The *moral aspect* of the question of induction of abortion, is thus forcibly presented by the same writer,—and we transfer to our pages *Dr. Holcombe's* own words, not only because they so admirably express the sentiments we wish to convey, but also from the hope that the name of one so widely known and so much esteemed in the Homœopathic ranks, may promote the adoption of principles which we cannot but regard as alike essential to the true dignity of the medical profession and to the best good of mankind. "The true moral position is this: The destruction of the ovum is always homicide, justifiable, perhaps, under a few extraordinary and painful conditions, after the failure of all reasonable medical and surgical means, and then imposing such solemn and fearful moral responsibilities, that it should only be accomplished after the mature deliberation and concurrent advice of several respectable members of the profession." *Holcombe.* "The procuring of abortion, under all circumstances, is a direct violation of the laws of the physical constitution, and almost always a violation of that holy commandment,—'Thou shalt not kill.'" *Professor A. E. Small.* The only substantial ground upon which the conscientious physician can justify the induction of abortion or premature labor to himself and to the moral sense of his fellow-men, is to be found the necessity which may exist of saving the life of the mother,—by this, as the only feasible means.

And the *legal aspect* of the question is not different. "If the fœtus be already, and from the very outset, a living human being, and existing independently of its mother, though drawing its substance from her, its destruction, in every stage of pregnancy, is MURDER. Every act of procuring abortion, rules Judge King, of

* Dr. W. H. Holcombe, United States Medical and Surgical Journal, vol. i., p. 390.

Philadelphia, contrary to the usual interpretation of the law, is murder, whether the person perpetrating such act intended to kill the woman, or merely feloniously to destroy the fruit of her womb."* Without undertaking to give the various forms of law and practice in the different nations of Europe, and States of our own country,—many of which may be found in the Treatise of Dr. Hale, already referred to,—suffice it to say that the induction of abortion can only become legally, as it only morally, justifiable, when it becomes the only means for the preservation of the mother's life.

The conditions which may require the induction of abortion at any stage of pregnancy, and the means by which such a result may be secured with least danger to the mother, will be considered in a subsequent section, on The Induction of Premature Labor.

Treatment of Anticipated or Threatened Abortion.

The anticipative treatment of abortion will consist in the removal by the appropriate medication of those constitutional dyscrasias,—sometimes apparently local, but always in reality constitutional and often hereditary,—which either have before existed, or have become developed under the influence of the pregnancy itself. In this connection therefore we have but to refer to the preceding chapters on the Diseases Peculiar to Women, and on the Disorders of Pregnancy. These include the first and second divisions of our classification of the causes of abortion. Those cases of still more imminently threatened abortion which arise under the operation of the third class, or independent influences, will in like manner require treatment especially adapted to each particular exciting cause and to each individual case.

Those cases which arise from physical violence, nervous irritability, or moral excitement, will of course require the most perfect quiet both of body and of mind. When the symptoms of an impending abortion result from the operation of drugs, they should be remedied by the exhibition of such antidotes as are most strongly indicated by the symptoms themselves. The removal of the cause, as rapidly as possible, will be found the best method of arresting the tendency to abortion which may arise from the attacks of diseases primarily local, or of those more general fevers of infectious, zymotic, or malarious origin.

The principal object of the physician, of course, should be to remedy the abortive tendency, to anticipate and prevent the attack, and when for the first time consulted at a more advanced period, to arrest if

* Vide Dr. Hale's Treatise on Abortion, p. 315.

possible the disorganizing and destructive process. But when the physician is called in too late, and it is evident that abortion must take place, he should treat the case very much as if it were *one of labor requiring especial attention.* For abortion, particularly when resulting from any of the wide range of causes enumerated above under the head of independent influences, is much more dangerous than ordinary labor. And in those most critical cases in which the mischief to the ovum is already irreparable, the careful administration of the Homœopathically indicated remedies will go far to moderate the violence of the symptoms, diminish the loss from hemorrhage and preserve the life and subsequent health of the mother.

In abortion, as in labor, the principal danger,—which is from hemorrhage,—arises after the expulsion of the fœtus, and from the retention of the membranes, or placenta. In these cases the efforts of nature must be assisted by the appropriate medicines; or the finger may be used to remove the membranes or placenta; or failing that, resort may be had to the placental forceps, to be subsequently described.—(See Induction of Premature Labor.) It is desirable to remove the ovum entire, if possible,—both from the greater ease with which this is accomplished by nature, and on account of the mischief which will inevitably result from the retention within the uterine cavity of any portion of the ovular membranes. But "as a general rule, the membranes remain after the expulsion of the fœtus; and the earlier the abortion, the longer the placenta or membranes have a tendency to remain. This is probably owing to the extended adhesion of the ovum to the internal superfices of the uterus, and the feeble power of the uterus to contract on its contents."—*T. Smith.* Sometimes the membranes of an early ovum will remain for weeks;—keeping up a more or less constant hemorrhage as before stated; and for this condition *China* has proved a most efficient remedy, being indicated by the very considerable loss of blood, and serving in a remarkable manner to arouse the expulsive action of the uterus. This indication for the selection of China has been strongly confirmed by the prompt results which followed its exhibition in some cases of long retained membranes, and consequent hemorrhage, in twin pregnancies.

The following remedies should be carefully studied;—and if the proper Homœopathic simile to the case in hand is not to be found among them, the search should be extended through the whole Materia Medica; for the medicine which presents the most perfect picture of the *tout ensemble* of the case, will not only do the most good, but will usually be the only one which,—in bad cases especially,—will do any

good. And both the dose itself, and the frequency of its repetition, should be made to conform to the nature and exigencies of the case, according to the best judgment and experience of the attending physician. The rule of Hahnemann, to wait for the exhaustion of the action of one dose before administering another, is as sound as it is universal in its application. But it is the particular application of this rule to each individual case which calls for the exercise of the closest observation and of the wisest discrimination. Since it must be evident that the action of a remedy adapted to relieve the most violent symptoms of an actual abortion, will be more rapidly exhausted than that of one calculated to cure in advance the constitutional taint or actual chronic disease which may predispose to abortion.

Aconite. If a pregnant woman has fright and the fear remains, and she cannot seem to get over it, she must take Aconite at once. Or if she have hemorrhage and fear of death,—is sure she will die; or she is very giddy on rising from a recumbent position;—she has to lie down again, she cannot remain up.

Apis. Stinging pains occur in one or the other ovarian region, more and more frequently till labor pains are produced; sometimes flowing and finally abortion. The urine is usually scanty and there is absence of thirst. Prolonged and difficult constipation is often connected with such cases. Apis will invariably relieve these symptoms, and pregnancy may then continue to the full term.

Arnica. In case of shocks, falls, bruises, or concussions, a pregnant female should always take Arnica at once. More particularly if she commences to flow with or without pain; or to have pains without flowing.

Asarum. Indicated in threatened abortion from excessive sensibility of all the nerves, so that from even imagining something unpleasant might occur, a disagreeable sensation thrills through her, momentarily arresting all her thoughts and functions.

Belladonna. A pressing towards the vulva, as if all the internal organs would issue therefrom. Pain in the back as if it would break. Flushed face, red eyes, throbbing carotids, and heat in the head. More or less discharge of blood from the vulva,—the discharge sometimes feeling very hot.

Bryonia. Discharge of dark red blood, pain in the back aggravated by motion; burning pain in the uterus; headache as if it would split. Pain all over, limbs and all; lips and mouth dry; thirst; desires to

keep still; nausea in sitting up. Constipation, the stool being dry as if burned, and difficult to evacuate.

Calcarea carb. Leucophlegmatic constitution. The history of her case reveals a disposition to hemorrhage; menses too often, too abundant and too long; cold and damp feet; vertigo. If we now find her threatened with a miscarriage, labor-pains, flowing, &c., we shall be likely to arrest her troubles with Calc. c., unless there are more decided symptomatic indications for another remedy.

Camphor. Particularly indicated in seasons of epidemic influenza, when females abort almost as generally as the influenza prevails. Especially if she have pale, loose and cold skin with general disposition to catarrhal discharges.

Cannabis. In cases where females have been affected with violent gonorrhœa.

Cantharis. The key-note for this remedy in such cases is an almost constant desire to urinate; sometimes ineffectual, but when successful only a few drops are passed, with cutting and burning pain.

Carbo veget. When the menses are usually too pale and too scanty; or too copious and premature, with a decided varicose condition of the genital organs.

Chamomilla. She has labor pains with more or less discharge of dark blood and *frequent urination*, the urine being profuse and pale. Her pains excite great restlessness and agony, and irritability of temper.

China. She has a sensation of distention in the abdomen as if it were packed full; she wishes to discharge flatus, but its evacuation either upwards or downwards affords no relief. If she has hemorrhages, see this remedy under Metrorrhagia, in a former chapter.

Cinnamon. After a false step, or a strain in the loins, the chief symptom is a profuse flow of red blood.

Cocculus. Much bilious vomiting; paralytic pain in the back, rendering the lower extremities almost entirely useless.

Conium. Much vertigo on turning over when lying down. Urine intermits at every micturition.

Creasote. Her hemorrhage seems to pass into a corrosive, ichorous discharge, and then to freshen up again and go on.

Crocus. Her discharge is composed of black strings.

Dulcamara. Where the threatened miscarriage has been induced by exposure in a damp cold place, as in a milk-house or cellar.

Ferrum. Flowing and pain, with a fiery red face.

Hyoscyamus. She is delirious and rather spasmodic, with rigidity of the limbs. She loses her sight and hearing. She may at the same time discharge bright red blood with labor-like pains.

Ignatia. Much sighing and sobbing; suppressed grief has been the exciting cause.

Ipecac. The key-note for this remedy is one continual sense of nausea, without a moment's relief; or pain about the umbilicus passing off into the uterus; or a continued and profuse flow of bright red blood. Either of the above symptoms are an almost positive indication, and when present this remedy will nearly always cure the entire case without resort to any other remedy.

Kali carb. If the labor-like pains commence in the back and pass off down the thighs, or if the pains are more like stitches.

Lycopodium. The abdomen is in a constant state of fermentation, or her pains are shooting from right to left, across the abdomen. Or she has intolerable pain in the back before passing water, with almost entire relief as soon as the urine flows.

Nux mos. Suitable to hysterical females who are disposed to fainting spells. Mouth and throat are very dry; the tongue sticks to the roof of the mouth.

Nux v. Every pain produces a desire to defecate and to urinate, particularly the former,—this is an almost certain indication. She is in a very irritable condition from high living, drinking wine, &c. Constipation of large difficult stools, or small and frequent stools with pain in the anus.

Phosphorus. Particularly applicable in tall, slender persons. Great sense of weakness in the abdomen. Stools narrow, long, dry, and difficult.

Platina. Discharge of a quantity of thick black blood. A tremulous sensation extending from the vulva into the abdomen. The mons veneris and vulva feel cold and sensitive to the touch.

Plumbum. Constipation, stools in balls like sheep's dung; much depression of spirits, pain drawing from the abdomen to the backbone as though the abdomen were drawn upwards.

Pulsatilla. When the discharge is arrested for a little, then returns with redoubled violence; this cessation and renewal is frequently repeated. Mild and tearful females, of yielding temperament, are most easily affected by this remedy.

Rhus. When the patient has been wrenched or strained; as when she slips and is strained in trying to save herself from falling, or in lifting. Her pains at first are worse at night, particularly the last

part of the night; and she is restless and must move frequently to find relief.

Sabina. This remedy seems particularly applicable to cases of abortion occurring habitually at the third month. The pain extends from the back directly through to the pubis. The discharge is profuse, with about equal proportions of clotted and of fluid blood.

Secale c. In feeble, cachectic women, having a wan, fearful countenance, pulse almost extinct, fear of death, copious flow of black liquid blood, and convulsive movements.

Sepia. She has yellow spots on her face; a yellow saddle across the bridge of her nose. She has a sense of weight in the anus; constipation, stools mixed with slime, great urging and involuntary straining, often ineffectual. This sense of weight, like a heavy ball when well marked, is almost an unfailing symptom; and is almost always present when Sepia is indicated.

Silicea. Is particularly indicated where there are spinal affections and constipation of difficult stools, as if the rectum had not power to expel them,—and where the stool recedes after having been partially evacuated.

Stramonium. Threatened abortion, with unceasing loquacity; she talks, prays, implores, sings,—constantly uttering something.

Sulphur. She has frequent flashes of heat; cold feet, heat on the top of the head; weak fainting spells; eruptions upon the face and other parts of the body, leucorrhœa, &c.

Veratrum. This medicine is indicated where there is nausea, vomiting, and diarrhœa at every menstrual period; or exhausting diarrhœa. With every pain there is a cold sweat upon the forehead.

Zinc. There is much restlessness of the feet and legs; or a sort of fidgety condition attending her symptons of abortion.

CHAPTER THIRTY-FIRST.

LABOR.

LABOR, or parturition, completes the grand function, of reproduction; and by it, either spontaneously, or by nature, by art, or by both conjoined, the new being is ushered forth to assume an independent existence with all other isolated existencies.

Labor is considered natural or spontaneous, when it is accomplished by the unaided powers of nature; and artificial or unnatural, when manual assistance is found necessary. Labor is also considered timely or at term, when it occurs at about the expiration of the ninth month of utero-gestation; premature or untimely, when it occurs at any time between the first of the seventh month and full time. Provoked labor is one which has been produced by some mechanical cause, either accidental or designed. A retarded labor is one that is delayed beyond nine and a half or ten months of gestation.

PREMATURE LABOR.—Premature labor may result from a great variety of causes, accidents of any kind, diseases incidental to the pregnant condition, or others, as described in the chapter on Abortion. For the precautions and remedies to be employed, in case of threatened premature labor see also the preceding chapter on Abortion. It may be stated here however that all women should use extra precautions at about the seventh month of gestation. In premature labors the first stage is usually longer in proportion than the second, which latter is generally longer than a labor at full term. Also vertex presentations are far less frequent, and cross, breech, or irregular presentations are much more frequent. Another proof that the fœtus takes the most natural presentation and position from an inherent disposition on the part of the mother to secure this result. There is great danger from hemorrhage in premature labors; consequently more need of quiet rest from the first symptoms, and ever after till all danger is past: and so much the more need of carefully selecting the proper remedy.

RETARDED LABORS.—The ordinary time for gestation is two hundred and seventy-five days; but as there are exceptions to all other rules, we might naturally conclude they would be found here also.*

* T Smith's Obstetrics, p. 212.

Accordingly investigation has been made, and out of forty-three instances of conception after a single coitus, collected by Dr. Reid, all of them resting upon testimony as credible as can be obtained in such cases,—of which the average duration of gestation was two hundred and seventy-five days,—three were delivered at the 280th day; two on the 283d day; one each, on the 284th and 286th days; two on the 287th; one on the 291st; two on the 293d, and one each, on the 296th and 300th days. According to the French law, every child born after the one hundred and eightieth or before the three hundredth day of marriage is considered legitimate.*

Natural Labor at Term.—In the study of this subject, two orders of facts must be separately considered, the one regarding the physiology of labor on the part of the mother; the other consisting of the movements which the child must execute in order to promote its passage from the uterus through the organs of generation. The former is to be regarded as purely functional; the other as simply mechanical. Let us first consider the subject functionally, with reference to the vital action of the mother.

Causes of Labor.—These causes of labor have been divided into the efficient and the determining causes. The efficient causes are unquestionably the vital energies of the mother, brought to bear in every possible manner upon the child for its expulsion, and at the same time to open up the way as much as possible for its exit. The uterus itself, acting involuntarily, is the chief agent in the expulsion, aided more or less by the voluntary efforts of the mother; while at the same time an involuntary dilatation is effected of the os uteri, vagina and external organs. All these processes on the part of the mother are purely functional and involuntary, as much so as are the processes of conception, gestation, digestion, nutrition, etc. The efficient cause of the labor is in fact only the last part of the grand function of reproduction. How important then that this most sacred function should not be disturbed by any influences whatever; but should be sedulously watched over by a careful and skilful Homœopathic physician, ready to administer the proper remedy for whatever deviation from the normal condition may occur. How different when the blood is poisoned and the senses stupefied by anæsthetics; how impossible then for the mother to give the alarm, or for nature to respond and furnish the symptomatic signs of danger till it is too late!

* Cazeaux, p. 378

The determining cause may be any influence by which the efficient cause is set in motion. At the full term, when the woman should be delivered, the determining cause becomes spontaneous; the grand function of reproduction is about to be completed; and here as in all other vital processes there is no delay; the work constantly advances till parturition terminates and completes to the very last the great process of reproduction. At the full term, or even a few days before, various kind of accidents, diseases or mechanical means may become the determining cause, by arousing the efficient cause in the contractive and expulsive action of the uterus; but this function of parturition will not be so safely or so easily accomplished when thus excited by external influences, as when it begins in a perfectly natural and spontaneous manner.

The Physiology of Labor.—The phenomena of labor may be arranged in three distinct groups or successive stages. The first including the whole period from the commencement of the labor to the complete dilatation of the os uteri; the second extends from the dilatation of the os uteri to the expulsion of the child; the third terminates with the final delivery of the placenta.

I. *The First Stage.*—The approaching termination of gestation is indicated usually by various symptoms called precursory signs of labor. About the last two weeks a change becomes perceptible in the form of the abdomen. Its sides become more projecting as the uterine tumor sinks from the region of the stomach and epigastrium; so that respiration becomes easier and food can be taken with less discomfort. And in many respects the woman feels lighter, better and easier. This change results from the cavity of the body and of the neck of the uterus being blended into one by the softening and giving way of the os internum uteri. The calls to urinate now become rather more frequent; the sleep is more broken by restlessness, and walking becomes more difficult. The woman becomes more clumsy; and a little later, glairy discharges take place from the vagina, which simply show an increased action of the muciparous glands preparatory to the final act of parturition.

Finally the first stage is ushered in by painless contractions, which after a while become somewhat painful, and finally more and more so. The mucous discharge often becomes more or less tinged with blood; the os uteri dilates more and more with every orderly contraction; the parts become bathed with moisture, and the upper portion of the vagina gradually dilates simultaneously with the os uteri. During this stage the female may walk about, sit, or lie down,

as she finds most comfortable. Her respiration is usually continuous with every pain; there may be a sort of shivering-like respiration; at times violent shiverings and shudderings seize upon her, although she does not feel cold, and she wonders why it is she shakes so. This shivering is one of the phenomena most usually witnessed during an orderly first stage of labor.

II. *The Second Stage.*—This is at once marked by a change in the respiration; instead of the shivering-like respiration continuing during every pain, the breath is held in as when making an expulsive effort at stool.

Up to this time the only muscles concerned in the contractions have been those of the uterus itself. Its fibres have been employed in assisting in the dilatation of the os uteri; and when this is sufficiently accomplished, all the muscles of the trunk become engaged in the last act of reproduction. Hence the involuntary suppression of the respiration during the pain, and the expulsive efforts of every muscle in the trunk, including the diaphragm, to bring the new human being to light.

As one contraction or pain succeeds another, the liquor amnii forces the membranes to yield, and they bulge into the vagina, forming a sack, or what is called the bag of waters, which finally ruptures, when the child is driven onward with more rapidity than ever, the floor of the pelvis gradually distends before the presenting part, till at length the vulvæ become distended more and more with every pain; until finally the head bursts through, followed presently by the remainder of the body, and the work of reproduction is accomplished.

III. *The Third Stage.*—Before proceeding to the more extended consideration of the second or most important stage of labor, it will be proper to notice in brief the phenomena of the third. These consist in resumption of the expulsive pains, usually after an interval of from fifteen to twenty or thirty minutes, or even more, after the birth of the child. By these contractions, the placental mass is gradually detached from its adhesion to the uterine wall; and expelled from the uterus into the vaginæ, or completely without the body. The subsequent pains, after-pains, serve the important purpose of completing the contraction of the uterus, and, by thus covering up the open mouths of the blood-vessels, (uterine sinuses,) of arresting the hemorrhage which otherwise would soon prove fatal.

A *pain* in labor signifies the contraction of such muscular fibres as are concerned in giving birth to the child; and the sensation of

pain produced in such contractions results from pressure upon the nerves distributed in the tissues, especially of the uterus itself, thus contracting. The sensation of pain is felt in the back, abdomen and elsewhere, by virtue of reflex action, by which the seat of the pain is located at the central origin of the nerves themselves, rather than at their peripheral terminations. During the entire course of the parturition, the child takes no part in its delivery, it is entirely submissive, as it has been during its entire stay in the uterine cavity; it is entirely neutral and passive, and is expelled entirely by the last act of reproduction on the part of the mother.

The more active the muciparous glands in this vital act, the more easily is the child brought forth; the abundant glairy discharges rendering the labor a moist one and comparatively easy; where little or none of this mucus is secreted the labor is called dry, and is consequently more painful and tardy.

The bag of waters, known as such, is simply the amnion and chorion distended in advance of the presenting part of the child, by the bulging of the liquor amnii in consequence of the pain.

The duration of labor is exceedingly variable,—even when no obstacle seems to oppose the delivery,—from one hour or to a week; and between these two extremes there is every intermediate grade. In general, labor is longer in primiparæ than in those who have had many children, or are nearer the climacteric period of life. As a general rule, the average length of time may be set down at from six to twelve hours. The duration of the labor is expected to be announced as soon as an examination is made per vaginam. But much caution should be used in this matter, for it is discouraging to the patient to overrun the specified time. After the first stage is passed, the second will be two or three times shorter, other things being equal, the diameter of the straits all being normal and there being no undue rigidity of the soft parts. In other cases, the time will vary, according to the changed conditions. It is, after all, utterly imposible to predict the time of delivery with certainty.

The Effect of Labor upon the Mother and Child.—On the part of the mother there is often much despondency at the commencement of labor; and during the first stage there is apt to be more or less distress of body and mind,—a feeling of despair, as if she could not endure to the end. But, as soon as the second stage sets in, the patient nearly always raises her spirits, she becomes more hopeful and bears her pains, and voluntarily exerts herself, with confidence

that she will be delivered all right. She often perspires profusely and becomes much exhausted during labor. The whole process of parturition is certainly very shocking to the nervous system, and there is danger of great prostration during delivery, similar in effect to that produced in persons sustaining a severe mechanical injury, —even a complete collapse may sometimes occur. Great care is needed, immediately after the completion of this great event, that the patient get quiet sleep as soon as possible. She should not be allowed to talk, and much less should the accoucheur try to have a little pleasant conversation with her after the labor is over. Such a course cannot be too severely censured, since it may be attended with fatal consequences. A little sleep makes all safe.

On the part of the child, the effect of the labor varies with its severity and its duration. And the shock of the compression of the uterine contractions is more severely felt upon male than upon female children, as before stated; in many cases, the sad effects are immediate; in others, more remote, and proportionally more injurious.

The mechanical phenomena of labor have relation strictly to the child. It is very evident, from the knowledge we possess of the form and mechanism of the pelvis and also of the child, that there must be a mechanical adaptation of the latter to the former, in order that it can be born; and that, in order to secure this result, there must be certain presentations and positions at the superior strait.

Almost any part of the child may present at the superior strait, making almost an infinite variety of presentations; but, for all practical purposes, it will be sufficient to describe only five. For, when the accoucheur recognizes either of these, he will be able to determine what, if any, mechanical means may be needed to produce relief.

Each of the five presentations may have one of six positions,—as for instance, in the vertex presentation, the occiput must lead the way in labor, since it is one end of the head. Then we describe the occiput as being in the left iliac region, anterior, transverse, or posterior; or the right iliac, anterior, transverse, or posterior. That is to say, the position is left occipito-iliac, anterior, transverse, or posterior, according as the occiput is in the left half of the pelvis and at the ileo-pectineal eminence, exactly transverse across the pubis, or at the sacro-iliac symphysis. The same terms would be applicable in all respects, if the occiput were in the right half of the pubis, and at those various points respectively.

In *facial* presentations the chin would lead, then of course the position would be styled, right mento-iliac, anterior, transverse, or posterior, if in the right half or the left mento-iliac, anterior, transverse or posterior, if in the left.

In presentations of the *breech*, the sacrum is the point of departure, and is called according to circumstances, the right or the left sacro-iliac, anterior transverse or posterior, position.

In presentations of the right lateral plane, the head must be either in the right or left half of the pubis, and the position must be called the right cephalo-iliac, anterior, transverse or posterior, according to circumstances; and similarly in the left half of the pubis. In presentations of the left lateral plane, the same terms, according to circumstances, must express the position with sufficient accuracy for practical purposes. Each of these presentations will now be particularly explained.

The Vertex Presentations.—This occurs very much more frequently than all the others put together; for instance, of twenty-two thousand five hundred and thirty-seven carefully observed cases, only eight hundred and fourteen were found to be of any other presentation. And of the vertex presentation the very much larger proportion of cases is found to be in the left occipito-iliac anterior position. This position, which occurs the most frequently, is found to be the easiest and most natural of all.

The diagnosis of the vertex presentation is made out by feeling a large, round, hard, smooth tumor, while examining per vaginam, either at the superior strait, or descending into the cavity of the pelvis. The stethoscope will also reveal with much certainty the presentation of the vertex, by the beat of the fœtal heart being heard low down in the abdomen. The vertex presentation being made out, it remains to define the position by means of the position of the fontanelles and sutures.

By carrying the finger a little backward and upward on the head the sagittal suture will be encountered, and if it runs from before backwards, from left to right, and if the anterior fontanelle is towards the right sacro-iliac symphysis, the position must be left occipito-iliac anterior. But if the anterior fontanelle is found to be at the left ileo-pectineal eminence, the position must be right occipito-iliac posterior. Either fontanelle, anterior or posterior, may be ascertained by tracing along on the sagittal suture each way, backwards or forwards. In this manner are all the positions of the vertex presentations ascertained.

The mechanism of labor where the position is with the occiput in the left half of the pelvis, is usually the same in all cases. The occiput being left anterior, transverse or posterior, the contractions having begun and the liquor amnii having partially escaped, the first effect upon the child is to flex the head more perfectly upon the chest, which constitutes the first stage in the mechanism of labor. This has the effect to bring the long diameter of the head in harmony with the axis of the superior strait. The second stage is completed when the head descends into the cavity of the pelvis till its crown presses upon the plane of the pelvis. The third stage and rotation is accomplished from left to right, till the progress of the head is arrested by the back of the neck resting upon the symphysis pubis. During the fourth stage, extension of the head upon the neck takes place, and the head is born by the occiput slipping up in front of the symphysis pubis, and the perineum retracting from over the forehead, face and chin of the child. Now the fifth and last stage in the mechanism of labor is accomplished, by the shoulders rotating into the long diameter of the inferior strait, which produces external rotation of the head, and the child is delivered.

It will be observed that the external rotation of the head is not an isolated fact, but that it is in consequence of the shoulders rotating in the inferior strait; and that this corresponds to the previous rotation of the shoulders in the superior strait simultaneously with this rotation of the head in the inferior strait. The face in these positions always appears on the right thigh of the mother. The right, or anterior shoulder is the first to appear in the fissure of the vulva; but the left, or posterior shoulder, is the first to be set free by means of the perineum retracting from it, and it is thus in reality born first.

The mechanism of labor, the occiput being in the right half of the pubis, whether it be anterior, transverse or posterior, is all the same usually as that just described. The same stages are passed through, but the rotations are now all from right to left; and consequently the face will appear at the left thigh of the mother, instead of the right, as in the former case. When the occiput is at the right iliac sacral symphysis, it should always rotate to the front and appear under the arch of the pubis, precisely the same as when it is at the left sacro-iliac symphysis,—which it sometimes fails to do, but slips into the hollow of the sacrum and remains behind till the completion of the labor, when the forehead appears under the arch, and the occiput is first disengaged at the posterior commissure of the vulva.

It sometimes happens that when the occiput is in the hollow of the sacrum, the head becomes gradually extended and the presentation becomes converted into one of the face.

Inclined, or irregular vertex presentations, are usually aided in recovering a regular presentation by changing the mother's position upon the same side of the inclination; thus if the sagittal suture is inclining far upon the right side, by turning the patient upon the right side, the child's body will fall down upon that side, and the inclination be rectified at once.

After the birth of the child, if inspection is made at once, it is always easy to tell the position it occupied from the sero-sanguineous tumor upon that part which presented. For the presenting part not being in contact with any thing, and pressure being made upon other parts, the fluids are forced into this part; all of which soon subsides after the birth of the child. This sero-sanguineous tumor need not be mistaken for the cephalæmatoma; for the former exists at birth, the latter does not appear for some hours after; the former is large and purple; the latter smaller, the skin not discolored, it is fluctuating or pulsating and has an osseous border. The sero-sanguineous tumor does not exist if the child perishes long before birth,—from which fact a medical jurist can draw an important inference in fixing upon the time of the death of a newly-born child.

Facial Presentations.—According to Allopathic authority, this presentation occurs about once in three hundred labors. The head, instead of being flexed upon the chest, is extended upon the neck, so that the face looks right down into the superior strait. In vertex presentations the occipital end of the long diameter leads the way in parturition; now in facial presentations the other end of the long diameter must lead the way, that is the chin,—of course then the chin must become the point of departure. Then we have the left mento-iliac, anterior, transverse or posterior; or the right mento-iliac, anterior, transverse or posterior.

The cause of this unnatural presentation, except when it is produced by the accidental exchange of other presentations, can only be accounted for as the result of some previous conditions of the mother,—which may be beyond our power to designate exactly.

This presentation, of the face, is diagnosed by feeling the depression of the eyes, the prominence of the nose, the mouth and the chin, and more especially by feeling the double gums and the intervening tongue. The relative position of the chin will also determine the exact position in this presentation.

Mechanism.—As the right mento-iliac transversus is the most frequent of any of the facial presentations, we will describe the mechanism in this for all the others,—since they are similar,—only it should be remembered that the rotation will be from right to left, or the reverse, according as the chin is in the right or left iliac regions. After the liquor amnii has been discharged and the expulsive pains begin to operate, the first effect is to produce forced extension of the head upon the trunk, so that every pain has a strong tendency to break the child's neck backwards. Descent now goes on, the chin leading the way, till its farther progress is obstructed by the breast coming in contact with the superior strait. Now rotation must commence and continue till the chin comes round in front sufficiently for the length of the neck to span the depth of the pelvis and the chin to pass under the arch. By this time complete descent and rotation have taken place, for the depth of the pelvis is here so shallow as to allow the neck to span it completely, and the crown of the head rests upon the floor of the pelvis, and this is the only point at which such a result can be obtained.

Flexion now begins to take place slowly around the symphysis, as a centre; and finally the chin rises up in front of the symphysis pubis, and the crown of the head descends on the anterior face of the sacrum and coccyx, and is finally disengaged at the posterior commissure of the vulva. External rotation is effected by the shoulders rotating into the inferior strait. Internal rotation causes the shoulders to place themselves in the long diameter of the superior strait. By no other means can a viable fœtus be born, in facial presentations, than that rotation shall bring the chin under the arch of the pubis,—unless the presentation itself should be changed into one of the vertex, or some other. Sometimes this actually does spontaneously take place, by the chin, when it is posterior, engaging in the sciatic notch; the progress of the child continuing, gradually flexes the head upon the trunk, and the vertex appears under the arch of the pubis, as in original vertex presentations. Inclined, or irregular facial presentations,—when the chin, or one cheek is found in the centre of the superior strait,—by continued contractions gradually regain the normal face presentation.

Facial presentations are by no means so safe for mother or child as are those of the vertex; yet in a very large majority of the cases they terminate favorably to both. The position is such that at every contraction the expulsive force upon the child is much diminished by the rolling back of the head upon the spine. Dilatation and rotation are

not effected so rapidly on this account, and the child must of course remain, as a general thing, much longer in the pelvis.

Presentations of the Pelvic Extremity.—We class as such presentations all those of the feet, knees, and breech, since in labor the same mechanism pertains to all alike. In the breech presentation, the sacrum forms the point of departure for determining the relative position; the anterior face of the tibia in presentations of the knees; and the heels, in footling cases. As in the vertex, or face presentations, the positions may be left sacro-iliac, or right sacro-iliac, and of the anterior, transverse or posterior varieties. Presentations of the breech are much more frequent than those of the face, and very much less frequent than those of the vertex; thus of sixty thousand four hundred and twenty-two cases reported, two thousand and eighty-two were breech presentations.

A breech presentation may be recognized, on digital examination, by feeling the cleft between the nates, instead of the sagittal suture, as in the vertex; in addition we find in the anus with its sphincter, instead of the fontanelles, a positive and not to be mistaken characteristic symptom. The coccyx and sacrum will enable us to decide as to the part of the pelvis they occupy, and consequently to determine the position exactly,—when the feet, or one foot, presents, the heel will enable us to decide as to the position. It must be recollected that a foot is articulated at right angles with the leg,—which fact alone will enable us to decide between the hand and foot,—since the hand is in a straight line with the arm. The knees seldom present; but when they do it is easy to make them out from the popliteal spaces.

The Mechanism of Breech Presentations.—The sacrum being left sacro-iliac anterior, and the membranes ruptured, the first stage is one of descent to the floor of the pelvis, the child's legs, arms, and chin being folded in the same position as in the vertex presentation. The next stage is one of internal rotation, where the left hip comes under the arch of the pubis, and at the same time the shoulders are made to come into the long diameter of the superior strait. The next stage is the expulsion of the breech, during which time the child is strongly flexed upon its left lateral border, to correspond to the curve in the excavation of the pelvis. As the breech is delivered, the body descends with the arms folded up, and the chest and shoulders rotate into the long diameter of the inferior strait, the long diameter of the head passes through that of the superior strait, and finally rotates itself into the long diameter of the inferior strait; and the head is

born with the chin still strongly flexed upon the chest, and the back of the neck and the occiput under the pubic arch.

If the breech is in the right sacro-iliac posterior, the mechanism is the same, only rotation occurs from right to left. If the feet appear first, or the knees, the mechanism is still the same, as in the former, breech positions. Sometimes it occurs that rotation is reversed, so as to bring the occiput into the hollow of the sacrum, in which case the face will appear under the arch of the pubis, and if the chin remain flexed upon the chest, all will go on well.

Presentations of the feet, knees or breech, are more tedious and consequently rather harder for the mother than are those of the vertex. The largest part escaping first, the smaller quite easily follows; but he smaller escaping first, there is less remaining in the uterus with which to force out the most difficult part. For instance, if all but the head escapes, it often becomes a difficult matter to expel that, for want of leverage or purchase power in the uterus itself.

The child itself is much safer in vertex presentations. This is true in the first place on account of the cord, which is more likely to become compressed and strangulated in breech presentations,—an accident from which the child necessarily perishes. For after the breech and abdomen are born, up to the navel, the cord must be more or less compressed till after the delivery of the head, since the placental extremity of the cord extends of course far above the head, even to the fundus of the uterus. Another danger to which the child is exposed in breech presentations arises in this manner; the smaller part escaping first, the uterus becomes sufficiently emptied to allow the contractions to detach the after-birth before the head is expelled, and the child perishes from asphyxia. Thus it is evident that it is very much safer for the child to have the head expelled first.

Presentations of the Trunk.—These are all comprised under presentations of the right lateral plane, or in those of the left lateral plane, back, anterior or posterior. The head is always taken as the point of departure, it being either in the left or in the right half of the pubis,—constituting the left cephalo-iliac, or the right cephalo-iliac; in each case the back is either anterior or posterior. It is quite common to find the hand, or the hand and arm in the vulva in either of these positions; but this is of no account, as it neither alters nor complicates the matter at all. This presentation occurs rather more frequently than do those of the face; many estimates have been made, but a fair average would be about one in one hundred and fifty cases.

A failure on the part of nature to place the child in a more auspicious position, is the only assignable cause for so unfortunate a condition.

The shoulder is usually the first point touched in making a digital examination. The acromion process is distinctly made out, and then the clavicle, the spine of the scapulæ and the axillary space, all combined, and always within reach of the finger, confirm the presentation to a certainty. All these being made out, we can tell the position of the child, for the axillary space always looks away from the head, and the clavicle will also tell where the face is, as the scapula will tell where is the dorsal region of the child.

When the elbow alone is accessible to the finger, it can be recognized by three protuberances; the olecranon process and the two condyles; and also by the transverse space in the bend of the elbow and by the vicinity of the chest and the intercostal spaces, for the arm is always found lying upon the chest. The elbow always points away from the head, and the forearm is always on the anterior plane; thus we at once know where the head and face are when we diagnose an elbow.

If the forearm is not doubled up, but lies in the vagina, by turning the palmar surface upwards and in front, the thumb will always indicate which hand it is by its being next to the corresponding thigh of the mother, and then to determine where the head is, it will be necessary to slip the finger up to the axillary space.

When the hand comes out of the vulva, its dorsal surface will always correspond with the direction of the head, and the little finger with the dorsal surface of the child.

The presentation of the trunk at the superior strait is always an indication for manual treatment. Still under certain circumstances a spontaneous delivery may take place, and this is effected either by spontaneous version, or by spontaneous evolution. Of spontaneous version there are two varieties, one cephalic, the other pelvic. In the former, where the shoulder presents, the trunk ascends under the influence of the uterine contractions, and the vertex comes into the superior strait; in the latter, the head ascends into the fundus, under the same influence, and the trunk comes into the superior strait;—and in either case of course a spontaneous delivery is effected.

*Spontaneous Evolution.**—"The mechanism of *spontaneous* evolution is much better understood; and in its description we shall find all

* Translated from the French of Cazeaux, p. 471.

the divisions of the mechanism of natural labor in the presentations of the vertex and face. M. Velpeau admits a spontaneous cephalic, and a spontaneous pelvic evolution. But since we can conceive of a spontaneous cephalic evolution only in abortions, or in cases where the fœtus is completely putrefied, we shall speak of the pelvic evolution alone.

Take, for example, the first, or left cephalo-iliac position of the right shoulder. In this variety we find the cephalic extremity is placed in the left iliac fossa; the breech in the right iliac fossa; the dorsal plane of the fœtus being in front, the sternal plane behind;—so that its long axis is almost exactly in the direction of the transverse diameter.

Immediately after the rupture of the membranes, the waters almost entirely escape; the uterus forcibly contracts and pressing in every direction upon the trunk of the fœtus, tends to engage the presenting part in the excavation.

A. Under the the influence of the uterine contractions, the fœtus in its long axis is strongly flexed upon the side opposite to that which presents;—in the case proposed, the head is turned towards the left side, and the breech towards the hip of the same side. This first change in the situation of the fœtus may be designated as the *movement of lateral flexion.*

B. Then begins a second period, which we may term the *period of descent;* that is to say, as the contractions are renewed the shoulder tends more and more to approach the inferior strait, and the trunk bent double engages itself deeply in the excavation. But here appears the same difficulty as in presentations of the face, (see position of the face,) that it is impossible for the shoulder,—the trunk being thus placed transversely,—to reach the inferior strait unless the head at the same time engages with it in the excavation; or unless the neck should be long enough to reach the whole length of the lateral wall of the excavation, which we have already seen to be impossible. The descent of the shoulder is governed, then, by the length of the neck.

C. Then follows a movement of rotation, by means of which the long axis of the child, originally transverse, assumes almost exactly an anterior-posterior direction, so that the head rests above the horizontal ramus of the pubis, near its spine; and the breech above, or rather in front of the sacro-iliac symphysis. The movement of rotation being accomplished, that of descent may now be completed; since the side of the neck is placed behind the symphysis pubis

equalling its whole length. Thus the forearm and arm make their appearance at the vulva,—the arm and shoulder having passed under the arch of the pubis.

D. Under the powerful efforts of the uterus, the trunk, bent double, is pressed into the excavation; but the shoulder can descend no farther, because it is arrested by the shortness of the neck. The expulsive force acts upon the pelvic extremity, forcing it more and more towards the floor of the pelvis and causing it to traverse the anterior face of the sacrum, till finally it reaches, depresses, and drives the perineum before it. Presently the vulva dilates, and,—the *acromion remaining fixed under the symphysis*,—the superior and lateral portion of the chest, the inferior part, the loins of that side, the hip, the thighs, and finally, the whole extent of the lower limbs, successively make their appearance at the posterior commissure of the vulva. And the head and left shoulder only remain in the excavation, and these parts are extracted or expelled without difficulty. This last movement may be considered the fourth stage of the labor and may be named the stage of *deflexion* or disengagement. This movement has for its centre, the shoulder engaged beneath the symphysis; and if from this centre we extend lines to all the points of the side of the fœtus, we shall have here the radii which subtend the anterior-posterior diameter of the inferior strait.

This is, very exactly, the mechanism of the spontaneous evolution in those cases in which the posterior plane of the child was primarily in front; that is in the first position of the right shoulder, and in the second position of the left. For in this latter, there is this difference only, that the movement of the rotation must be in the opposite direction, that is, the head must turn from the right to the left, and from behind forwards, and the breech must turn from left to right and from before backwards.

But where the sternal plane of the fœtus is originally turned forwards,—as in the first position of the left shoulder, and in the second position of the right,—the movement is somewhat different. M. P. Dubois, who had an opportunity to see two such cases, states that at the moment of the disengagement of the breech at the anterior perineal commissure, the entire trunk of the child experienced a movement of torsion, that brought the dorsal plane of the fœtus still farther forwards and upwards, which, without this movement, would have been directed towards the anus. Thus it happens, and we cannot but declare it a very remarkable circumstance, that even here we find the same general law, that we have already seen to regulate

every natural labor, *that whatever may be the primitive situation of the posterior plane of the fœtus, it ultimately places itself in relation with the anterior parts of the pelvis.*

As was observed at first, it is easy to submit the mechanism of spontaneous evolution to the same divisions as the delivery by the face. We have, in fact, a first period of *flexion* of the trunk of the fœtus towards the side opposite to that which presents; a second one of *descent*, interrupted by the third movement or stage of *rotation;* a fourth period of *deflexion* or *disengagement;* and according to the observations of M. Dubois, for the dorso-posterior positions, we may add a fifth movement, or period of *exterior rotation.*

Such is the account given by M. Cazeaux; illustrated by cuts from the same work. Of course no one at the present day would think of allowing any of these unnatural presentations to continue for the sake of observing a possible spontaneous evolution. Speedy interposition should be instituted, for the humane purpose of saving both mother and child.

CHAPTER THIRTY-SECOND.

THE CARE OF THE WOMAN AND OF THE CHILD DURING LABOR.

The Care of the Woman during Labor.—When summoned to attend upon a case of labor, it is better to go provided with a male and a female catheter, a pair of forceps, and a blunt-hook. Emergencies may arise requiring in haste the use of one or more of these instruments, and no time should be lost in sending for what might so easily be taken in the first instance. Our little pocket-case of medicines we take with us, of course; for we should never go to church even without this potent weapon against evil.

Before entering the room our arrival should always be announced; that we may not shock our patient by our unexpected entrance. We should take especial care to be ourselves in a happy frame of mind that we may appear in an easy, unaffected manner. And we should have no other thought in our mind than to attend strictly to our business in as agreeable a manner as possible.

First we should inquire into the nature of the pains, with a view to prescribe for any abnormality that may appear in the sufferings of our patient (see Dystocia). After observing attentively, without seeming to look at the woman, the nature of her pains, we may, when we think it necessary, propose an examination per vaginam, in order to observe the condition of the internal organs, the presentation, &c.

It may not seem out of place to observe that the first object of search will be to see if the woman be pregnant; for it has sometimes happened that every preparation has been made for parturition when no pregnancy exists. The writer has met with such cases where the real facts were not revealed until examination was made per vaginam, as if to ascertain the presentation.

Having then determined the existence of pregnancy, the next thing is to learn if the patient is in labor, or whether she have not, instead, certain abdominal or lumbar pains, called "false pains." If she is really in labor, we shall find, on retaining the finger in the os uteri during a few pains, a rigidity and tenseness of the os accompanying every contraction, and followed, after the pain, by a corresponding looseness and state of relaxation. Or if the membranes are entire and become tight and firm under the contraction, relaxing as it passes off, the woman is certainly in labor.

The next step is to inquire, if she is at full term. This inquiry will of course be settled in our own minds affirmatively, if we find the neck of the uterus absolutely blended or spread out into the globe of the uterus. The internal os will not be felt,—the orifice leading to the membranes now being simply that of the os tincæ. If the internal os still remain closed or partially so, the cervix uteri will also be capable of being distinguished, as the full term has not arrived; and we must hasten, as in threatened abortion or premature labor, to arrest all further progress by means of quietness and the exhibition of the proper Homœopathic remedy.

The next question to determine is, are the membranes ruptured? And this is not always an easy task, since they are sometimes so closely drawn over the scalp as to deceive a new practitioner. But during a pain,—unless the head has already descended low down in the excavation,—so much water will be forced down between the membranes and the scalp, as to make it quite apparent that the former are still intact. And besides, there is a certain greasy smoothness perceptible in the touch of the unruptured membranes, which differs from the sensation experienced in feeling the hairy scalp of the child. Bearing these things in mind, we never need be mistaken, if we press

firmly down upon the scalp; for the rough, hairy condition of the uncovered scalp is never simulated by the unbroken membranes.

Next we wish to determine how far the labor has advanced, and what part of the child presents. In *primiparæ* particularly, it is not always easy to find the os uteri; for sometimes it is not discoverable till we carry the finger far upwards and backwards, upon the anterior face of the sacrum,—nearly up to its promontory. In such cases it may be necessary for the female to lie on her back till the anterior obliquity disappears; and this can be aided by the accoucheur elevating the fundus with one hand applied externally, and with a finger of the other hand in the os to draw it down.

If it now appear that we have a timely labor to treat, it will be necessary to provide for it accordingly. Where we can have our choice, the woman should be placed in a large, airy chamber, exposed to the sunny side of the house;—and as much retired as possible, the above more important points being secured. The temperature of the room should be about sixty-five degrees during labor; about seventy degrees afterwards; the covering should be sufficient for the comfort of the patient. A strict adherence to these rules may prevent fatal, or at least dangerous accidents, such as hemorrhages, chills, metastases, &c. If her bowels have not been freely evacuated within twelve hours, she had better take a large injèction at once, that no accumulation of feces remain in the rectum. She should now be suitably dressed for the occasion. Let her be arrayed in the dress she intends to wear in bed, but so adjusted that it cannot slip down below the waist. Next to this let an old sheet, or something of the kind be pinned around her, so as to cover all the lower part of the body, hips and legs. Next the bed must be suitably prepared for its own protection and for the comfort of the patient. An india-rubber sheet, about one yard wide, should be placed across the middle of the bed upon the mattrass. A clean sheet should now be spread over the whole bed. Across the foot of the bed an oil-cloth, or another piece of india-rubber, a yard wide, should be placed; and this covered with a thick doubling of blanket. The patient should lie upon this, with her feet placed against the foot of the bed as a purchase during the expulsive efforts of labor. She should lie with the breech near the edge of the bed, with her thighs flexed at right angles with her abdomen, and the legs at the same angle with the thighs. During the expulsive pains, an assistant may hold her hands, or a towel may be so attached that she can assist herself by drawing with her hands in the direction of the support of her feet.

The last rule to observe in relation to attendants, is to have only the husband, the nurse and the doctor. The husband at all events, and not more than two female friends; the doctor to be in and out, from time to time, as his judgment may dictate. It is better to be absent as much as possible and keep due surveillance over the case, till towards the close of the labor. In the first stage the female may make herself as comfortable as she best can, by walking about, sitting in her chair, or changing from one to the other. Unless the labor be very protracted, cold water is the only refreshment required.

When the head has commenced descending into the cavity of the pelvis, and the os uteri is fully dilated, the accoucheur should not absent himself from the patient long at a time. It will be better for him to take his seat at the patient's bed, in a position to watch the appearance of her face, place the finger on the presenting part, mark well its progress, and be ready for any emergency that may arise. Some women are troubled with a terrible shivering during the early part of labor, or at its commencement, and sometimes it follows immediately afterwards; but it is of no account. When it occurs as a first symptom, the labor is apt to be correspondingly quick.

Patients are apt to be frightened at the noise of the rupture of the bag of waters; so that it is best to forewarn them in time to prevent any alarm. When the labor seems delayed by the tardy discharge of the waters, and the os is fully dilated, and yet the head is evidently kept back by something, it is better to plunge the finger forcibly into the sack, during a pain, and let the waters escape,—then the labor will advance much faster. When the membranes are tightly drawn over the head, they can be scratched through by means of the finger nail, and then they may be torn up each way, by forcing the finger between them and the scalp.

Sometimes the child is very movable at the superior strait; and several portions presenting in alternation; in such cases when the head presents, the membranes may be ruptured, and the head thus caused to engage in the superior strait. Where there is evidently an over-distention of the uterus by excessive amount of liquor amnii, weakening the contractions, the membranes may be punctured at any time we are certain of such a complication.

During the first stage of labor the woman should never bear down; since her strength must be exhausted in making such useless efforts. It is only in the second stage, when the expulsive pains occasion a sort of involuntary forcing, that advantage can be taken of this effort, for then only is it useful. Too much voluntary exer-

tion should not be used at the very last, for fear of rupturing the perineum. Nor should women be allowed to rise to the chamber, near the close of the second stage, for fear of accidents; however much she may desire to evacuate the bowels; for it is far easier to remove such discharges from the bed, than to extricate a new-born child from the chamber, as has sometimes been necessary in such cases.

As the head is about to escape from the vulva, the accoucheur should bear his right hand upon the perineum, in such a manner as to encircle the labia as much as possible, with his thumb and fingers; and while he is drawing down with these upon the labia, he must press gently forward upon the perineum with the palm of the same hand.

THE CARE OF THE CHILD DURING LABOR.—Immediately after the expulsion of the head, we should feel with one finger about the child's neck to ascertain if the cord is around it; if this is the case, a slight elevation of the cord upon the finger will cause the placental extremity to yield, thus the loop will become large enough to slip over the head. Should the cord prove too short for this purpose, when the next pain occurs it may still be loosened sufficiently to enable the child to pass through it in safety without becoming strangulated.

When the head is delivered it should be carefully supported and protected from the clots and other discharges from the uterus, patiently waiting for the subsequent contractions of the uterus to complete the delivery. The more we trust to nature in this respect, the better it will be for the mother, and the less will she suffer from subsequent hemorrhage and after-pains. No interference should be attempted at this stage unless demanded for the safety of the child. When the occiput remains posteriorly we should not interfere any more than when it rotates to the front,—all the instructions of former accoucheurs to the contrary notwithstanding.

After the expulsion of the child, it is better to turn its back to the mother, and let her covering fall between the child and herself, thus at the same time bringing the child to our full view, and completely protecting the mother from cold or exposure. A soft napkin should now be used to wipe the child's face, eyes and mouth. By this time, if not before, it will cry lustily; and the cord may be tied first about an inch and a half from the abdomen, and again a little further along, then cut between the two ligatures. The child is now ready

to be enclosed in a flannel wrapper and handed to the nurse to be washed and dressed.

When the breech presents, great care should be observed not to interfere further than to watch the condition of the cord, after the lower part of the body is born. We should take hold of the cord with the thumb and finger and draw it down a little, to prevent it from being dragged upon at the navel. Then it should be examined to ascertain if pulsation still continues; if not, try to disengage it from compression, by slipping it sideways, or by drawing it a little lower down. For as long as the cord pulsates there is no danger to the child. But there is danger, in this breech presentation, of making so much traction upon the child as to pull the body away from the flexion of the head, and thus cause the chin to hang upon the superior strait, or to become fixed in the cavity of the pelvis. Great care should be observed till the head has descended into the pelvic cavity; and then, if there is need to hasten delivery, the finger can be introduced into the child's mouth, by which means extension may be prevented and the child delivered instanter.

The death of the child in breech presentations is nearly always due to the compression of the cord; therefore when its pulsations are seriously interfered with, it will be better to make traction upon the lower extremities during a pain,—but with great care; and as soon as the finger can be introduced into the child's mouth, a good deal of pressure can be applied to keep the chin down upon the chest, and then almost any amount of force can be exerted upon the shoulders with safety. As already stated, it is better so far as possible to avoid manual interference either with mother or child, during labor. The more perfectly nature can be helped by the use of Homœopathic remedies, where assistance is required, the better will it be for both parties,—much less suffering will be entailed, and much better health will be enjoyed in after-life.

Diet and Regimen of the Woman in Labor.—Cold water or lemonade is all the refreshment usually required in labor. The use of fermented liquors of any kind should be dispensed with. If the patient is in the habit of taking tea, a small quantity, either cold or warm, will sometimes be found very refreshing. A little broth, or some other light food, may be allowed in case the labor proves tedious,—but no spices.

It is necessary that the enema should not be forgotten, where it may be needed,—in order that the rectum may be as free from obstruction as possible, and for other obvious reasons. The patient should

be encouraged to evacuate the bladder occasionally during labor; and if there be reason to apprehend an accumulation of urine which she cannot void, the male catheter should be at once employed. Much danger and inconvenience are avoided by such precautions; the over-distended bladder often becoming so paralyzed that the urine cannot be voluntarily passed for days. Therefore always beware of an over-distended bladder during parturition. After the discharge of the liquor amnii, a distended bladder can be detected by the fluctuation between the pubis and the umbilicus. In order to introduce the catheter, the patient should lie flat on her back, and the presenting portion of the child be pressed backwards and upwards as much as may be necessary.

On the Attentions to the Woman immediately after Labor.—After the child has been handed to the nurse, the accoucheur should not leave his patient till the after-birth is delivered. This will usually take place in from ten to thirty minutes. In most cases there is a momentary suppression of the labor-pains after the expulsion of the child; after this interval of a few minutes the pains return, by which the placenta becomes entirely detached from its uterine adhesions, and it is then finally expelled from the vagina. Should there be any unusual delay, or should hemorrhage occur, the proper remedies should be administered to arrest it, promote the expulsion of the placenta, and the consequent normal contraction of the uterine parietes.

If necessary the delivery may be facilitated by making gentle traction upon the cord, taking care not to draw the cord upward in such a manner as to change its proper line of direction, and endanger its breaking against the inferior margin of the pubic arch. Sometimes the placenta may be merely inclosed and detained in the mouth of the uterus, although entirely detached from adhesion to the uterine walls. In such cases a slight manipulation with the finger may hook it down, and with the co-operation of gentle traction upon the cord itself, the entire mass may be removed with the next pain. A dry napkin will be found useful to apply to the cord, to prevent the hand from slipping. Especial care should always be observed, not to draw too forcibly or too violently upon the cord, and thus tear it away from the placental mass, while this latter still remains adherent. Much more force of traction will be borne, if slowly, gently and steadily applied; and this should be done only during the pain,—and in the absence of the pain the cord should be slacked a little as the uterus recedes. When the placenta finally begins to emerge from the vulva, it should be received into the palm of the left hand,

and rotated with the right hand, in order to secure the complete twisting up and removal of the last membranous shreds; since even a small fragment left behind will occasion very great annoyance to the patient, even if it does not give rise to more serious complications. Where any shreds are thus left behind, one end will appear at the vulva in two or three days, when it may be seized with a dry napkin.

The woman should then be made dry; a soft dry cloth applied to the vulva. Let her then be straightened out a little in bed, and in all respects made as comfortable as possible. No bandage should be applied. Since this doctrine is so entirely opposite to the usual practice, it will be proper to state the reasons which have led to the adoption of this method. First: It will be evident, from a moment's consideration of the natural position of the fundus uteri, inclining forward, that the application of a bandage could not but change this position so as to render the uterus itself nearly perpendicular to the plane of the superior strait. This must of course bring the uterus into a line with the axis of the superior strait; this position must evidently be more favorable to prolapsus, and it may even lead to retroversion. Second: The great object intended to be secured by the bandage is to promote the contraction of the parietes of the abdomen,—both for the safety of the patient and for the symmetry of her form. Now we believe not only that this is better accomplished by nature in her own way, uninterfered with by mechanical and compulsory appliances; but that such appliances actually weaken the walls of the abdomen, and so in reality tend to defeat the very object sought to be secured. Third: The omission of the bandage, as we have found by much experience, by allowing free circulation in the adjacent parts and avoiding unnatural compression of the peritoneum and uterus, in many cases removes much of the danger from peritoneal inflammation, and greatly facilitates the speedy recovery of the patient.

A dose of *Arnica* should usually be given, and perfect quiet maintained in order that she may procure a little sleep. After an hour or two, when she may have thus rested, the nurse may safely proceed to place her in bed, by gently moving her up to her place, rolling the soiled clothes up into a lump and removing them. Thus the patient will be at the same time rendered neat and comfortable; her clean clothes being brought down from her waist as the others are removed, and her lower limbs made dry and warm. The nurse will, of course, understand her duty of keeping the patient clean and comfortable, by constant attention to the lochia, and in other respects.

The natural phenomena of the lying-in state may now be briefly stated. The relief experienced immediately after parturition is, in a great majority of cases, truly remarkable,—according to her own expression, the patient feels "as though she were in heaven." Afterwards, it is no uncommon occurrence, however, for the patient to be seized with a shivering, or chattering of the teeth. With the addition of a little covering this soon passes off; she begins to feel a glow of heat, her skin becomes moist, and there is no more trouble. After a little sleep,—which, as already suggested, she should seek to obtain as soon as possible,—she seems to recover from the shock of delivery, and once more appears in a natural, healthy condition.

In this place I cannot too strongly deprecate the habit in which some accoucheurs indulge, of entering into a little pleasant chat with the patient before he quits the room. This often excites hemorrhage, either internal or external,—and in other respects exerts a pernicious influence. How little does the newly-confined woman feel like indulging in conversation? The effort which in her exhausted condition she must necessarily make, is exceedingly injurious; since her system absolutely needs rest after her severe and protracted exertions.

Let her room be kept darkly shaded and as quiet as possible, till the milk becomes well established; then, other things being equal, her room may be gradually lighted up, and she may begin to see a little more of the world, her own family first, and afterwards her friends and neighbors. In the first few days after parturition the lying-in woman generally has more perspiration than usual; and this is one of the means by which her system returns to its normal state. The urine remains usually in the normal condition; still at our first visit after labor, we should not fail to inquire if the patient has passed water. If no inclination to urinate has been felt, a dose of *Arsenicum* should be administered at once,—or *Causticum*, or *Hyoscyamus*,—according to the particular indications—The bladder being in a paralyzed state, and needing help in order to relieve itself. Unless spontaneously moved, the patient's bowels should not be in any way disturbed for eight or nine days; the rectum being so much bruised by the passage of the child's head, as to need rest in order to recover its tone. The custom,—formerly much more general than now in Allopathic practice,—of giving a purgative in the first day or two after confinement, very greatly predisposes to puerperal peritonitis; and in many instances it has been observed directly to produce this dangerous condition.

The uterus, by alternations of contraction and repose, gradually returns, after parturition, from its enormous distention to its natural size. Its complete restoration, in size and position, generally occupies about six weeks. Sometimes, on the contrary, it suddenly grows larger, from some abnormal condition, and may be felt rolling from side to side, as the patient turns in bed. This condition need excite no alarm,—since the uterus will soon subside to its normal size,—except in some few instances, in which it still remains large, with a sensation of bounding as if it contained a fœtus; in such cases a dose of Crocus will soon set all things to rights. As the uterus regains its normal size, the new mucous membrane becomes completed, and the spot from which the placenta was peeled off is also supplied with a new mucous membrane by a process of granulation.

As the uterus returns to its normal state the vagina also grows shorter and shorter; its transverse rugæ return, and in the course of six weeks it is in all respects as before pregnancy, except that the subvaginal portions of the neck may be more or less permanently shortened on account of the extreme stretching upwards during gestation.

The uterus and vagina return to their usual condition, by virtue of the elasticity of their tissues, and where this is sufficient, the process is unattended with pain. But if necessary, organic contractility is also brought to aid, and this is always attended with more or less pains,—constituting what are called the after-pains.

During all this time a discharge from the vagina is taking place; first of pure blood, for a day or two,—which grows paler and paler, till finally it appears as a sero-purulent liquid, often of a pinkish color,—then it becomes lighter, watery, and at last entirely disappears.

The After-Pains.

Of the *after-pains*, it is proper to state more particularly, that they are really the organic contractions of the uterine fibres, where the elasticity of the general uterine tissue is insufficient to expel the liquids with which the walls of the uterus are engorged,—or the clots which are contained within its cavity. When they make their appearance at all,—which is sometimes not the case,—these pains usually come on soon after delivery, and continue, with greater or less severity, from two to eight days. Fluids, or coagula, in greater or less quantity, are discharged with each pain. It is very important to diagnose between the after-pains and those which indicate the accession of puerperal inflammation;—but this is an easy thing to do,—since the former contract the uterus, while the latter do not.

Arnica should be administered immediately after delivery, unless contraindicated; and this remedy is particularly called for by the bruised condition of the genital organs, as it often aids in restoring the parts to their usual state,—thus preventing severe after-pains, by removing the causes which otherwise would have produced them.

Belladonna. When the pains come on suddenly, and after a time disappear with corresponding suddenness; or if the pains be severely forcing, as if all would be forced out through the external organs.

Bryonia. If the after-pains are excited by the least motion, as in taking a deep inspiration, &c.

Chamomilla. The pains are very distressing; she feels that she can hardly bear them. She wishes to get away from herself. She is irritated and ill-natured. Dark lochial discharge.

Coffea. She is very sleepless,—wide awake, and the pains are very distressing. She feels them very acutely.

Cuprum acet. Terrible cramping pains; pains which often produce cramps in the extremities.

Ferrum. In feeble women with fiery red face.

Hyoscyamus. Much jerking and twitching in various parts of the body; she is delirious; spasmodic.

Ignatia. Much sighing and sadness with the pains.

Kali c. The pains are stitching and shooting, or they are in the back, shooting down into the glutæi muscles, or buttocks.

Nux v. Aching pains. Every pain causes an inclination to go to stool.

Pulsatilla. In mild, tearful temperaments; the pains grow worse towards evening; no thirst; not a good taste in the mouth.

Rhus. The pains are always worse at night, with restlessness; they last, sometimes, the whole night.

Sabina. The pains run from the sacrum to the pubis.

Secale c. In feeble, thin, scrawny females; or the pain is much prolonged, as if pressing and forcing the uterus.

Sepia. A constant sense of weight in the anus; much upward shooting in the vagina.

Sulphur. Flashes of heat, weak, faint spells; feet either cold or burning hot, particularly in the soles.

Sulphuric acid. Great sense of general weakness; or a sense of trembling all over without absolute trembling.

The Lochia.

The *lochia* constitute the discharge from the genital organs, which commences soon after the expulsion of the placenta, and continues until the complete restoration of the uterus to its normal condition. This discharge results from the disgorgement of the uterus, in its return to its usual size,—and it is principally derived from that portion of the uterine surface to which the placenta had been adherent. During the first twenty-four hours, the lochial discharge is quite sanguineous, and sufficient in quantity to soil ten or twelve napkins. After the first few hours, this discharge gradually becomes less and less, as it passes through its four or five successive stages: first, sanguineous; second, serous; third, milky; fourth, puriform. And, when it has nearly subsided, it is not an uncommon occurrence for it to freshen up and assume a pinkish hue, and then resuming the appearance of a delicate, limpid pus, rapidly disappear.

In about six days after parturition, the sanguineous discharge should disappear entirely; and in two or three weeks more, the patient should be completely well. In severe cases the lochia will cease sometimes earlier, sometimes later,—either as a natural consequence of the attendant conditions, or as an exception merely to the general rule. And, in all such variations, the accompanying sensations and conditions of the patient will indicate the treatment.

During the milk-fever the lochial discharge lessens, or ceases entirely, and returns more abundantly as the fever subsides. In quantity this discharge varies in different individuals; some have very little, others have much; in either case no interference is necessary, unless symptoms arise which show that the unusual quantity results from some abnormal state. The lochia have a peculiar odor, differing in individuals, both in character and intensity. The presence of even a small shred of the membranes, which may have become detached and left behind in delivering the placenta, may render the lochial discharge exceedingly offensive. In all cases, the fetid nature of the discharge, or any other deviation from its normal character, will go far to indicate the proper remedy for the general morbid condition, of which this peculiarity is one of the evidences.

Throughout the lying-in period, the condition of the lochia, if abnormal, forms one of the surest and soundest indications for treatment. The selected remedy must always cover the condition here manifested. Every day the physician should inquire of the nurse as to the state of this discharge; and the first abnormal condition

should place him on his guard against other serious disturbances which may result. We should always be watchful for the beginning of mischief; but this one of abnormality of the lochia should be especially guarded against, since it is very apt to be overlooked till a late hour. In such cases all the symptoms should be carefully collated and the remedy selected in accordance; but it must always cover the abnormal condition of the lochia.

In the treatment of cases in which there is *derangement* of the *lochial discharges*, the following medicines should be carefully studied:

Aconite. A suppression of the lochia, or too scanty discharge occurs soon after confinement, with distress in the abdomen, chest, and head,—apparently from congestion. Offensive lochia,—other symptoms agreeing.

Belladonna. Offensive lochia, feeling hot to the parts. Flushed face and injected eyeballs; delirium and frightful visions. Pain in the region of the uterus coming on suddenly and finally leaving as suddenly.

Bryonia. Lochia suppressed, and sensation in the head as if it would burst. The least motion aggravates her sufferings. Dryness of the lips, and of the mouth. The lochia may be too profuse, with burning pains in the region of the uterus.

Calc. c. The lochia last too long in women who menstruate too often and too profusely; in females of a leucophlegmatic temperament.

Chamomilla. Suppression of the lochia, followed by diarrhœa, colic, toothache; irritable, impatient disposition; thirsty; one cheek pale, the other red.

Coffea. The discharge is too profuse, with an exalted nervous sensibility.

Colocynth. Suppression of the lochia, with violent colic, or from anger, or with tympanitic swelling of the abdomen and diarrhœa. Worse from eating or drinking.

Carbo animalis. Lochia too long continued, thin, offensive, excoriating, with numbness in the limbs.

Creasote. Very offensive lochia, almost ceasing, and excoriating, then it freshens up, and again almost disappears, to freshen up once more, &c.

Crocus. The discharge appears in dark strings; sense of motion in the abdomen.

Dulcamara. Lochia suppressed by cold or dampness; and the quantity of the milk much diminished.

Hyoscyamus. Much delirium and jerking of the muscles; she says she is being drugged or poisoned.

Ignatia. Derangements from the abuse of Chamomile tea. In some cases, Nux v.

Merc. s. The discharge is worse at night, with some inflammation of the genital organs.

Nux v. The lochia are scanty and offensive in women accustomed to highly seasoned food, coffee and wine. Or the patient has an irritable rectum, calling her to stool frequently.

Opium. Suppression of lochia from fright, with sopor.

Platina. A little discharge will remain, but it will be black and clotted. The genital organs will be very tender. On account of the excessive sensitiveness she cannot bear the napkins usually applied.

Pulsatilla. In cases where the milk has suddenly disappeared from the breasts. The scanty lochial discharge remaining is milky; she is feverish, but has no thirst.

Rhus. The lochial discharge lasts too long, is thin and offensive. It has well-nigh exhausted her; it is thin, ichorous and offensive, or it occasionally becomes bloody. Shooting pains up the rectum. Restlessness at night.

Secale c. In thin, scrawny women, very offensive and thin lochia; —the discharge may be scanty or profuse. It may be painless, or accompanied by prolonged bearing-down pains.

Sepia, where the fetid odor is the most characteristic symptom. Offensive lochia, excoriating,—with little sharp-shooting pains in the region of the neck of the uterus.

Silicea. Pure blood is caused to flow every time the infant nurses.

Stramonium. Her mind is full of strange and absurd, but strongly marked ideas.

Sulphur. The discharge causes a sensation of weakness, and she has hot flushes, perspiration; heat in the soles of the feet, or her feet feel cold all the time.

See also remedies under *Nymphomania, Metrorrhagia, Constipation,* and *Diarrhœa.*

Secretion of the Milk.

This function is one of the most interesting and at the same time one of the most remarkable of the phenomena transpiring during the whole of the lying-in period. While the child is still in utero, the maternal principle and all that pertains to the mother conspire to its nourishment, growth and development there. Suddenly all this is

interrupted; the child is expelled from the little world within; the maternal principle misses it, as it were, stands aghast and wonders at its whereabouts. It is without; and in from forty-eight to seventy-two hours, it provides for its sustenance there,—from the same source as when it was within,—from her own blood. The reaction upon the organism, from this "change of base" from the uterus to the breasts, causes what is called the milk fever. While the child was yet in the uterus, all things conspired and flowed in the bosom of her blood to supply the offspring there: and now all things still conspire and flow in the bosom of her blood to be offered to the offspring,—but in the ultimate form of milk, which resembles pure blood more than any other fluid in the body. All this is effected by the "maternal" arousing herself and going out in search of provision for her offspring;—and in consequence there results a disturbance in the system, more or less well marked according to the obstacles to be overcome. Hence appear chills, fevers, headaches, and a great variety of pains and sufferings,—even intermittent fevers are sometimes developed in consequence of this great physical change.

Some women appear to have milk before the babe is born, or at its birth; but this is not the real milk, since it is devoid of the true milk globules, and is called colostrum. The change already referred to has yet to be made; and presently the real milk comes, bearing in its bosom the true, full and plump milk globules.

The quantity of milk varies greatly; in some women it is quite scanty, but rich in quality; while in others it is poor in quality but abundant in quantity. Every female in a perfectly healthy state will yield nourishment enough for her own babe; and when this is not the case, the remedial agents must be administered to bring about this much to be desired result: for no child can possibly do so well as when supplied with its own maternal aliment laden with all the rich things of its mother's love and affection. As a general thing all the disturbances incident to the coming of the milk, are less when the child is applied to the breast as soon after delivery as practicable. Much advantage is gained both to the mother and babe by this method,—since it serves to lessen the suffering of the one from hunger and of the other from fever.

When the fœtus perishes near the full term, the child is still carried for a while,—it may be till term. In general, no milk secretes in such cases,—certainly not till after the delivery of the dead child.

At no time should the milk flow from the breasts except when drawn. In those cases in which it is constantly flowing spontane-

ously, remedies should be sought for to cause its retention till needed.

In order to relieve the disorders incident to lactation, we must always rely upon the properly-selected Homœopathic remedy. No bathing, or even rubbing of the breasts, no undue friction, should be employed,—nothing, in fact, should be permitted save the natural action of the child's mouth. Rubbing the breasts in order to rub out lumps, often bruises the breasts, and lays the foundation for inevitable abscess. The same remark applies to all mechanical suction other than that of the babe's mouth or that of some other person. No external application of any sort is admissible.

Aconite should be administered when there is hot, dry skin, much thirst, restlessness, discouragement, anxiety; breasts hard and knotted.

Belladonna. The breasts feel heavy, and appear hard and red,—the redness often running in radii; flushed face and injected eyeballs; full, bounding pulse; drowsy; throbbing headache; sensitive to noise and light.

Bryonia. The breasts feel heavy, a sort of stony heaviness; rather pale, but hard; dry lips and mouth; constipation of burnt, dry feces; splitting headache; nausea and faintness, on sitting up.

Calc. c. The breasts are distended, the milk scanty; she is cold; feels the cold air very readily; there seems to be a want of vital activity to bring the milk forward; leucophlegmatic constitution.

Chamomilla. The breasts are very tender; the nipples inflamed, and swollen; she is restless; thinks she can hardly endure her sufferings; is fretful; sleepless and cross.

Croton t. The breasts may or may not be swollen, but the pain extends from the nipple through to the shoulder-blade every time the child draws at the breast; the suffering is excruciating,—a sovereign remedy.

Pulsatilla. The breasts are much swollen, and rheumatic pains extend to the muscles of the chest, shoulders, neck, axillæ, and down the arms, &c. She is feverish and tearful, but not thirsty.

Rhus t. The breasts are painfully distended and red in streaks, and there is a rheumatic condition of the whole body. Stiffness of the joints; the first movement is painful and stiff; but she can move more easily afterwards. She cannot lie long in one position; she must change in order to find an easier place.

Hygienic Care of Lying-in Females.

Where choice is offered, a large, airy chamber should be selected, on the sunny side of the house. Strict attention should be paid to ventilation and cleanliness; remove immediately from the room all matter that emits odor, even soiled linen, and let the air be kept as pure and uncontaminated as possible. There should be a draft of air through the room, but not across the patient's bed. The genital organs should be bathed under the clothes, with lukewarm water, morning and evening, as long as they are soiled by the lochia. The patient should make no exertion the first three or four days. As soon as she is able, she may be moved from one side of the bed to the other, thus leaving a fresh side to be transferred to as often as she desires for the first ten or twelve days. But during all this time she should never get up from the bed. If she is able, she may leave her bed after ten days and sit up, properly protected, for half an hour or an hour; then she must lie down and rest, so that, little by little, every day, she may gain more strength. In the same manner she may begin to walk about, little by little, as her strength increases; and, in the summer season, she may ride out during the third week, and in the winter, during the fourth week, in the middle of the day. But she should avoid going to church, or to any other large, cold, damp public place to remain long,—for a church service, for instance,—under six or eight weeks.

Until the milk has become well established and the breasts have assumed a good healthy condition, the patient should subsist on oat-meal gruel, boiled an hour and a half, or on panada, or some such light food. Oat-meal gruel is the best, with no spices,—only a little salt or sugar, if desired. Immediately after this period is safely reached, which, other things being equal, is usually on the third or fourth day, she may be allowed to return to her usual diet, with the exception of eggs, oysters and fish, which should never be allowed in a lying-in chamber. After the fourth day, beefsteak, mutton-chop, chicken, fruits, vegetables, &c., may usually be taken at pleasure. Cold water must not be forgotten from the first, as a beverage, *ad libitum;* it is of great use in preserving a healthy condition in lying-in patients.

The bowels usually remain closed for eight or ten days after parturition, and no interference should be permitted; but about this time a spontaneous motion will take place. In the mean time, all symp-

toms must be prescribed for as occasion requires. If, on account of frequent urging, *constipation* or *diarrhœa*, the bowels need attention, see the articles on these conditions in other parts of this work.

A single direction may here be given in respect to the covering for the bed, both of the babe and its mother. Avoid heavy quilts, and use blankets, since they are lighter and warmer, and more healthy, from not exhausting by their oppressive weight. A silk spread stuffed with fine lamb's wool, makes a covering very light and very warm. So, by the use of light coverings, "easily to be borne," you may save your patient's strength,—thereby securing a more rapid convalescence.

Hygiene and Treatment of the Child immediately after its Birth.—The moment the child has been entirely delivered, it should be placed upon the bed with its back towards the mother; the sheet with the other covering lying next to her (the nicer bed-covering, blankets, &c., being first turned back) should be allowed to fall between the child and its mother. Thus the latter will be perfectly covered and protected from exposure; while the new-born child lies in full view. Its little face should be wiped with a soft napkin; and as soon as its respiration becomes well established, the cord should be tied about an inch and a half from its abdomen, so firmly as to preclude any possibility of hemorrhage after the shrinking of the tissues. Should the cord seem large and tapering from the abdomen, great care must be taken not to include any portion of the intestine,—which latter, if present in the cord, should be stripped back into the abdomen, before tying. The cord having been cut, the child is to be placed in a flannel blanket upon the bed, by seizing the feet with one hand and placing the other under the shoulders and neck. In this manner the operation can be performed neatly, without a risk of soiling the bed-clothes or carpets,—a precaution which should always be observed.

The child should now be washed and dressed. Some unctuous matter, such as lard or oil, should be rubbed into all those places covered with the *caseusa*, which latter will then be entirely removed upon being washed with a little soap and water. The navel should next be dressed; this may be done by taking a piece of old linen about three inches square and of double thickness,—tear down one edge to the middle, slip this on to the cord in contact with the skin of the abdomen, double up the sides so as to overlap the middle, apply a flannel bandage around the body,—then may be added the diaper, the shirt, the flannel petticoat, and the little muslin slip. This constitutes the babe's dress for the bed; when it is taken up it should also have

a little shawl or blanket provided for that purpose, which should always be laid aside upon its return to bed. The diapers should always be changed immediately after being soiled or wet, both day and night; otherwise almost incurable sores will inevitably result. At his daily visits, the physician should observe that the infant is not smothered while lying in bed, but has an opportunity of breathing like other human beings. Its pillow should not be more than two inches and a half thick; and it should be made of hair untufted, so that it may be pulled apart and made light and airy every few hours.

Should the child be troubled with retention of urine, *Aconite* will be the remedy most likely to afford relief. See *Dystocia*. If the meconium does not pass off naturally, *Mercurius*, *Nux v.*, *Bryonia*, or *Pulsatilla* may be resorted to. See *Constipation*.

The child is not always born in so healthy a condition as to be capable of undergoing promptly the treatment above described. Sometimes it comes into the world in a state of apparent death. This condition may result from three distinct classes of causes; and may present corresponding differences in the appearance of the child.

I. Apparent death of the child may result from shock to its nervous system in general, or to some special lesion of a particular portion of it. In the former class may be instanced the severe compression which the brain undergoes in certain cases of contracted pelvis, and from the application of the forceps under difficult circumstances, especially in the superior strait; in the latter class may be instanced the still more serious lesions of the medulla oblongata which may result from extreme rotation of the head, from undue traction upon the head after it is delivered, or from too much force applied to the body in order to deliver the head still detained within the pelvis. This latter is one of the most frequent causes of the fatality so commonly attendant upon breech presentations. The injury to the brain, not necessarily preventing respiration, may pass away and the life of the child still be preserved. Such however is not the case with serious lesion of the medulla oblongata, which renders respiration impossible. However, as it may not be known that such injury exists,—unless the child's neck should have been distorted by some remarkable violence,—every case of apparent death in the new-born babe should be treated as if there were a possibility of recovery.

II. Injuries of the placental circulation may have been the cause of the apparent death of the child. These may variously arise,—from compression of the umbilical cord between the sides of the pelvis and

the head or body of the child; from winding of the cord so tightly around the neck as to obstruct the circulation in the umbilical vessels; from the premature separation of the placenta, which may occur in cases of delivery by the breech, when all but the head has been delivered; or from great retraction of the uterus itself when only the head remains within it, such retraction preventing the admission of fresh blood into the uterine sinuses in sufficient quantity to supply the child. By either of these causes a real asphyxia may be produced. A similar condition may result from such an accumulation of mucus in the nose and mouth as will prevent the introduction of air into the bronchia. In addition to the breathlessness, this condition will be indicated by discoloration of the skin, which may exhibit a violet or blackish-blue color; the muscles are motionless; the limbs flexible, and the body warm; but the pulsations of the cord, of the radial artery and even those of the heart, are faint and imperceptible.

III. Lesions of the fœtal circulation constitute a no less dangerous class of causes of apparent death. These may consist in ruptures of the placenta or of the umbilical cord which affect the life of the child while yet unborn; or if the hemorrhage should be arrested in any way before proceeding to so fatal an extent, the child may be born alive but in a state of syncope. In these cases the child is very pale; the muscles are relaxed; it may make a few short respirations and utter some feeble cries; but unless saved by the administration of the proper remedy, it soon perishes.

There is still another class of lesion of the fœtal circulation, entirely opposite in its nature and apparent symptoms to that just described; but far less dangerous. This consists in a real strangulation of the fœtal circulation; which may occur from the cord being wound tightly round the neck, or from the spasmodic contraction of the cervix uteri around the child's neck; in the former case the face may be merely congested and the eyes bloodshot and protruding, in the latter the countenance may so remarkably resemble that of a negro, as to throw the mother into maniacal convulsions, if it is incautiously exhibited to her.

Treatment.—The following remedies may be given, dry on the tongue, in accordance with the conditions present.

Aconite. The child is hot, purplish, pulseless and breathless, or nearly so.

Arnica. This remedy should be given, if the child appears to be much bruised.

Belladonna. The face is very red, and the eyeballs are much congested and red.

China. In cases where much hemorrhage has been the apparent cause.

Opium. The face is purplish and swollen; in other respects like *Tart. e.*

Tartar e. When the child is pale and breathless, although the cord may still pulsate.

If the child does not soon respond to internal remedies, it had better be immersed suddenly in very cold water; or better still, pure cold water, or even ice-water may be poured over it. In some pale, and apparently lifeless children, pouring cold water upon the head and allowing it to pass down over the body, produces a redness of the skin, and establishes the circulation and respiration; the child should then be at once wrapped in flannel blankets till quite restored. Of course in all those cases where respiration is prevented by accumulation of mucus in the nose and mouth, these obstructions will have been noticed and removed as soon as possible after the delivery of the child, or even while yet the head only is delivered. And the various efforts to restore life in cases of suspended animation, should be persevered in for some time; for although ineffectual at first, they often prove successful after a while.

Artificial inflation of the lungs, effected by holding the child's nose and blowing into its mouth,—the operator fitting his own mouth closely to that of the infant,—has proved efficacious in some instances.

CHAPTER THIRTY-THIRD.

DYSTOCIA.

By dystocia is meant unnatural, "laborious, morbid, or difficult labor." Labors do not always take place in what may be regarded as a truly natural, normal manner. They may become, by a combination of circumstances, difficult, dangerous, or even impossible. It is here the intervention of art is called for. These circumstances are exceedingly various and numerous, and they give rise to three distinct groups or classes of labor,—viz.: 1. "Those rendered difficult, dangerous, or impossible by a defect or an excess in the action of the expulsive forces. 2. Those rendered difficult, dangerous, or

impossible by obstacles to the expulsion of the fœtus. 3. Those complicated by accidents liable to endanger the life or health of the mother and child."*

In respect to the first of these cases, it should be observed that the pelvis, as well as the organs of generation, may be perfectly natural, and the child in harmony with the passage, and yet the expulsive force may be wonderfully deficient, and at length may cease to act entirely. In deciding on the duration of labor, it may be adopted as a general rule, that where more than twenty-four hours have elapsed since its commencement, serious accidents may be feared, either to the mother or child; and these should be anticipated by removing the cause of the excessive slowness. The fact which requires particular attention in the prognosis is, that the period of dilatation of the cervix is to that of the expulsion as two or three to one. Now, the delay may occur either in the first or the second of these stages. The first stage may be prolonged without danger, either to the mother or the child; but when the second stage, or the period of expulsion, is extended beyond ten or twelve hours, the uterine pains may become irregular in their return and intensity, and the fœtus seem to retrograde rather than advance—there is no expulsion. The condition of the patient at this crisis is thus described by Cazeaux:

"The local disorder is accompanied, or at least soon followed, by a violent trembling; the patient has an inclination to vomit, and even throws up bilious matters; she is uneasy, excited, and changes her position every moment; the skin is hot and dry; the pulse runs up to a hundred or a hundred and fifty per minute; the tongue is dry, and both it and the teeth are covered with a dark coating. The vagina and cervix are hot, and sensitive to the touch, and a yellowish liquid escapes from them, which occasionally has a fetid odor; the pressure of the child's head on the cervix vesicæ prevents the emission of urine; and the parts that line the superior strait and the pelvic excavation, being compressed for a long time by the head, may become inflamed, or even gangrenous; which complications may subsequently prove a source of the most serious accidents.

"If the woman still remains undelivered, these symptoms increase in intensity in a frightful manner; the vomitings become more frequent, and the abdomen more distended; the excitability of the patient knows no bounds; the pulse is more and more feeble and frequent, and she falls into a half-stupid, or a semi-delirious condi-

* Cazeaux.

tion, which is soon terminated by death. It is scarcely necessary to remark that, in the latter case, the life of the child is also most seriously compromised."

There are numerous causes which may operate to bring about this condition, some of which are vital; others mechanical, as, for example, the over-distention of the uterus by an excess of the liquor amnii, or the too early rupture of the membranes. When the cause appears to be a vital one,—the pains having been too weak from the first, grow weaker, cease entirely, are irregular, or in any way abnormal, study the following remedies:

Treatment for Failure of the Vital Forces, in any way, to produce Spontaneous Delivery in a reasonably prompt and easy Manner.

Pains too weak: Study particularly, 1st. Belladonna, Chamomilla Kali c., Natrum m., Nux v., Opium, Pulsatilla, Ruta, Secale c., Sepia.

2d. Arnica, Borax, Camphor, Carbo v., China, Cocculus, Graphites, Ignatia, Lycopodium, Magnesia m., Natrum c., Nux m., Platina, Sulphur, Thuya.

Pains ceasing: 1st. Belladonna, Chamomilla, Kali c., Natrum m., Nux v., Opium, Pulsatilla, Ruta, Secale c., Sepia.

2d. Arnica, Borax, Camphor, Carbo v., China, Cocculus, Graphites, Ignatia, Lycopodium, Magnesia m., Natrum c., Nux m., Platina, Sulphur, Thuya, Veratrum.

Pains distressing: 1st. Aconitum, Arnica, Belladonna, Chamomilla, Coffea, Gelseminum, Hyoscyamus, Ipecacuanha, Nux v., Pulsatilla, Sepia.

2d. Aurum, Causticum, Conium, Cuprum, Ignatia, Kali c., Lycopodium, Opium, Phosphorus, Secale c., Strontiana, Veratrum.

Aconitum. There is much distress, restlessness, and moaning during every pain. On examination, *per vaginam*, the parts are found dry, tender, and undilatable.

Arnica. The pains are so violent as to make her almost crazy, yet but little good effect is accomplished. She wishes to change her position very frequently. The pains are sometimes very weak and feeble with a desire to change the position frequently. She feels unusually sore and bruised in every position.

Aurum. The pains make her desperate, so that she would like to jump out of the window, or to dash herself down, often with congestions to the head and chest, and palpitations of the heart.

Belladonna. The pains come on suddenly and disappear, after a time, as suddenly as they came. Spasmodic contractions of the neck, which is hot, dry, and tender. Very red face and injected eyeballs, with pain; labor slow and tedious. Throbbing headache, with great sensibility to light and noise.

Borax. The pains are accompanied by violent and frequent eructations. She fears a downward motion. She is very sensitive to the slightest noise, as the rumpling of paper, fall of the door-latch, &c.

Chamomilla. Her pains are spasmodic and distressing. She can hardly bear them, she wishes to get away from them. She is very fretful, peevish and cross, can't return a civil answer. Tearing pains down the legs.

Camphor. Her pains have ceased, and her skin is cold, dry and shrunken; she does not like to be covered, and is restless. Camphor[200], or higher, will now warm the patient, restore the pains, and other things being equal, produce spontaneous delivery.

Causticum. She complains mostly in her back of a sore, distressing pain. Her suffering is principally in the back.

Carbo veg. The pains are too weak or ceasing with great debility. Particularly indicated where there is a varicose condition of the vulva, or when there has been a great loss of animal fluids or the debilitating effects of acute diseases.

China. Where much blood has been lost, fainting fits, convulsions, &c. Cessation of pains from the loss of blood; her skin may even be cold and blue. She can't bear to be touched during the pains, not even her hands.

Cocculus. Her pains are of a spasmodic, irregular, and paralytic character. She will have one hard one, and then, after a longer interval, several light ones, &c. Much headache.

Coffea. Labor pains insupportable to her feelings; she feels them intensely, weeps and laments fearfully.

Conium. If there are scirrhosities in either the breasts or uterus and labor does not progress normally—Pains spasmodic; vertigo, particularly on turning in bed; rigidity of os uteri.

Cuprum. Violent spasmodic pains appearing at irregular intervals, often with violent cramps in the lower extremities.

Gelseminum. Cutting in the abdomen from before backward and upwards, rendering the labor-pains useless; these come on with every pain.

Graphites. In females of large, corpulent, venous constitution,

tettery spots here and there on the surface, which itch much and ooze a glutinous fluid; *her* pains are weak or have ceased.

Hyoscyamus. There is delirium, startings and jerks in various parts of the body, in the face, eyelids, and sometimes all over.

Ignatia. Deep sighs and sadness, she must take a deep breath in order to breathe at all. The labor does not progress.

Ipecacuanha. One *constant* sense of nausea, not a moment's relief. The pains are distressing by reason of a sharp cutting about the umbilicus which darts off towards the uterus, or even the sharp cutting about the umbilicus; this distress hinders the proper action of uterus.

Kali c. The pains begin in the back and instead of coming round in front like a regular pain, pass off down the buttocks or the glutæi muscles, or they are sharp and cutting across the lumbar region, arresting contractions.

Lycopodium. During the paroxysms of her pain she is obliged to keep in constant motion, with weeping and lamenting; there may be even spasmodic contraction of the neck with the above symptom.

Magnesia m. The labor-pains are interrupted by hysterical spasms. See Hysteria, same remedy.

Natrum c. Anguish, tremor, and perspiration with every pain, during which she desires to be gently rubbed.

Natrum m. Very, *very* sad and forboding, so much so as that labor goes on very slowly, from feeble pains.

Nux m. She is very drowsy, sleepy and disposed to fainting spells, the pains being correspondingly slow and feeble or quite suppressed.

Nux v. Every pain causes an inclination to go to stool or to urinate. The more urgently she is disposed to stool the more Nux v. is indicated. Every pain causes fainting and thereby interrupts the progress of labor. Retarded and painful labors in women accustomed to a sedentary life, and to those accustomed to high living and an inactive, indolent life.

Opium. The pains have been suppressed from fear or fright. She is in a soporous state, with red face and eyes, and stertorous breathing, twitching and jerking muscles.

Phosphorus. Tall and slim ladies of phthisical habit, the pains being distressing and of but little use. She feels so weak and empty across the abdomen, and sometimes cutting pains.

Platina. The contractions are interrupted by the very painful sensitiveness of the vagina and the external genital organs. Very painful though ineffectual spasmodic labor-pains.

Pulsatilla. In mild, tearful, women, apparently in a healthy con-

dition, but the uterus seems inactive. The pains excite palpitations, suffocations and fainting spells, unless the doors and windows are wide open; she feels that she must have them open. Pulsatilla will allow them to be shut, and labor will transpire very soon.

Ruta. General lameness and soreness all over, with weak, feeble pains.

Secale c. Particularly in weak cachectic women, or in women debilitated from venous hemorrhages. In such cases it is particularly efficacious for weak, suppressed, or distressing pains. By far the best is the ^{200}, or higher. Fainting fits in such cases, small or suppressed pulse.

Sepia. Shuddering attends the pains, and she rather wants to be covered up more, because she can bear the pains easier. Indurations are felt upon the neck of the uterus. Shooting pains in the neck extending upwards. Spasmodic contractions of the neck in these cases.

Stannum. The pains seem to exhaust her very much and make her speech difficult from weakness in the chest. She cannot answer questions; she is all out of breath; the labor does not progress.

Sulphur. She has flushes of heat, frequent weak and fainty spells, wants more air. Cold feet, heat on top of head.

Thuya. In some cases of complication with syphilis, which hinders the proper contractility, this remedy will do much good immediately.

Veratrum. The pains are accompanied with cold sweat, particularly in the forehead—fainting on the least motion—the pains exhaust her much, and she feels completely done over after every pain.

MECHANICAL CAUSES OF DYSTOCIA. (a) *Over-distention of the Uterus from Excess of the Liquor Amnii.*—Cases of this kind can be recognized from the fact that the membranes do not bulge into the mouth of the uterus as it dilates: during the contractions the membranes are felt to be tense and to retain the globular form of the uterus. In this case, the only plan of relief and of rendering the pains efficacious, is to rupture the membranes, which may readily be done by plunging the finger through them during a uterine contraction.

(b) *Premature Rupture.*—In cases of this kind, the early escape of a small portion of water allows the head to descend upon the undilated mouth of the uterus, so as to hinder the escape of any more water, and, of course, it is all retained in the fundus, above the child. The contractions gain nothing by forcing out more

water, either through the ruptured membranes, or by causing the bulging of a pouch, consequently, the pains are liable to become more and more feeble. The mode of action now to be adopted, is to introduce a finger and, in the absence of a pain, raise the head and hold it up during a pain, when the water will escape in torrents. Repeat this process, if necessary, again and again, and the pains will strengthen rapidly.

Sometimes the child's head becomes engaged in the lower segment of the membranes and they fit close to it, and there is no opportunity for the membranes to bulge through the os, the consequence of which is, that the water is all retained above the body of the child and in the fundus of the uterus. In this case, the membranes must be scratched through, as described on page 488, and the head elevated, in the absence of a pain, and held there until the next pain, when water will gush out and the pains will gain strength. This process may be repeated again and again, if necessary, and the pains will become more and more effective.

The pains may be rendered inefficacious from an over-distended bladder, the reflex from which painful condition will cause the uterine contractions to cease. This may be determined by the history of the patient's case, and by great sensitiveness of the bladder when pressed, or by a dulness on percussion if she has not voided urine for a long time. In this case, a catheter must be used, the male being preferred, for obvious reasons. A loaded rectum may have the same effect as the bladder in the state above described, in which case it must be washed out with injections.

In labors which are too rapid, the chief danger lies in a liability to the rupture of the uterus from too powerful contractions, or of the vagina, or yet the perineum. The umbilical cord may be torn asunder by the child falling on the floor, or the child may receive other injuries consequent on sudden and violent action. Some women are *always* troubled with too rapid labors, and, knowing from experience what to expect, should adapt themselves to this condition by preserving a recumbent posture from the first pain and restraining themselves as much as possible. In some cases the disposition to too slow or to too rapid labor seems to descend hereditarily from mother to daughter.

When the pains seem too strong, study the following remedies, viz.: Aurum, Belladonna, Chamomilla, Coffea, Conium, Gelseminum, Lycopodium, Nux v., Phosphorus, Secale c., Sepia, as above described.

Dystocia from Malformations of the Pelvis.

We next come to the second group of causes which render labors difficult, dangerous or impossible. These causes are mechanical, and refer themselves to the mother or to the child. We shall first treat of those which depend on the mother, and the first of these which we shall notice are *the malformations of the pelvis*. A pelvis is malformed, in the sense in which we here use the word, when it too greatly exceeds, or falls short of the average size. Excess of amplitude or of retraction, too great size or narrowness, are productive of notable obstacles in the exercise of the child-bearing functions. If the amplitude is too great, the woman is exposed to serious accidents, in all the three states, the non-gravid, the pregnant, and the parturient.

In the *non-gravid*, because the uterus, being free and movable in an overspacious cavity, is much more liable to the various displacements of *descent, anteversion*, and *retroversion*.

In *the pregnant*, because "during gestation the womb, finding more space than usual in the pelvic cavity, remains there until a much more advanced period of pregnancy, and the volume of the organ, by compressing the rectum and the bladder, often occasions an excessive tenesmus in these parts, which proves very distressing to the patient; sometimes, even the discharge of the urine and fecal matters is impeded, besides which, varices, hemorroidal tumors, or a considerable infiltration of the lower parts are found to be developed, in consequence of the mechanical obstacle to the circulation of the inferior extremities."*

In the *parturient state*, because, during labor, the too great amplitude of the pelvis, exposes the patient to all the dangers resulting from a too rapid delivery, which we do not propose to treat of here. A woman subject to this malformation should be kept in the recumbent posture during labor, and she should be instructed not to aid the pains in any way, and not to bear down until the os uteri is fully dilated; and even then as little voluntary effort should be made as possible.

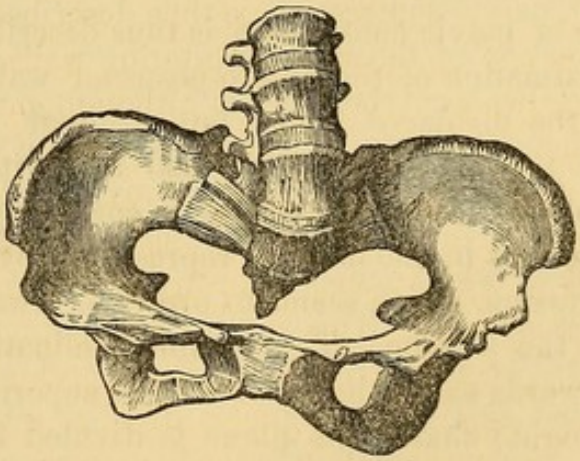
But the most terrible accidents which can occur in the obstetric art, are those arising from *the retractions of the pelvis*. For it must at once be obvious that a just proportion must exist between the dimensions of the canal and those of the body which is to traverse it; and that where this relation does not hold, either through the retraction of the pelvis, or the abnormal size of the child, the delivery becomes impossible.

* Cazeaux.

The contractions of the pelvis, according to Velpeau, are either absolute or relative: *absolute*, when, although greatly retracted in all its dimensions, it notwithstanding is properly formed, and presents no irregularity in its exterior aspect: *relative*, when only one or more of its diameters are affected by the contraction, (the others preserving, or very nearly so, their normal length,) and the form is completely changed by this partial alteration. The last group of contracted pelves, viz., the relative, is the only one which will engage our attention in this place. This deformity is referred by M. Dubois to one of three principal types, viz., either to a flattening from before backwards, to a compression on the sides, or to the depression of the anterior and lateral parts.

(a) *The flattening from before backwards*, or shortening of the antero-posterior diameter, results from a more or less marked approximation of the anterior and posterior pelvic walls; and of this species of malformation, there are several varieties, all resulting from the extent of contraction, either in height or width. An example of this kind is presented when the superior strait alone is contracted, the excavation retaining its normal capacity. This phenomenon is due to an unusual curvature of the sacrum, which sometimes makes an obtuse angle at its middle part, so that the

Fig. 81.



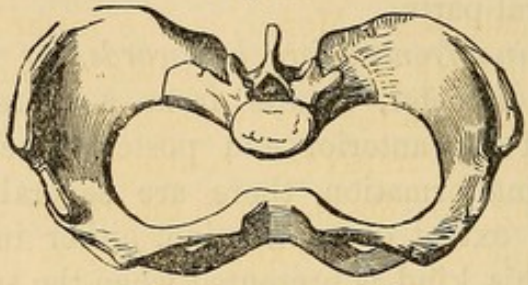
A pelvis, in which the contraction of the sacro-pubic diameter is produced by the unusual prominence of the sacro-vertebral angle.

sacro-vertebral angle is increased to an unusual degree. Sometimes the reverse happens, and the sacrum, instead of affording an anterior cavity, is quite plane, or even convex in front; and then the antero-posterior diameter of the excavation is contracted simultaneously with that of the superior strait, and the sacrum seems to lose its natural curvature, and project forward in its whole length.

Sometimes the shortening of the antero-posterior diameter of the superior strait is accompanied by an enlargement of the corresponding one at the inferior strait. This, indeed, is the arrangement most usually met with, and this is what generally happens when the sacrum, yielding to the weight of the trunk transmitted to it by the spinal column, tilts, that is, projects forward its base, while pushing backward its coccygeal extremity.

Sometimes the coccy-pubic and the sacro-pubic diameters are shortened at the same time. This happens when the sacrum, instead of performing the tilting movement just mentioned, yields in such a

Fig. 82.



The shape of the superior strait in the figure-of-eight pelvis.

way, that its two extremities are thrown forward; and two consequences are the result of this action, viz., the anterior curvature is greatly increased, and there is an enlargement of the corresponding diameter of the excavation.

Another case of pelvic contraction is thus described by Cazeaux: "In the approximation of the antero-posterior walls, the sacrum is nearly always the displaced bone; but although much more rare, a flattening of the anterior wall is also met with; and then the symphysis pubis, instead of presenting a convexity in front, is perfectly flat, or even (as in one instance represented by Madame Boivin) presents a depression, which seems to protrude inwardly towards the prominence of the sacrum. This double inclination of the pubis and sacrum towards each other, gives to the superior strait the form of a figure-of-eight; that is, its plane is divided into two rounded portions on the sides, corresponding to the iliac fossæ, and is separated in the middle by a restricted part, of variable width. If the depression is considerable, the antero-posterior diameter of both straits, and of the excavation, must evidently be affected by it."

Or again, the extent of the symphysis pubis may be much greater in its vertical direction than usual, giving rise to what is termed the *bar* pelvis; or it may have an excessive inclination backwards at its lower end: in both these cases the pelvis is narrowed.

Sometimes the coccyx is elongated, and it takes a nearly horizontal direction. This, as well as an immobility of the sacro-coccygeal articulation, may, it is alleged, contribute to the shortening of the coccy-pubic diameter.

(b) *The compression of the lateral walls*, by which the transverse diameter is shortened, is the rarest of all pubic malformations, that is, so far as the superior strait and upper part of the excavation are concerned. As it regards the inferior strait, the approximation of the two ischial tuberosities, by which this species of deformity is produced, is quite as frequent as the shortening of the coccy-pubic diameter. The pubic arch, in this case, assumes the triangular form peculiar to the male sex. Moreover, the inward projection of the spines of the ischia may produce a sensible diminution of the lower part of the excavation in the transverse direction.

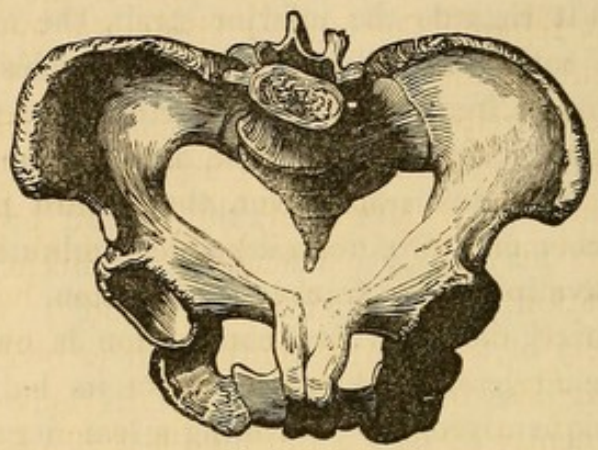
"Another variety of transverse contraction is owing to the fact of the pelvis being less developed in one of its halves than in the other, and consequently to its exhibiting a less degree of curvature in that part than upon the opposite side. In this case, the articulation of the spine with the sacrum no longer corresponds to the middle of the pelvis, and the vertebral column is found nearer to the hip of the contracted side; the transverse diameter is likewise diminished at the inferior strait by reason of the obliquity of the entering part of the coxal bone. The antagonism before alluded to, as existing between the antero-posterior diameters of the superior and the inferior straits, whereby the elongation of one most frequently coincides with a shortening of the other, rarely exists in the transverse direction; the deformity produced by a congenital displacement of the femurs is probably the only condition in which the transverse diameter of the inferior strait augments at the same time that the bis-iliac one diminishes. The enlargement in the lower part of the pelvis, in this instance, being marked by an unusual width in the pubic arch, a great obliquity of the ischio-pubic ramus, a separation of the ischial tuberosities, &c."—*Cazeaux.*

(c) *The depression of the antero-lateral walls.* The effect of this depression is the diminution of the oblique diameters. It occurs more frequently than the preceding, but not so frequently as the first variety. The essential characteristic of this deformity is the flattening or the inward projection of the coxal bone at the part corresponding to the cotyloid cavity and the junction of its three constituent pieces;—whereby the curve described by the pelvic circumference is more or less diminished,—even when carried to a high

degree, to the reversal of the curvature, its convexity being turned towards the sacrum,—and the pubis pushes almost directly forwards, the coxal bones assuming the form of an italic *S* instead of presenting a regular arch.

We, lastly, proceed to describe the oblique oval pelvis, a malformation produced by an arrest of development on the part of one

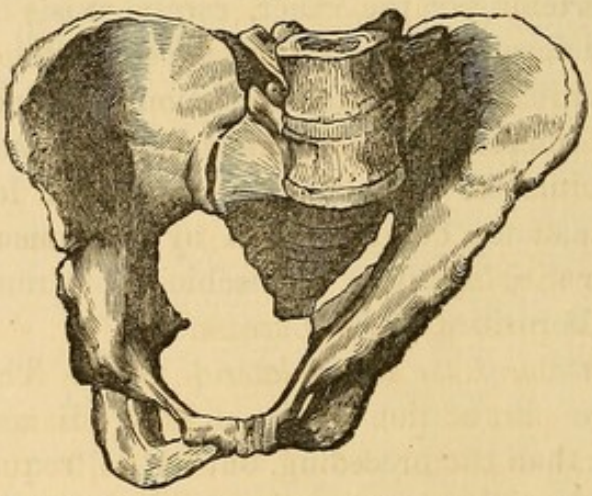
Fig. 83.



A pelvis in which the sinking-in of the antero-lateral walls exists on both sides.

lateral half of the pelvis, while the other maintains its normal condition. The effect of this, as will readily be seen, is to throw the symphysis pubis to one side of the mesial line of the body, whilst the sacrum seems to be on the other side. The consequence of this is, that the cavity of the pelvis will be oval, and will occupy one or the other lateral half.

Fig. 84.



A figure taken from M. Nægèle's work, which exhibits the characters of the oblique-oval pelvis in a high degree.

The influence of these deformities on the pregnant state is rather unfavorable, from the fact that in the latter half of pregnancy the gravid uterus is not so easily and safely supported, and in the earlier

period it is often more easily displaced, or it more slowly rises above the superior strait. These and other similar circumstances have a constant tendency to produce abortion, or premature labor. The mode of treatment where cases of deformity occur, does not differ in the first stage from that pursued in the case of well-formed females. Where the os uteri is sufficiently dilated or dilatable, so as to permit the escape of the head, the experienced accoucheur, by a careful comparison of the presenting part with the passage, will be able to decide on the possibility of a spontaneous delivery. When the vertex presents itself, sufficient time should be allowed for its engagement, descent, and final expulsion. The contractions should be supported by means of such remedies as the case may seem to require. See *Labor*. But should no advancement be perceptible, the forceps may be applied and an artificial expulsion effected, if possible; but if there is no reasonable hope of delivery by this means, craniotomy must be resorted to. See *Forceps*, and *Craniotomy*.

When the pelvic extremity presents, the same rules apply as in natural labor; but if the deformity is too great to allow a spontaneous expulsion, the blunt-hook must be used, as hereafter to be described. When the body is in the act of being delivered, introduce as soon as possible the index finger into the mouth of the child, and force the chin down upon the sternum as much as possible, whilst traction is being made upon the shoulders. In this way the longest diameter of the head will be made to occupy the shortest possible space in the pelvis. If then it is not found possible to deliver the head, the forceps must be applied. See *Forceps*.

When *the face presents*, an effort should be made to convert it into a vertex presentation, as described on page 497; and then, if necessary, apply the forceps. Desperate efforts should be made to change the face presentation to one of the vertex, as it would greatly increase the chance of the child's life, afford relief to the mother, and contribute to our satisfaction.

When the child presents by the trunk, an effort should always be made to convert this into a presentation of the vertex; and if we discover that one part of the deformed cavity is broader than any other, the occipital diameter should be directed to that part as much as possible. If the labor has already continued so long as to make it impossible to bring the vertex into the superior strait, the foot must be seized and the malpresentation converted into one of the breech, when we may proceed as in all breech presentations.

When the smaller diameter of the pelvis is less than two and a

half inches, and the child is living, the Cæsarean section should be resorted to at once: no time should be lost after the first stage of labor is accomplished or nearly so. I should deem this the most opportune moment for the operation, for this is as nature would operate so far at all events. The liquor amnii should be discharged, and as the second stage cannot be accomplished as nature would require, the Cæsarean section should be resorted to at once. For thus an opportunity is afforded for preserving the life of the child, and the mother has as good a chance for preserving her life as she would have in the operation of craniotomy. For in this malformed state of the pelvis, the difficulty of extracting a child piecemeal through so small an aperture would be as great hazard to the life of the mother as the Cæsarean section. Should the child be dead, then, as there is but one life to consider, the extraction should be made through the natural channel.

Causes of Pelvic Deformities.

We now pass to the causes and mode of production of the pelvic deformities. For a long time these, together with other deformities of the skeleton, were referred to a single cause, viz., *rachitis;* but modern researches have clearly proved that the pelvis may be deformed in the absence of rachitis; and from purely mechanical causes, operating at a time when, on account of tender age or feebleness of constitution, they could meet but little resistance. From this view of the causes which produce changes in the form of the pelvis, we might collected formed pelves into three groups, viz.: (1) Those which are deformed from a softening of the bones, either by rachitis or mollities ossium; (2) Those deformed in consequence of a previous deformity of some other part of the skeleton; (3) Those deformed by absolute narrowness.

(1) *The Pelvis deformed by Rachitis, or Malacosteon.*—These two diseases, however differing from each other in their anatomical characteristics, yet produce the same result, viz., they soften the osseous tissue and thereby weaken its power of resistance. But the mere fact of softening the bones and their consequent weakness, is not of itself sufficient to account for the various deformities presented by the pelvis. For it is very evident that the bones, unless reduced to a gelatinous state, would maintain their general conformation unless acted on by some external force. For rachitis diminishes the solidity of the bones, but does not, of itself, produce any alteration of shape. This exterior force may be looked for in the muscular action,

and still oftener in the weight of the parts which the pelvis has to support. For the pelvis, interposed between the spine which it supports, and the lower extremities on which it rests, is most favorably conditioned for the action of deformity. The weight of the trunk, in its erect position, being transmitted from the lumbar vertebræ to the heads of the femurs in the direction of two lines intersecting the sides of the superior strait, evidently tends to increase the curvature of the posterior part of the ilium, and to depress the osseous circle of the pelvic cavity. In this way the sacrum receives a tendency, by almost insensible degrees, to push forwards. By considering the action of the pubic bones under this pressure, we may see how it is that the superior strait is oftener affected by the contractions of the pelvis than other parts; and why at this strait the antero-posterior and oblique diameters and the sacro-cotyloid intervals are more frequently contracted than the transverse ones.

When the weight acts more particularly on one side of the pelvis, the collapse is more marked in that direction, because, in this case, a change in the centre of gravity takes place from the inclination of the spine; and there is also a very unequal pressure of the weight of the body on the two sides of the pelvis, where, on account of a difference of length in the lower extremities, one of the coxal bones is more depressed than the other. In this way the acetabulum of one side is thrown almost directly under the sacrum, and at the same time receives the weight very obliquely. The customary attitude of the individual, and the nature of her occupations, must be taken into account in considering the irregularity of figure in the pelvis.

Sometimes there is a complete fusion of the sacrum and ilium, and the sacro-iliac articulation on the contracted side disappears. We simply state this fact without attempting any explanation of it.

In estimating the respective influences of mollities ossium and rachitis on the bony tissue, the distinctive characteristics of each should be carefully noted. Mollities ossium affects all parts of the skeleton indifferently, and it occurs in the adult only. The softening produced by this disease is more distinctly marked, and the most considerable retractions must be referred to it. Rachitis affects the bones of the lower extremities and ascends gradually to the upper parts: it proceeds from below, upwards; so that a deformity of any part by rachitis almost necessarily implies a deformity below. It is peculiar to infancy, and its effects on the skeleton are twofold,—it softens the bones, and it arrests their development. And as this arrest of development particularly affects the lower extremities, it is

a necessary consequence that the ossa innominata should be much less developed in those subject to this disease than with others, and the limits of the pelvic cavity more or less contracted by it.

It is here that we may see the difference again between rachitis and malacosteon, or rachitis adultorum, as it is sometimes called; for the first, exerting its influence at an early age of the patient, at a period when the pelvis has not yet reached its full development, permanently arrests the growth of this part of the skeleton; but the last, not occurring until after puberty, at a time when the ossa innominata have reached their full development, may soften the bones, but cannot arrest their growth. Moreover, the bones of the skeleton are not only arrested absolutely by rachitis, but their growth is retarded, even after a cure has been effected, during the whole term of development.

(2) *Those deformed in consequence of a previous Deformity of some other part of the Skeleton.*—These deformities are:

(*a*) *Deviations of the Vertebral Column.*—Rachitis is not the only cause of this deformity. It is now admitted that several other diseases may produce abnormal curvatures in this column. It is thus we establish a line of distinction between those deviations which nearly always attend pelvic malformations, and those which often exist when the pelvis is well formed. The former must be referred to rachitis, the latter to some other affection. The shape and direction of the pelvis are subject to the influences of other deviations of the spine than those which depend on rickets; but it is only in subjects of an advanced age that curvatures occurring after the age of infancy exert an influence of this kind. Curvatures produced by rickets, even when not the essential cause of deformity in the pelvis, heighten the degree of contraction and affect the shape of the pelvis. The aged and the young are alike affected by the spinal deviation, but the effects are brought about more rapidly with the young than with the old. The malformation is more or less similar to that described under the name of the *oblique oval pelvis.*

(*b*) *Congenital Luxations.*—These may cause an arrest of development, and subsequent pelvic deformity.

(*c*) *Non-congenital Luxations.*—A luxation remaining unreduced, and which occurred early in life, is sufficient cause for an atrophy of the iliac bone corresponding to the dislocated femur; and it is evident that the malformation of the pelvis will be proportionately great as the luxation occurred at an early age.

(*d*) *Lesions of the Inferior Extremities.*—The curvatures of the lower limbs do not always diminish in length equally, and the pres-

sure which they make on the bottom of the cotyloid cavities is not the same for both sides; the consequence of this is, that the pelvis may be affected on that side where the pressure is the greater. The lower extremities may often be curved, without injury to the pelvis, provided they maintain the same length; and where they are unequal in length there must result pelvic deformity.

The pelvis may be deformed by a shortening of one of the legs from any cause, particularly if the accident occur in early life, when the pelvis is but partially developed. Where one leg is affected with chronic disease, and the person is obliged to use crutches, bearing the whole length of the body on one leg, or where the thigh has been amputated in early childhood, the pelvis is in either case liable to deformity.

(3) *Pelvis deformed by Absolute Narrowness.*—The most generally accepted opinion on this topic is, "that we have no positive data concerning the causes that give rise to the general narrowing of the pelvis; and that such pelves, as well as unusually large ones, should rather be considered as a freak of nature, belonging to the same category as a want of proportion in the head, which is not unfrequently found too large, or too small, relatively to the rest of the body."

CHAPTER THIRTY-FOURTH.

DYSTOCIA FROM MALFORMATIONS OF THE VULVA, VAGINA, AND UTERUS.

MALFORMATIONS OF THE VULVA AND VAGINA; TUMORS, &c.

Adhesions of the vulva may occur, hindering the expulsion of the child. In a case of this kind, it is only necessary to divide the adhering portion with the scalpel at the moment that the presenting part is pressing down upon the adhesion.

The hymen also may be so persistent as to hinder the expulsion; this also should then be divided with the scalpel.

Contractions and rigidity of the vulva quite frequently delay the expulsion very much, but I have never found it necessary to operate in cases of this kind. *Aconite,* most usually, or some other remedy, has aided the dilatation, and a little patience has always sufficed, and I believe always will suffice in such cases.

Remarkable cases of resistance on the part of the perineum are met with when the labor has been much delayed. *Aconite*, or some other remedy, has invariably supported the contractions and aided in the dilatation, and the delivery has been satisfactorily accomplished. In some cases the whole perineum has appeared to fit in such a manner the child's head, and to sink down so low that it has been found necessary to apply the forceps and simply lift the head directly out of the little sulcus it has seemed to make for itself there.

The vagina may be found malformed, or adherent, or the hymen may be double or triple, and thrown across high up in the vagina; or there may be a complete septum in the vagina. These cases should all be treated with the knife, if necessary; and according to circumstances present;—these will indicate the proper treatment.

Inversion of the vagina sometimes takes place during labor, when the protruding portion from prolonged pressure becomes gangrenous. When this is likely to occur, the forceps should be used at once, and the expulsion accomplished. When this condition is apprehended or observed in its incipiency, the accident can be averted by carefully crowding the descending parts back continually as the labor progresses.

Tumors are also liable to obstruct the passage, so as to cause great and even fatal delay. These may be osseous tumors, or they may belong to the soft parts.

Exostoses are likely to exist and to form some of the most formidable obstacles to a safe delivery. These usually arise from the anterior face of the sacrum, sometimes from the ischium and the pubis. This tumor is recognized by its hardness, immobility, roughness, and adherence to the bone. These forms of tumor continue to grow in size from year to year, and consequently to become more and more formidable at every successive pregnancy, unless cured by the proper Homœopathic remedies. Compare article on *Exostosis*. The only plan of treatment is that pursued in deformed pelvis.

Osteo-sarcoma is another type of malformation, quite similar to the one just mentioned. The only difference is that it is somewhat compressible, a mixture of the osseous, fibrous, and cartilaginous matter. Even the osseous crepitation can be felt on pressure. The plan of treatment is the same as that in the last case.

Osseous tumors are sometimes met with in the pelvic cavity. These arise from an improper union of fractures; and, further, from the head of the femur being forced in upon the acetabulum. These affections are of course fixed and incurable. Others may be cured

by a proper course of medical treatment. The plan of delivery must be conducted as in similar cases of pelvic deformity.

Œdema of the labia, so far as my experience goes, presents no formidable obstruction to the process of parturition. Patience and the administration of the remedies according to the principles already laid down, will assist the work of nature, and no surgical operation will be found necessary.

Sanguineous tumors sometimes form in the soft parts, in the labia, among the muscles of the pelvis, or even in the neck and lips of the uterus. If the size of these tumors increase gradually, the case should be treated by the administration of *Aconite*, *Hammamelis*, *Erigeron*, or any other remedy strongly indicated by characteristic symptoms, which will then be sure to arrest the difficulty and facilitate parturition.

Various other tumors are found in and about the track which the child must pursue in its passage to the light of day; many of which need no attention during parturition, if they are not obstacles to the expulsion of the child; if they are, they may need to be punctured, incised, or removed, as the nature of the case may indicate. It is always best to wait and allow nature to do her own work, if possible. Many of these tumors are not discovered until the hour of parturition arrives. And note should be made of them and the proper treatment resorted to, after the lying-in period has passed.

Tumors of the Neck and Body of the Uterus.

These may be Encysted, or Fibrous Tumors, or Cauliflower Excrescences.

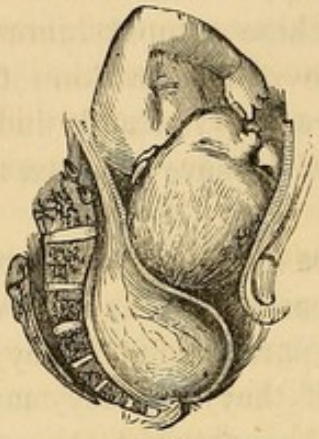
If *encysted tumors* prove an obstruction to delivery, they may be punctured and the fluid which they contain drawn off; or, if they contain cheesy matter, an incision will allow it to pass out, especially under the pressure from above during the accession of a pain. But unless their size prevent the expulsion of the child, they need not be interfered with.

Pedunculated fibrous tumors or *polypi,* usually precede the advancing portion of the child, as shown in the accompanying cut, Fig. 93. In such cases, we may ligate the neck of the tumor, and remove it, if thought best.

Cauliflower tumors, or *excrescences.* These cancerous or syphilitic growths seldom cause delay, unless their size is very considerable. But where they are large the condition is much more serious. Several

cases are quoted by Cazeaux from Puchelt: "in one, it was necessary to make incisions upon another part of the hard or scirrhous neck, so as to secure the introduction of the hand; and in a second, to remove the tumor that was attached to the anterior lip and occupied all the vagina, by the scissors; gastrotomy was resorted to in a third, on account of a rupture of the womb, and not even the child was saved; in another, the extraction of the child was impossible,

Fig. 93.



This figure, taken from Ramsbotham's work, shows the situation of the polypus pressed down by the advancing head in parturition.

notwithstanding the perforation of the cranium, and the woman died before delivery. Only a single mother survived." But this great fatality is no doubt in part due to the malignant nature of the disease which supports these excrescences.

Ovarian tumors, and those of the Fallopian tubes, must, if possible, be pushed back above the superior strait. If this should prove impracticable, and they offer serious impediment to delivery, let them protrude still further, then they may be perforated with a trocar, and their fluid contents evacuated. Should these contents prove semi-solid,—cheesy matters,—a more free incision may be made, —when the downward pressure of the child's head will speedily cause their discharge.

Tumors of the Rectum.—Sometimes tumors of this kind seem very formidable, but an injection or two will generally dissipate them. Sometimes, however, they require a scoop. These tumors are composed of an accumulation of feces.

Tumors of the bladder may usually be remedied by the catheter, and when it is prolapsed it must be crowded up to its place. If there is a calculus, it must be elevated above the superior strait, or, if this is impossible, it must be excised. If the bladder be in a cancerous con-

dition, it must be pushed up as high as possible, at the moment the presenting part of the child is descending. In case of calculus, terrestrial gravity will do much for us, if we will place the patient on her knees and face.

Hernia, Intestinal or Omental, Vulval or Perineal.—These tumors must be reduced as soon as discovered, and much aid may be derived from placing the patient on her knees and face; then a little manipulation will cause the tumor to ascend. A horizontal position must be insisted on now until the child is born.

Vesical hernia, or *cystocele*, occurs quite frequently. The male catheter must be introduced at once; and after the urine has been discharged, the bladder must be crowded up to its place. The tumor will be found attached to the symphysis pubis, in a fluctuating state, and the os uteri will be found above in its natural place. See cut 94. The introduction of the catheter makes the case clear and unmistakable.

Fig. 94.

Vaginal cystocele, taken from Ramsbotham.

Dystocia from Affections of the Cervix and Uterus.

Rigidity of the neck of the uterus often causes dystocia. An examination per vaginam results in finding a hard, contracted, unyielding, muscular body, even in the absence of pain. It is not a schirrous, but a muscular hardness. For its relief, see the remarks on labor-pains. *Belladonna* is the remedy most frequently indicated.

In *spasmodic contractions of the neck*, an examination per vaginam discovers a thin, almost cutting edge of the os tincæ. In this state also, labor is very much retarded until the proper remedy is brought to bear upon the system: *Bellad.*, *Sepia*, and some others, which may be found among the remedies for labor. The general and the particular characteristic symptoms must determine the proper medical treatment; relief will speedily follow. All these different states arise

from some constitutional derangement, and hence the marked success attending the administering of the properly selected medicines in unlocking and setting free the obstruction.

Obliquity of the uterus would throw the orifice of the neck to one side of the axis of the pelvis, either too far posteriorly, anteriorly, or yet to the right or to the left lateral. In such cases, the position of the patient should be so changed as to rectify the obliquity. If the os is looking backwards too much, she must lie on her back; if too much forward, even on to the pubis, she must throw her chest and trunk forwards; if to the right, she must lie on her right; if to the left, she must lie on her left. In all these cases, the uterus will right itself very soon, and a speedy delivery will ensue.

Agglutination of the external uterine orifice sometimes occurs, even at the hour of labor. Such a state will be recognized by feeling the outlines of the lips apparently covered over by a thin membrane. At every contraction, the line of demarcation between the lips will become more and more apparent, and allow the thin membrane to sink a little between the lips. Now, during a pain, the thinnest and most yielding spot must be found out, and the finger forced with much violence through the membrane. If the finger is not sufficient, a more potent agent must be used, great care being taken not to wound the child or the mother needlessly.

The swelling and elongation of the anterior lip is a frequent cause of delay in labor. The anterior lip, from some cause, may not dilate. It may swell and become paralyzed, and hang down upon the head of the child; whilst the posterior lip kindly dilates, and the presenting part is ready to pass through, but for the stubbornness of the anterior lip. Great and often immediate relief is obtained by pushing up with the finger this anterior lip, and holding it firmly, and even crowding it up further during a pain. It then slips up, sooner or later, above the head, and the distress of the patient is relieved, and the labor progresses finely to its completion.

Induration and hypertrophy of both lips are found in some cases, when the distress of the patient during labor will furnish the symptoms necessary for the indication of the remedy which will effect the desired dilatation.

A cancerous neck is sometimes an obstacle to easy labor. When the cancerous affection occupies only one-half or so of the neck, dilatation will be effected, and the labor brought to a close. But if two-thirds, or quite all of the neck be affected, it will be necessary, in order that dilatation be effected, that an incision be made

through the schirrosity, in six or eight places, equidistant from each other.

Complete obliteration of the cervix uteri, it is admitted by all medical writers at the present day, does sometimes occur. Of course no os, in this case, can be found by exploring in any direction,—far back towards the promontory of the sacrum, and in other directions; but much care is necessary here, for sometimes it is found at an incredibly distant point towards the promontory of the sacrum. When not the faintest line of demarcation of an os can be discovered, one must be made at the lowest or most pendant point of the uterus by a vaginal Cæsarean section.

Hernia of the womb, it is admitted, sometimes takes place, by the inguinal or crural rings becoming so much dilated as to allow the escape of the uterus. Pregnancy may continue to the full term, when a reasonable time should be allowed for spontaneous delivery; but it is most likely that a Cæsarean section will be found necessary.

A prolapsed womb may become pregnant; or the womb may prolapse suddenly after conception, and the full term be accomplished there: a slow and difficult labor will result; but it may take place fairly, and the uterus return to its place.

Dystocia from Rupture of the Uterus.

Rupture of the uterus is one of the most serious complications or accidents which can possibly occur during the puerperal state. It may occur at any time during gestation or labor, but is much more frequent in the latter stage than in the former. Primiparæ are much less liable to the accident than multiparæ. It may occur in the body or in the neck; when it occurs in the neck, it almost always involves a rupture of the vagina also.

The cause of so unfortunate an accident may be referred to many circumstances: great thinness, a softening, or a diseased condition, of the walls; mechanical injuries, or too violent contractions may all be enumerated among the circumstances.

When this accident occurs, a sharp, tearing pain is felt, and that so suddenly and severely as to cause the patient to scream out with great force, then a sensation of numbness, paleness, swooning, sinking of the pulse, and finally syncope.

When this accident occurs at an early stage of gestation, before the uterus contains much to be discharged, through the rent, the product

of conception may dam up the passage, and cause the contents of the uterus to be retained for some days; so that when a reaction ensues after the first shock, a calm precedes a more violent set of symptoms after the final escape of the product of conception into the cavity of the abdomen. In the later months of conception, the diagnosis is easier to be made, from the fact that the uterine globe has evidently become dissipated; its contents having escaped and become generally diffused throughout the abdominal cavity. There follows a sense of heat and then a burning sensation, as in cases of peritoneal inflammation.

When it occurs during labor, we have, added to the other symptoms, a collapse of the bag of waters, or the retrocession of the presenting part, and a terrible hemorrhage from the ruptured organ, a small portion of which will escape from the vagina, but the remainder passes into the abdominal cavity. Hemorrhage occurs in all cases, it is true, but not from the vagina in so marked a degree as in labor, and after the rupture of the membranes. If this occurs during labor, instruments should be applied as soon as possible, to prevent the escape of the child into the abdominal cavity. Should the child have already escaped, the hand should follow and deliver through the rent, care being taken not to drag out the intestines, or to leave any of them embraced in the rent after the extraction of the child. If the rupture occurs from a hydrocephalic head, apply the trocar at once, and then the forceps, or the crotchet. Should this be impracticable from the retraction of the uterine walls, the Cæsarean section will be the only remedy.

Should the rupture occur after the seventh month, and previous to labor, the Cæsarean section should be resorted to at once, particularly if the child be alive. If it occurs in the earlier months of gestation, it is thought to be the better plan to leave the consequence to nature and to such medication as the symptoms of the case would seem to require.

If, after all, in either of the above cases, the patient survive the loss of blood, we may entertain a reasonable hope to save her life, by combating the symptoms as they occur, by means of the proper medication. Inflammation will probably be the first, and the worst symptom to contend with. See the remedies under *Peritonitis*, *Hysteritis*, &c.

All foreign substances that remain in the abdominal cavity after rupture in any stage of gestation, become encysted as the patient recovers, and may be carried in the cyst for years, or even during

her lifetime, and she may enjoy, in the meanwhile, a tolerable degree of health.

The vagina sometimes becomes *ruptured*, in which case a similar condition prevails, in all respects, as in case of ruptures of the uterus; except that the symptoms are not so intense, nor so dangerous. This accident occurs only during labor. A similar course of treatment must be resorted to; instruments must be used immediately, or extraction should be effected through the rent, should occasion require, which is very seldom in cases of this kind. The post-partum treatment, according to the medication above recommended, should be carefully instituted, and with reasonable hope of success.

There are certain diseases which may complicate labor, that require special and particular attention. Of this kind are hæmoptysis and hæmatemesis. In these cases, the remedies must be resorted to which are usually employed in treating such diseases. As a general rule, hemorrhages will be controlled and labor will terminate in a regular, natural way. But if we are not thus fortunate, the labor must be terminated as soon as possible, by artificial means. In asthmas, palpitations, and other diseases of the heart, we should be governed in our action by the principle stated above. In aneurisms, where there is a great danger of rupture at any pain, immediate resort should be had to artificial means of delivery.

When hernia exists it should be reduced as soon as possible, and when it is utterly impossible to reduce it, the best practice is to resort to artificial means of delivery, in order that the hernial protrusion may not be strangulated longer than necessary, for fear of mortification and consequent sloughing. When the hernia is liable to return after reduction, it may be kept back by constant pressure. Fainting spells and syncopes are all curable by using the proper medicines. See remedies for *Labor*. When there is great exhaustion from debility, and it cannot be relieved by the proper medicines, resort to artificial means for delivery.

CHAPTER THIRTY-FIFTH.

DYSTOCIA FROM DEFORMITIES OF THE FŒTUS.

We now commence the study of those obstacles to its ready expulsion, which depend on the fœtus and its appendages,—the passage being in a normal condition, and the expulsive force sufficient. Some disease of the fœtus may develop a true hydrocephalic condition, in which the head becomes so large as to make it impossible for it to pass through the cavity. This state may be known from the cranial bones being separated far from each other, and each seems to swim, as it were, in water, when pressing upon them; there is also a wide suture between every bone of the cranium.

In cases of this kind, it will be necessary to plunge a trocar through the head, and draw off the water, when the natural forces will cause an expulsion.

Hydrothorax may exist. This disease may be diagnosed after the expulsion of the head or breech, by the arrest of progress, by the intercostal spaces being extended, and by the fluctuation of water between the ribs.

Ascites may occur and arrest the further progress of the child. When this is the case, fluctuation and enormous distention solve the mystery. In the last two, or in similar cases, the trocar is the only remedy.

An emphysematous condition may occur in fœtuses which have been long dead and become so distended with gas as to hinder their expulsion. The trocar is to be used also in this case. Upon applying this instrument, large quantities of offensive air escape.

Tumors of the fœtus may also cause a delay, until the tumor is removed, if solid; or punctured, if containing fluid.

We must be on our guard against accidents, and be duly prepared for every exigency which may arise.

Anchylosis of the fœtal articulation has been known to occur, causing great delay. On the application of the forceps, and making severe tractions, a great cracking has been heard, and the child delivered.

Excess of volume on the part of the child may be a cause of delay; the volume may be so much in excess, indeed, as to constitute the

child a monster. The application of the forceps or blunt-hook is the remedy in cases of this kind,—that is if the vital forces are inadequate to a delivery.

Multiple and adhesive fœtuses constitute a very formidable cause of dystocia. We can often ascertain before the time of delivery the fact of the presence of two or more fœtuses in utero; but we cannot ascertain whether they are separate and independent, until the hour of delivery has actually come. If two bags of water are found to be present, it is necessary to rupture the membrane twice. The same must be done if we have evidence of their being two distinct gushes of liquor amnii. We may then be assured that two pouches have ruptured, and it is made certain that there are no adherent fœtuses present: for adherent children are always enclosed in a single set of membranes, and perfect twins are seldom enclosed in a single amnion. If, moreover, the head and feet appear at the superior strait, and particularly if we can draw upon the feet without causing the head to ascend, we may be sure that there is no adhesion; no adherent fœtuses being ever so united that the feet and head are in different directions. If three or four feet appear at the vulva at the same time, and on pulling at one, another moves simultaneously, but the others remain at rest, we may be sure of the fœtuses being detached from each other. If all move simultaneously, we can only ascertain this fact to a certainty by carrying the hand up into the uterus.

In all cases, whether there is an adhesion or not, sufficient time should be allowed for nature to operate unaided, but efficient aid should be rendered the moment that there is reason to believe it to be called for. Whether the union takes place at the head or the breech, the expulsion takes place, the one after the other, without difficulty. But if the union be at the occiput and the full term has expired, craniotomy will probably have to be resorted to.

Where there are two heads to one trunk, one head will engage after the other, and the body will descend subsequently.

Where each head has its body, and the union takes place at any point of the trunk, one head may be born first; the feet belonging to this head may be brought down; next, the feet of the other child may be brought down, and lastly the head of this same child.

When there is but one head to two bodies, the head may be born first, and the two bodies simultaneously with each other. If the breech of one body comes first, the hand may be introduced and the feet of the other child brought down.

But it is impossible to lay down positive rules for all the anomalies

which may arise. In special cases, the accoucheur, in deciding on his course, must be led by general principles.

Multiple and *independent* fœtuses are often delivered one after the other, promptly and with but little delay; but usually these cases are more tedious. The child first presenting cannot be acted on as efficiently as if there were but one, for the uterine contraction must force one by acting upon the other.

Moreover, the over distention of the uterine walls serves to weaken the contractile powers for the first child. When the first child presents by the breech, there is likely to be more difficulty in the birth of its head on account of the remaining child's hindering the direct application of the uterine contractions upon it. Hence we must not overlook the importance of introducing a finger into its mouth in order to flex the chin upon the chest, and make sufficient and prompt traction for a safe delivery. Soon after the birth of the first child, in the course of twenty minutes, the contractions return, feebly at first, but soon more efficaciously,—and the next child, and the next is promptly expelled. The accoucheur, as soon as one child is born, should always place his hand on the abdomen of the mother, to ascertain whether others are present there, and so on, successively, until all the births are effected. If another remains, the abdomen will seem to be but a little smaller for the expulsion of one or two: the presence of more will be unmistakable to both sight and touch. Sometimes, after one child has been born, a rest of some hours seems necessary, before the exhausted fibres are sufficiently recovered to renew their contractions. All troublesome symptoms, such as flooding, fainting, &c., may now be relieved by the proper Homœopathic remedies, according to the principles already mentioned. If the pains are delayed very long, they may be reproduced by resorting to the remedies already referred to under the head of *Labor*. Sometimes it may be necessary to rupture the membranes for the passage of the second child, in order to excite contractions, and sometimes to tickle the os with the finger in order to excite a reaction.

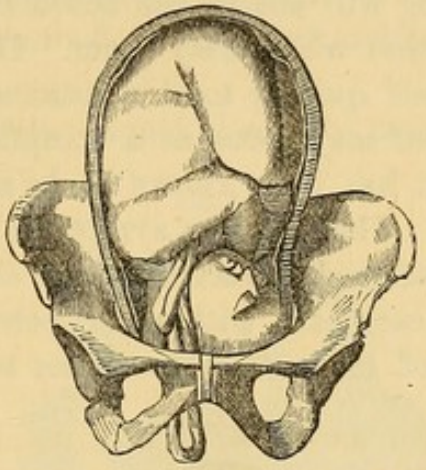
Sometimes both heads incline to present at the same time, in which case one must be pushed aside to allow the other to descend. The same course must be adopted in the case the breech presents. If either child presents by the shoulder, and a pelvic version is determined upon, great care must be exercised to seize the feet of the child to be turned; this is an easy matter, by constantly keeping the hand on the child whose shoulder presents.

When two feet appear at the vulva, and it should seem advisable

to interpose assistance, but one foot should be drawn upon, and that, very gently at first, in order to ascertain whether the other moves simultaneously, as belonging to the same body, and if this is found not to be the case, every effort should be made to return those which do not. A good, and perhaps the only way to accomplish this, is to suspend the patient by the feet, at the same time holding on to a leg of one of the children, the others would return into the uterus, to be extracted after the expulsion of the first.

Prolapsus, or the falling of the cord, is a serious complication for the child, whilst it brings no harm to the mother, the life of the child being alone endangered: Fig. 95 exemplifies a case of this kind. The

Fig. 95.



The right posterior occipito-iliac position, complicated by a falling of the cord.

first evidence which the accoucheur has of this accident, is its actual presence with the presenting part of the child. The fold of the cord hanging may be of different lengths, simply hanging below the superior strait, or it may be six inches long, or more. If the child is living, the cord will be felt to pulsate, one hundred and twenty to one hundred and forty beats a minute, and the cord will be felt firm and like a living tissue. But if dead, there will be no pulsation, and the cord will feel shrivelled, soft and lifeless.

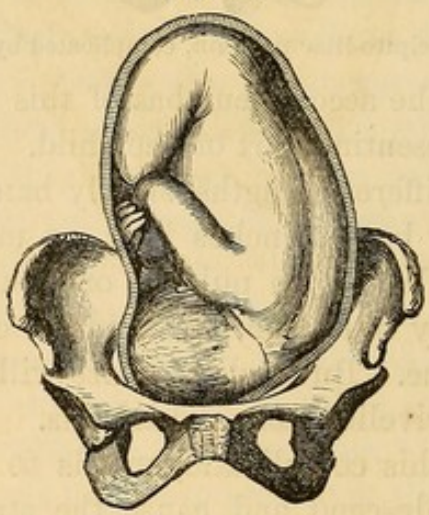
The treatment of this complication needs to be very prompt, lest the presenting part descend and cause the strangulation and consequent death of the child. The only plan of safety possible is to take a piece of wet sponge, about twice the size of a hen's egg, and cut entirely through its centre a hole large enough to receive the fold of cord. Now pass a string through the loop of cord, and next pass the same string through the sponge. Now by holding on to the string and slipping the sponge upwards, the fold of cord is drawn into the sponge. Slip the sponge well up so as to secure a full introduction

of this fold into the sponge. Now with the fingers crowd the sponge and all well above the superior strait. The sponge will dilate and retain all above the presenting part safely. It may be well to be always prepared with a small piece of sponge ready for the occasion. If the presenting part of the child has become so firmly engaged in the superior strait as to render the return of the cord impracticable, the labor should be terminated either with the forceps or the blunt hook. Should the shoulder present, and pelvic version become necessary, the cord should be carried up with the hand used for this purpose. When the breech presents, it may become necessary to hold the sponge at the superior strait until the part becomes so engaged as to retain the sponge without further effort. A little thought and reasoning will enable the accoucheur to quickly adapt himself to any variation which may occur. He should always endeavor to adapt himself quickly to circumstances as they arise.

Shortness of the cord may occur as a complication, and delay the labor very much. It has been known to be not more than four or five inches in length. The strongest symptoms of this state of things are found in the continued retraction of the child, time after time, after the cessation of each pain, without any perceptible advancement.

If this condition of the patient continues too long, so as to en-

Fig. 96.



The left occipito-iliac position strongly inclined on its posterior parietal region.

danger the welfare of the mother or child, the aid of instruments must be invoked. When the presenting part has advanced so far as to expose the cord, it should be severed at once, about an inch and a half from the child's body. It may be tied; or held tightly between the fingers of an assistant until a complete delivery takes place, when it may be tied. There is danger of a rupture of the

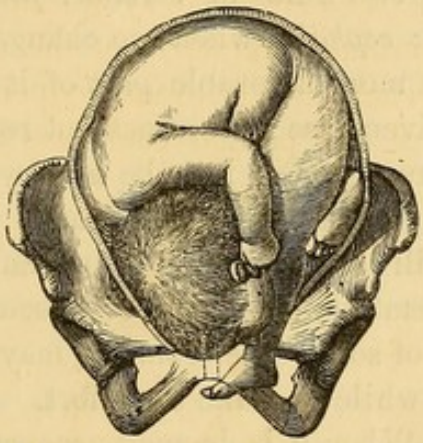
cord or of a separation of the placenta, exposing the child and mother to a severe loss of blood before the child is sufficiently far expelled to expose the cord; in this event the treatment is still the same: apply the instrument necessary for hastening the expulsion of the child.

Inclined position of the fœtus constitutes another cause, on the part of the child, of its tardy birth. Fig. 96 illustrates a case of this kind. In making an examination per vaginam, one ear, the side of the head and the neck are felt. In all similar cases it is only necessary to turn the patient so that she shall lie on the side opposite to the place where we feel the neck of the child. The body falls down on the same side and soon rectifies the inclination.

Inclined breech positions can be managed on the same principle; the mother being always turned, in such inclinations, upon the same side as the anus points to.

Inclined facial positions should always be managed in the same way

Fig. 97.



The left posterior mento-iliac position complicated by a descent of the left foot.

as any facial presentation; they should be converted at once, and without delay, into vertex presentations, as will hereafter be described.

Inclined positions of the trunk must also be interfered with at once, and converted into vertex presentations or delivered by the feet, as directed a little further on.

Complicated presentations, something similar to Fig. 97, must be managed by the application of general principles.

The child is forced quite closely down into the superior strait. Now, it is evident, the trunk cannot go back, and the head be brought down, because one foot has advanced too far. If the feet were further up, the forceps might perhaps be applied, and the head brought down, and the cord would be less liable to become compressed. All things

being considered then, it is very evident that the best course to be pursued is to use a linen handkerchief as a fillet on the foot most advanced. An assistant should make powerful, but steady and careful traction upon it, whilst the accoucheur steadies the uterus with both hands placed upon the abdomen. The labor will then terminate in the most favorable manner. The exercise of mature judgment is called for in all these unusual and entirely new conditions.

CHAPTER THIRTY-SIXTH.

MANUAL OPERATIONS NECESSARY FOR RELIEF IN DYSTOCIA.

THE first of these operations which we shall notice, is *version*, or the changing of one presenting part for another more favorable to delivery. There are two kinds of version: *podalic*, when we change the head for the feet; *cephalic*, when we change the head in such a manner as to bring a more favorable part of it for delivery. When the history of any given case of confinement reveals a probable malposition in the future, the case is to be met by the administration of such remedies as the symptoms may indicate. Cure the patient and the presentations will be natural. If a malposition be detected near the close of gestation, by means of auscultation or palpation, a dose of *Pulsatilla*, or of some other remedy, may rectify the abnormity. It is certainly worth while to make the effort.

Podalic Version.—When it is deemed necessary to change the presentation of the child by bringing down the feet, there are certain rules which, under all circumstances, must be observed.

1. The patient should, by all means, be apprised of the nature of her case, and as simply and kindly as possible be made acquainted with the nature of the operation to be performed. When she is once made to understand that the proposed operation is for the safety of her child, she will the more cheerfully submit; her free consent must in the first place be obtained.

2. Her position must be upon the back, with the breech near the edge of the bed, her feet also near the edge of the bed, the thighs flexed at right angles with her body; the head and shoulders must be elevated to a reasonable height.

3. The accoucheur should slip off his coat as gently as possible, in

such a manner as not to make a great flourish, and thereby alarm his patient. The hand to be used in the operation should be rubbed with lard until perfectly smooth,—that hand always to be employed whose palmar surface corresponds with the face of the child. For obvious reasons, care should be taken not to lubricate the palmar surface.

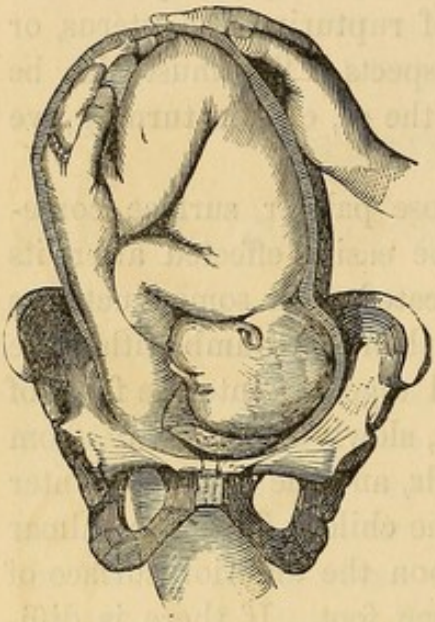
4. The os uteri must be sufficiently dilated, or dilatable, to admit the free introduction of the hand and the passage of the child. If there is the least rigidity of the fibres, we must defer the operation a little longer, otherwise we incur the risk of rupturing the uterus, or of badly injuring the patient in other respects. We must also be sure that the head has not passed through the os, else, in turning, we should be likely to cause a rupture.

5. The introduction of that hand whose palmar surface corresponds with the face of the child, can be easily effected after its dorsal surface has been thoroughly lubricated with some unctuous material, by placing first the fingers and then the thumb within the vulva, at the same time bringing them all together into the form of an elongated cone. Now press carefully, slowly and steadily, from before backwards and from below upwards, and the hand will enter the vagina and soon come in contact with the child. Then the palmar surface must be spread out and kept upon the anterior surface of the child until we come in contact with one foot. If there is difficulty in finding the foot, carry the hand upwards to the thigh, and then the hand can follow the thigh down to the foot. Having ascertained that it is really the foot, by its being articulated at right angles with the leg, make a firm grasp about the ankle close down to the foot. We may always proceed in this manner, whether acting before the membranes are ruptured, or at any succeeding period. If action is taken before the rupture of the membranes, these can be broken as the hand is about to enter the os uteri; all this stage can be accomplished from time to time, during the intervals of the pains. During each pain the hand should remain perfectly quiescent, no matter how much suffering the uterine contraction may occasion.

Having secured a foot as just described, the free hand must be placed upon the abdomen, in order to steady the uterus,—or this office may be performed by an assistant,—then, during the absence of a pain, the hand should be gently and carefully withdrawn. If we have been careful to carry the hand upon the anterior surface of the child, and secure a foot there, we shall succeed in turning the child by doubling it more and more upon its anterior surface, until the breech takes the place of the original position of the head, and the

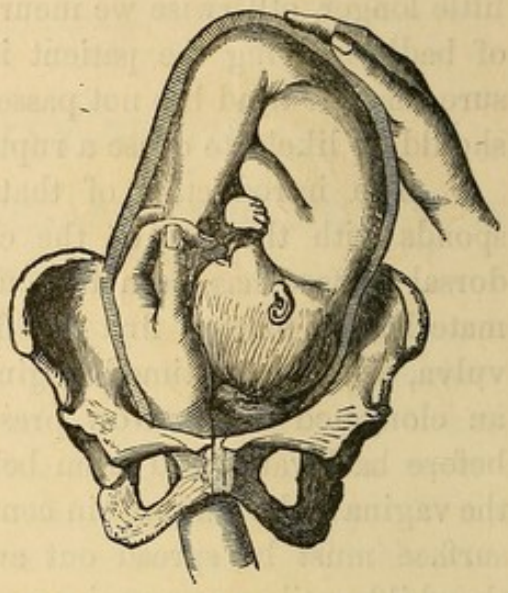
head that of the breech. By doubling the child upon its anterior plane we run no risk of breaking its back or neck, as in doubling it backwards. Moreover, by bringing down only one foot and allowing the other to remain in its usual position, we leave the breech to occupy a bulk nearly as large as the head, so that as it passes through the organs, more dilatation is effected,—which the head

Fig. 98.



In this figure the head has been pushed up into the left iliac fossa, and one hand takes hold of the foot while the other supports the organ externally.

Fig. 99.



The same position, in which the version is commenced by drawing down the foot.

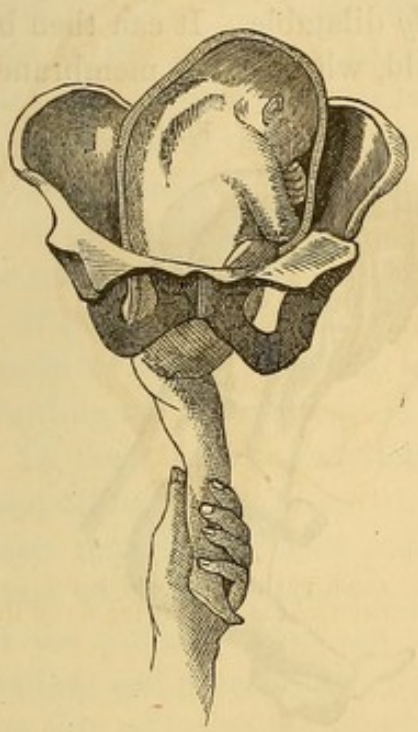
requires in order to pass freely and with less compression upon the cord, and of course with less danger of strangulation.

Further, as one leg is left distended upon the abdomen of the child, it serves to protect the cord during the passage of the body; this is a self-evident fact.

After the turning of the child is fairly accomplished, the labor may be effected by the natural process alone, or we may continue to act as occasion requires. Wait, by all means, if it will seem to answer to do so; but if not, make traction upon the leg, but act only in concert with the pains. Do not draw down the other leg; wait until it is fairly expelled, foot and all, for it may be the saving of the child's life to do so, the cord being in this manner protected. Now the chief danger arises from the strangulation of the cord, by its being compressed between the head and the bony walls of the pelvis. So long as we can feel the pulsation of the cord, all is well. Should

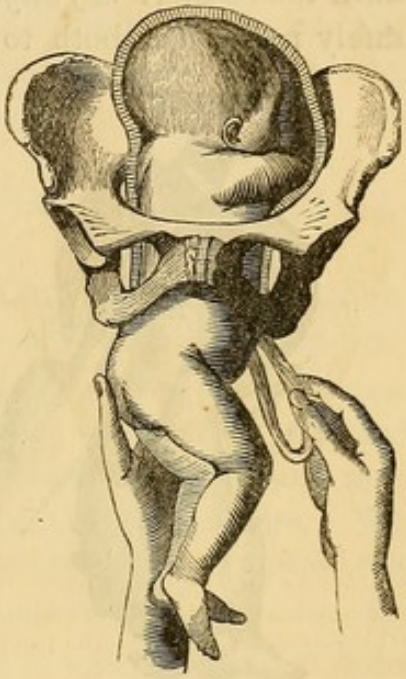
the pulsation cease, a slight effort may be made to draw it down a little. If this can be done, pulsation will often become re-established, and, all things being equal, we can still wait. If it cannot be drawn down, and pulsation ceases, we must hasten delivery as much as possible by making careful traction upon the body of the child. As soon as possible we must hook down the arms by placing the index finger in the bend of the elbow, and then, as soon as possible, hook

Fig 100.



The version is here completed, and the occiput, which was placed in the left iliac fossa, at the commencement of the operation, will now come down behind the right acetabulum.

Fig. 101.



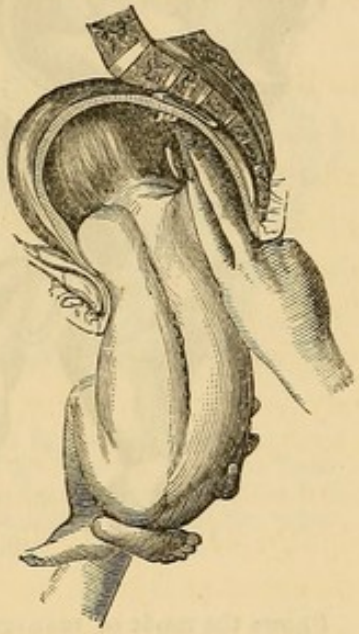
Shows the mode of management of the cord.

the same finger into the mouth of the child and flex the head as strongly forward as possible; hold it thus, while with the other hand, placed upon the shoulders, make steady and strong traction, and the patient will soon be delivered. Manage all breech presentations in this way, when interference appears necessary in order to save child or mother; otherwise trust to nature.

It sometimes happens that the arms slip up by the sides of the head, when it will be necessary to disengage them, before the head can engage. This can be done by slipping two fingers up from the shoulder along the humerus and, allowing these fingers to lie along on this line its whole length, we can pass them forwards and downwards on the child's face, and in this manner run no risk of fracturing

its arm. The posterior arm should be disengaged first and the subpubic afterwards. In all cases of difficulty in the introduction of the hand to perform this operation, from rigidity of the uterine neck, the difficulty can be overcome by the administration of the proper remedies. See *Labor*. It should be further observed that complications from hemorrhages, &c., can all be controlled by suitable medication, and in this way time can be obtained for dilatations and other necessary advantages, without resorting to brute force or Allopathic measures. *Let it not be forgotten* that version must *never* be attempted until the os uteri is *fully* dilated or *freely* dilatable. It can then be safely performed, both to mother and child, whether the membranes

Fig. 102.



Delivery of the posterior arm, first.

Fig. 103.

The mode of flexing the head by drawing down the chin and pushing up the occiput. (This mode is several times mentioned or referred to in the text.)

are ruptured or not. If not ruptured, they must be, as the hand is passed into the uterus.

Mode of procedure in all cases, when the head, face, breech, or trunk presents.

When the head presents never, under any circumstances, change it for the feet. If hemorrhage occurs, and there be placenta prævia, manage as before stated. If there is not placenta prævia, control the hemorrhage by medicine. See *Hemorrhage*.

Remove all other difficulties by medicine, if possible, (see *Labor*;) if not, apply the forceps, or resort to craniotomy, as the case may seem to demand. It is a very unsafe plan ever to exchange the head for the feet, if it can possibly be avoided. It is much safer, in all

respects, for the child as well as for the mother, to deliver by the aid of the forceps. We then run no risk; no possible contingency can drive us to decapitation after the body is delivered, and to perform the unsafe, the very difficult operation of craniotomy upon a floating head in the maternal organs, and that too up through the base of the skull. As a principle then, worthy of all confidence, never exchange the head for the feet.

If the face presents, and we are called before the face has become fairly engaged in the cavity of the pelvis,—if it be in the right mento-iliac position, we must introduce the left hand, when the face will rest in the palm, and by proper manipulation with the fingers the face can be rotated upwards so as to flex the chin upon the sternum and thus bring the vertex into the superior strait, when the labor can be abandoned to nature.

If the position be one of the left mento-iliac, the right hand is to be used, and the same result brought about.

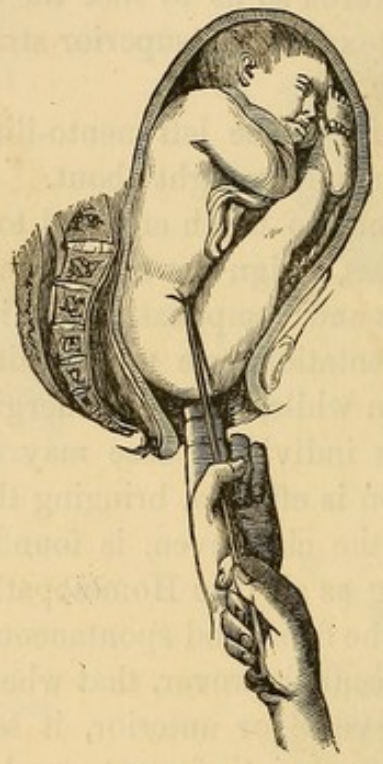
If the face has become too much engaged to admit of a reasonable doubt as to final success, resign the case to nature, at the same time warding off hindrances and complications, as in vertex presentations.

In these facial presentations, we must wait with great patience; supporting, in the mean while, the vital energies for expulsion, with such remedies as each individual case may seem to require. We must wait until rotation is effected, bringing the chin under the arch of the pubis. When the chin, even, is found exactly posterior, by waiting and prescribing as all true Homœopathicians best know how, the chin will rotate to the front, and spontaneous expulsion take place.

It does sometimes occur, however, that when the chin is posterior, instead of being transverse or anterior, it seems, as descent takes place, to lodge in the great sciatic foramen, and be retained there until the presentation is converted into one of the vertex; this should be regarded as a very happy event. When it becomes necessary to offer instrumental aid to facial presentations, the forceps must be applied in such a manner that the chin may be in harmony with its concavity. This would favor the rotation which brings the chin under the pubic arch. After the chin has engaged under the pubic arch, very great assistance is often afforded by applying the forceps in such a manner as to gently aid the process of flexing. It will be recollected that at this stage the sinciput is lying back in the cavity of the sacrum, and the expulsive forces are so applied as to render the flexion of the head very tedious, so that the life of the child may often be saved by producing flexion of the head by artificial means.

When the breech presents, it must be allowed to descend; no turning is ever admissible in these cases. If artificial means are thought necessary, the blunt-hook must be used. It can be applied by putting one finger on the presenting part as a guide to the point of the hook, the handle being held in a perpendicular posture. Now, whilst this point is kept in contact with the breech, the handle should be depressed until the hook is slipped over the thigh and into the groin. Before traction is made, one finger must be *slipped up between* the thighs of the child and placed upon the point of the hook. Next, be sure that the hook in the groin is closely applied to the body; for

Fig 105.



The mode of using the blunt-hook in the breech presentations.

if it should slip down upon the thigh, the latter will certainly be fractured upon making traction. With every return of the pain we may make powerful traction in safety; but never remove the finger from the point of the hook, lest it do mischief by penetrating the abdomen of the child, or wound some other organ.

When the trunk presents, we always know at once that the intervention of art is inevitable. And we must at once determine where or in what position is the anterior surface of the child, so that we may be able to choose which hand is to be used,—always remembering to use that hand whose palmar surface corresponds to the face of the child. Now if the child's arm be found hanging from the vagina, we

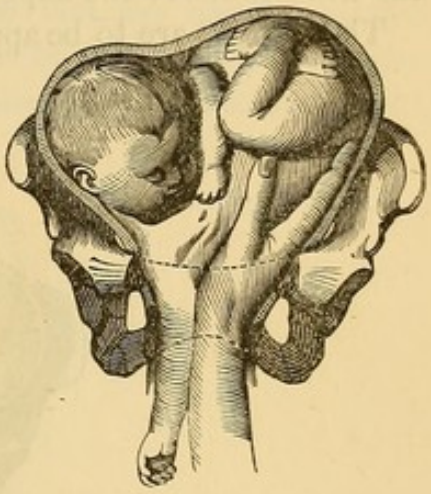
must attempt to turn the child at once, by introducing the proper hand. Seizing a foot very gently, withdraw the hand as before directed. No attention need be paid to the arm hanging in the vagina.

If the arm is not hanging externally, the shoulder being felt in the superior strait merely, introduce the proper hand and make an effort to push up the child so as to allow the head to fall into the superior strait in place of the shoulder. We may be aided in this operation by gravity. If the head is found to occupy the right iliac fossa, after crowding up the child as much as possible, allow the patient to lie over upon her left side, whilst the accoucheur is still holding up the child, and the head will be aided in its descent to its

Fig. 106.

Introduction of the hand in the second position of the right shoulder.

Fig. 107.



Mode of seizing the foot in the same position.

proper place. The hand may then be partially withdrawn, and at the same time aid in placing the head in the proper position. If we succeed, the case can then be abandoned to nature, aided, when requisite, by medicine, or the forceps if necessary. If we fail, the hand should not be withdrawn, but should pass on upwards and, seizing a foot, bring down the breech. All we have to think of in any position, is to diagnose the child's relative position, select the hand accordingly, and proceed as above directed.

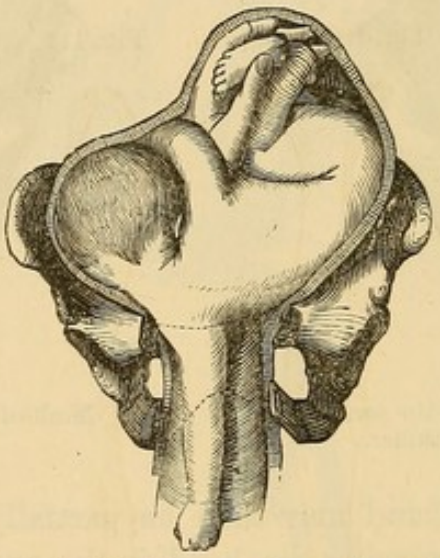
In those very difficult cases, when the body is so crowded into the superior strait as to make it almost impossible to introduce the hand, and quite impossible to hold on to the foot to produce version,—we must hold the foot, form a slip-noose with a strong handkerchief around the arm holding the foot, and then slip the noose up little by little, with the other hand, on to the ankle, when powerful traction can be made and version produced.

We now come to treat of the Forceps. The natural history of the forceps the writer deems quite unimportant in a work of this kind, and feels quite satisfied when he recommends the best forceps he knows of at the present day. Figs. 109, 110, 111, represent the instrument referred to. Fig. 109 represents what is called the male blade, which has about its middle a pivot. Fig. 110 represents the female blade, having a little notch which fits on to the pivot when brought together, and constitutes, when thus brought together, what is called the lock.

We have in general use what are called respectively the short, and the long forceps. The short forceps are more usually resorted to when the head is in the cavity of the pelvis. The long forceps when the head is above the superior strait.

The forceps are to be applied only to the head, either in the vertex

Fig. 108.



Mode of seizing the foot in the second position of the left shoulder.

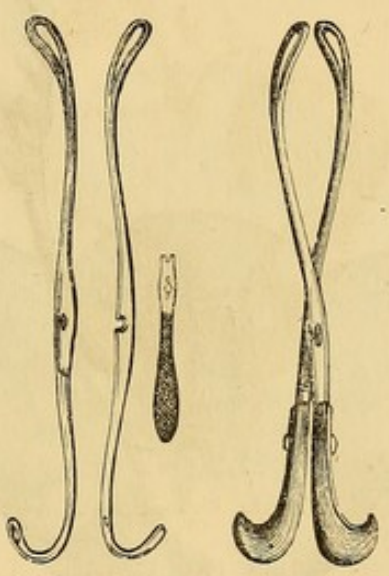
or facial presentation, or when the head remains behind after the body is born. They are to be used always at the discretion of the accoucheur. It is better never to exchange a certainty for an uncertainty. If the head can descend through the pelvis at all, it can better pass vertex first than base first; and the difference in favor of the child's life is much on the side of the vertex descent. Therefore, when the head presents and resort to mechanism is required for delivery, always apply the forceps if they can be applied; but if there is not space for that, or if delivery by the forceps is no longer possible, we must have recourse to the operation of craniotomy, or, finally, if this is not possible, to the Cæsarean section.

The best forceps, those which are most successful in use under all

circumstances, are Bethel's. If long forceps are particularly required, Davis's are the best. Hodges' short forceps are very good; so also are Wallace's.

When it is foreseen that forceps are to come into requisition, it is better to make the fact known to the patient as gently as possible. We might speak of having little silver hands in our possession, which, if applied to the child's head, would serve to relieve her very much and at the same time to render the life of the child more certain. At all events her confidence must be secured, and her full and free consent obtained. The operation decided upon, she must be placed in the same position as though the operation of version was to be performed. If the child is in the superior strait, the breech should be brought quite down to the very edge of the bed, so that the handles of the forceps when locked may hang over the side of the bed,—for traction must first be made directly downward in that stage of the operation.

Fig. 109. Fig. 110. Fig. 111.



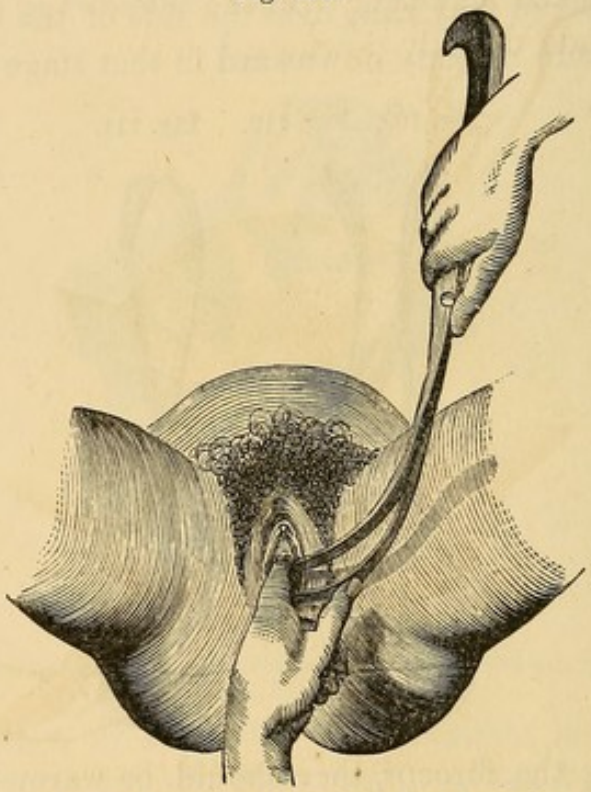
Before applying the forceps, they should be warmed to blood-heat, and the external or convex surface well lubricated with lard.

All things being ready, the accoucheur can at once proceed to the operation. Where it is practicable, we should apply the forceps upon the *sides* of the child's head, always taking care that the concave margin of the blades shall rotate under the arch of the pubis.

When the head has descended into the cavity of the pelvis and has rotated into the long diameter of the inferior strait, the application of the forceps is a very easy matter. The male blade is to be held in the left hand and in a perpendicular position. With the fingers of the right hand the point of the blade is to be guided to the present-

ing portion. The point of the blade resting upon the head, it can be very easily slipped round on the head by using a *very* little force upon the blade, depressing the handle all the time more and more, as it enters the vagina. When well applied the pivot will stand perfectly perpendicular. The female blade is then to be taken in the right hand, and, guided by the fingers of the left hand, it is to be slipped around on the right side of the head, in the same manner as upon the left in the former instance. If this has been applied correctly the notch in the blade will at once fit on over the pivot, and the instrument is readily locked. In doing this, care must be taken not to embrace in the lock any portion of the soft parts, or even of the hair. Being locked firm, pressure upon the handles must be made,

Fig. 112.



Mode of introduction of the first branch.

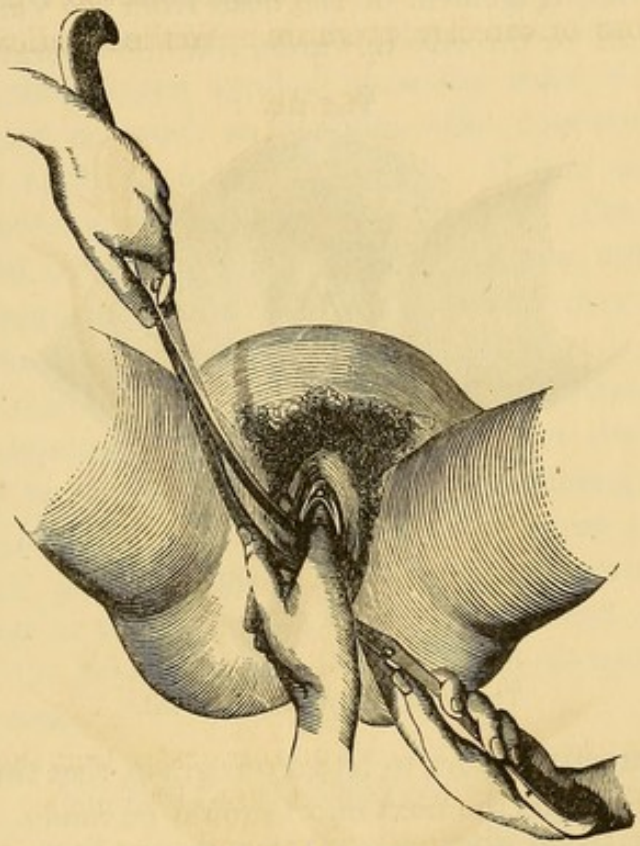
and if this causes the patient no pain, it will prove that no portion of the soft parts is included in the grasp.

When the instruments are thus firmly fixed upon the head, the handles will always point out the line in which the tractive effort is to be made, which will always be the axis of the cavity occupied by the head.

It frequently happens that the forceps must be applied in other positions of the head, and when they cannot be applied in the lateral halves of the pelvis, as in the former case,—for in so doing they could

not be placed on the sides of the head, where they ought always to be applied. We may lay it down then as a general rule that the sagittal suture and the posterior fontanelle will always afford positive guides for the correct application of the forceps; and when we know the direction of the sagittal suture, and the position of the posterior fontanelle, we then know where the sides of the head are and what point is to rotate under the arch of the pubis. Then the blades are to be introduced as in the manner first described, and as the blades are slipped around on the sides of the head the concave margin of the

Fig. 113.



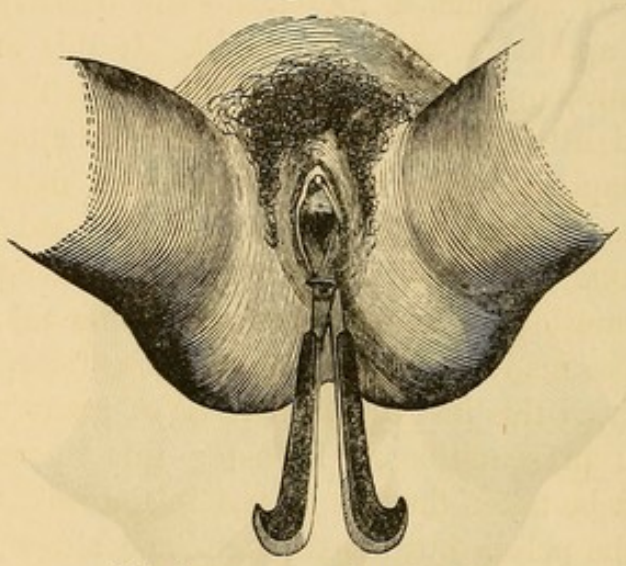
Introduction of the second branch.

blades must look towards the posterior fontanelle, for this point most usually rotates to come under the pubic arch,—now the pivot of the male blade will be parallel to the suture. There are cases when the occiput is found to be too far back, so that we know it will rotate into the hollow of the sacrum. In these exceptional cases the concave margins of the blades must look towards the anterior fontanelle, for that point will rotate to come under the pubic arch. Now it will not always be possible to apply the forceps by introducing the male blade first. It is better to do so when it is possible, for then the lock comes nicely together, without being compelled to separate the handles far

apart, so as to bring the male blade under the female blade, as it happens when the female blade is introduced first.

When the instruments are locked, the direction of the handles will always indicate the direction in which the tractive force is to be applied. When the head is in the superior strait, and the instruments are locked, the handles will always be at the extreme posterior commissure of the vulva, which shows (the female lying on her back) that the tractive force is to be made downwards and backwards, just as the handles point. As the head descends into the cavity more and more, the handles will elevate themselves more and more, till at the nstant of the disengagement of the head from the vulva the handles will point almost or directly upwards. While operating, then, it is

Fig. 114.



The forceps applied and locked.

wise, after any tractive effort, to let go our grasp, that the handles may point in what direction the next effort should be made. The tractive efforts should be made with every pain, and only then. They should be made to imitate the uterine contractions as nearly as possible, resting when they rest, and drawing as carefully and gently as possible when they expel,—yet with sufficient force to be made effectual.

Great care should be used not to wound the soft parts by swaying the instrument sideways or upwards and downwards, as all these motions are useless. As the perinæum becomes distended, we should advance slowly and cautiously, giving the parts time to dilate, so as not to cause rupture or laceration. With a little common sense, guided by good judgment, the application of the forceps is an easy matter.

The use of anæsthetics in these operations is particularly objection-

able; since it tends to render them more dangerous. For, when pain is produced by pressure with the forceps, we know all is not right; and hasten to correct the error. But where the patient is rendered unconscious by the use of anæsthetics, this valuable indication is lost.

Not only should the application of the forceps be unattended with pain, but no force should be used in applying them. The blades should slip in very easily; and they will certainly do so if the palmar surfaces are kept properly applied to the head,—and if the instruments are not hurriedly introduced.

When the head remains after the body has been delivered and after flexing the head by pressure with the finger in the child's mouth, —which would seldom happen,—the child should be crowded to the posterior and the forceps applied upon the sides of the head after flexing the head as much as possible,—the concave surface of the handles being applied next to the child. If this attempt result in failure, the craniotomy forceps must be applied. The vectis or lever is a very useful little instrument, which might be used to advantage much more frequently than it is. The vectis may very easily be applied over the occiput, sinciput, or sides of the head; and by making a fulcrum of one hand, the other can cause considerable traction. In facial presentations, particularly when flexion takes place slowly, the vectis may be made to take the place of the forceps. And in any flexion of the head this instrument may be of great use,—as in some posterior facial presentations. In using this instrument, however, great care must be taken that we do not, in the least, make a fulcrum of the side of the pelvis, but use the free hand altogether for the purpose of a fulcrum.

Induction of Premature Labor.

The induction of premature labor by artificial means is admissible under certain circumstances. By premature labor, we mean, that only which may take place after the viability of the child is established beyond a doubt. This period first occurs immediately after the close of the seventh month.

In all cases where the excavation of the pelvis is so obstructed by any cause,—either by pelvic deformity or by tumors of any kind that cannot be reduced, or pushed above the superior strait,—which will prevent the passage of the child at full term, premature labor may be effected; provided always, that such a course will give a reasonable assurance of saving the life of the child and at the same time of preventing greater sufferings and danger to the mother.

Should the history of the patient prove that she cannot give birth to a child at term, and should the smallest diameter be about two inches and a half, premature labor should be resorted to immediately after the completion of the seventh month. If we could be assured that the smallest diameter is three, or three and a quarter inches, we may delay the operation till about the eighth month.

Under judicious Homœopathic treatment, no diseased condition of the patient would ever render necessary a premature delivery. Neither would it ever prove admissible to induce premature labor, where the previous history goes to show that the child perishes at the eighth, or eighth and a half month. For all such cases are perfectly curable by medicines. See *Diseases of Pregnancy.*

The best mode of operation for the induction of premature labor is simple and safe. Many others might be enumerated, but as their practical value is as nothing when compared to that about to be described, we shall not even mention them. The patient to be operated upon may assume the same position as in labor. The bed should be protected with oil-cloth or India-rubber cloth, arranged so as to guide a stream of water from the vulva into a pail or tub placed near the bed. Another pail must be provided, containing tepid water,—with a common syringe the warm water should be thrown directly upon the os uteri. This operation irritates and softens the neck of the uterus, so that contractions set in in the course of an hour or two, and thus labor is provoked and takes place in the most natural manner possible,—except when it occurs in nature's own way at full term.—The operation will fail unless the stream is so directed that it shall fall directly upon the neck of the uterus. It should be repeated in the course of two hours, unless the first experiment is successful. The common pump syringe is the best for this purpose;—though the India-rubber (or bulb) syringe will answer; but not the common squirt-gun syringe. The quantity of water used at each operation should be about ten quarts. The value of this mode of operation above all others, is beyond all question, in every respect,—in safety for mother and child.

Of the production of *Abortion,* that vexed, that much abused, that awfully abused, that wickedly abused presumption, we have this to say: Can it be right under any circumstances whatever? Is it right to commit wilful murder under any circumstances whatever? If not, then it is never right to produce abortion, under any circumstances whatever,—for is not abortion actual murder!

Under Homœopathic treatment we have abundance of proof that no state or condition of health demands this operation; for the subject of such a malady as might be thought to require it under Allopathic treatment, is cured by Homœopathy, not only of such ailments as are developed by pregnancy, but the general health is also restored. Chronic maladies are even more easily cured under the influence of pregnancy than in any other condition; and every abortion that is perpetrated is not only a murder of the production of conception, but also a slow murder of the mother herself.

In all cases in which the obstructions or deformities of the pelvis reduce the diameter of its excavation to two and three-fourths inches, the operation for inducing premature labor is proper after seven months of pregnancy. And the injury inflicted upon the vital organism is much less now than at an earlier period. And the prospect for saving both mother and child is much better by this operation, than by the Cæsarean section.

But cases in which the least diameter of the pelvic excavation is but two and a halt inches, had better be allowed to go to full term; and then submitted to Cæsarean section. This course wards off the crime of murder, and affords a good opportunity for saving both mother and child; for this operation of the Cæsarean section, performed by skilful hands, under Homœopathic treatment, affords a very much better chance for saving the life of the mother, than under the Allopathic regime. Another consideration of great weight is the fact that nearly all the extreme pelvic deformities are only brought to light at the very time of parturition; and it stands us in hand to perfect ourselves in the surgical art, so as to be able, in such trying circumstances, to save both lives.*

But if, after all, abortion *must* be produced by some timid persons, —*who dare not do right*,—or by those who feel incompetent to perform the operation of Cæsarean section at full term; let it be performed in the best possible manner; and never unless the smallest diameter be under two and a half inches; and never at all until after the third month. The operation being determined upon, the same means should be employed as in the induction of premature labor. The most eligible time for the operation is between the fourth and fifth month.

But to return to the Cæsarean section; this operation has been resorted to quite frequently in cases in which the passages have been

* For History of the operation of Cæsarean section, see Meigs' Velpeau, Philadelphia, 1852, p. 546.

found too restricted to give birth to the child in the natural way. And this operation would always have been far more successful than former statistics show, had it been performed in a more timely season, and in a proper manner. In the great majority of cases it has been postponed till the subject has become nearly exhausted with fruitless efforts. This should not be. In the first place, the accoucheur should satisfy himself, or confirm his opinion by that of one or two other accoucheurs of mature judgment, that, from retraction or other deformity, the passage is certainly too small to admit the passage of the child.

If the forceps can be applied, let every reasonable effort be made with them, to avert so formidable an operation as the Cæsarean section. If the smallest diameter be less than two and a half inches, the Cæsarean section will give a better prospect for the mother's life, whether the child be living or dead. If the smallest diameter is greater than two and a half inches, and the child be dead, craniotomy may be preferable.

The time most favorable for saving the life of the child and of the mother, is to operate as soon as the os uteri has become dilated and the membranes ruptured, and before any attempt has been made to extract with the forceps or blunt-hook. Up to this time the patient has not become so much exhausted, while ample opportunity has been had for a correct prognosis of the case.

The Operation of the Cæsarean Section.

The operation of Cæsarean section having been determined upon, the subject should be placed upon a bed of sufficient height for the convenience of the operator. An assistant should support the uterine tumor with considerable firmness upon each side; while a second assistant places one hand upon the fundus of the tumor, after stroking upwards any fold of intestines which may have slipped down between the uterus and the parietes of the abdomen. This hand must continue to press upon the fundus throughout the whole operation, with the view of keeping the intestines from slipping down in front of the uterus.

The operator now makes a clean cut, from just below the umbilicus, down to or near the symphysis pubis,—through the integument and subcutaneous fatty tissue, down to the peritoneum. This incision should be at least six inches long; and if necessary in order to secure this length, we must extend it to the left and along the umbilicus.

The next step is to cut a small opening into the peritoneum at the

upper end of the womb, into which a probe-pointed bistoury must be inserted, and this second, or internal incision, is extended to the lower extremity of the first or external one.

The uterus is now exposed; and through the tissues of this organ we must carefully cut, layer by layer, until the membranes are revealed.

The probe-pointed bistoury may be employed to divide these, in the same manner that it was used to divide the peritoneum.

An assistant should be employed to keep the lips of the womb apart; and in doing so he should keep the uterine and abdominal walls firmly together.

The extraction of the fœtus is now to be accomplished by seizing the first extremity that presents. The uterus retracts at once by virtue of its elasticity; and by this means, also, the placenta is soon separated from the walls, and extracted at the same time,—the membranes being twisted into a cord for their secure and complete removal.

After the uterus has been thoroughly emptied of all clots, &c., the wounded surfaces should be properly cleansed and allowed to come together. A simple dressing of the wound with adhesive plaster, a light compress thoroughly saturated with *Calendula*, and a body-bandage to assist in keeping the abdominal walls in apposition, are all the external appliances that are needed. The patient must be allowed to drink as freely of pure cold water as she may desire; and for some days the abdominal compress must be kept well moistened with the preparation of Calendula. An occasional dose of Calendula, internally, will also be very serviceable. The patient must be kept as quiet as possible; and very narrowly watched, so that the first symptoms of peritonitis may be combated,—if any appear. See chapter on *Puerperal Peritonitis*. In this direction lies all the danger that need pertain to an operation conducted in the manner here described, and undertaken before the patient's strength is too far gone to admit of a hope of vital reaction from an operation whose very extent renders it grave. But as we so seldom lose a case of puerperal peritonitis arising in our practice, from all other causes, why should we not hope to be equally or even more successful here, where we have no miasm to contend with, nothing but simple traumatic inflammation. But in all respects let the patient be treated in accordance with pure Homœopathic principles.

This operation of Cæsarean section should always be performed upon women who die with a viable fœtus within their womb. It should be performed *immediately* after death; but with the same care

as though the woman were alive,—for sometimes death is only apparent. By this means many children have been preserved, and valuable lives saved to the community.

The Vaginal Cæsarean Section.

This operation consists in making an incision into the lower segment of the uterus, in cases where there is no os to be found. The mode of operation is simply to make an incision into the lower segment, and then to introduce a probe-pointed bistoury, and make a crucial incision, taking care not to cut too far either way, for fear of wounding the bladder, the rectum, or the iliac vessels. After having thus made a crucial incision of an inch or an inch and a half each way, dilatation will be effected, the membranes will rupture and the child be expelled as in ordinary labors.

Craniotomy.

This is an operation which should be performed only upon the dead child, and when the smallest diameter of the pelvis is above two and a half inches, and yet not large enough to admit the passage of the child by means of the forceps. If the smallest diameter is below two

Fig. 123. Fig. 124.

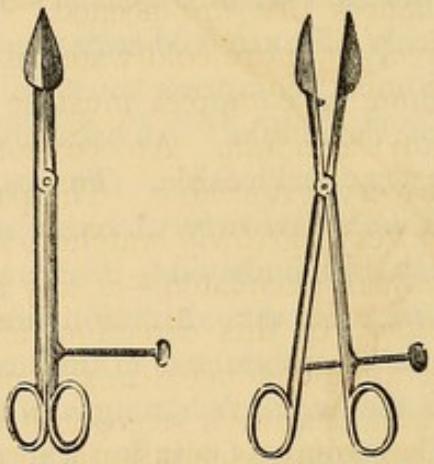


Fig. 123. Smellie's scissors closed.
Fig. 124. Smellie's scissors opened.

and a half inches, the Cæsarean section affords a better chance for the mother's life.

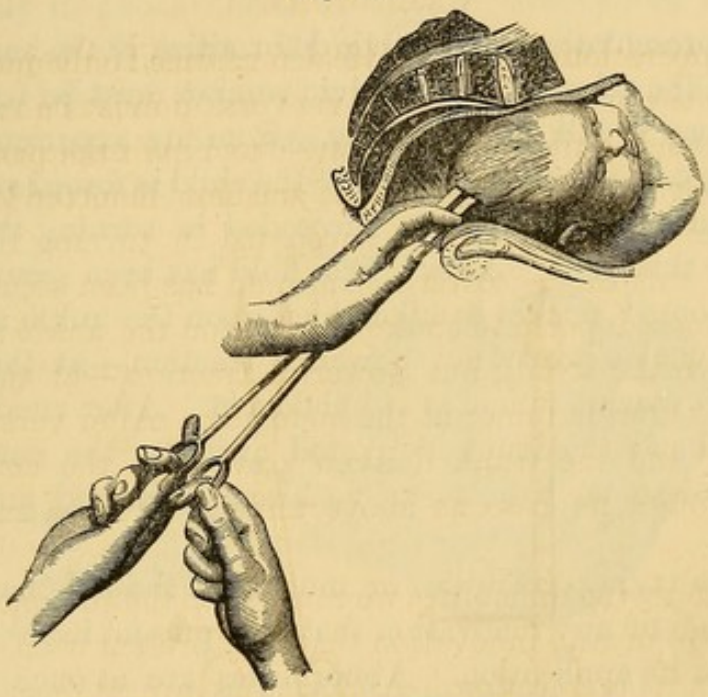
The operation consists in puncturing the cranium; evacuating its contents; and, if necessary, in order to reduce the bulk of the head sufficiently to allow its passage, in removing the cranial bones till this object is secured.

In the first stage of the operation, Smellie's scissors is perhaps the simplest means. The closed instrument is carried up the vagina,

which it is prevented from wounding by the fingers being placed upon each side of the blade. See Fig. 125. In this manner it is directed against the most pendant portion of the cranium, when the sharp points may be made to pierce the skull by rotating the instrument back and forth in the hand which controls it. The fingers of the other hand should continue to guard the points till they have fairly entered the cranium,—so that if they should slip, the soft parts of the mother will still be protected from harm.

The blades may now be thrust deep into the brain; then the handles may be separated for the purpose of enlarging the orifice as much as possible. The contents of the cranium are now to be broken up thoroughly by the blades of the instrument,—which are then to be withdrawn protected in the same manner as in their entrance. Now if the pains are energetic, a spontaneous expulsion may take place.

Fig. 125.



Mode of introducing and using Smellie's scissors.

If not, the forceps may be again resorted to. And finally, if this means fails, Meigs' Craniotomy Forceps, and the Crotchet, will most likely be required.

In using the forceps in these cases, the bones should be seized on the inside of the scalp, so that this integument may remain entire when the bone comes away, and thus capable of giving protection to the uterus and other soft parts. And every spicula of bone that comes away should be protected between the fingers of the free hand, so that its rough edges shall not injure the mother. Finally, the crotchet

may be introduced, the finger guarding the sharp hook till it enters the brain, when we must endeavor to lodge the hook in the thick occipital bone. Traction may then be made, the finger as much as possible guarding the sharp hook, so that if it do give way it may wound the finger rather than the mother. (The best crotchet is one furnished with a sheath or guard, which does not hinder the sharp point from becoming fixed upon the inner side of the cranium, like a tooth, but which affords entire immunity in case the point tears or slips out from the bone.) Still it is better to use the finger rather than the steel guard of the crotchet. In this manner we may finally secure the expulsion of the child.

If the breech should present, and the head remain after the expulsion of the body, we must reduce the size of the head by operating through the base of the cranium. In a large majority of cases after the perforator has been thoroughly used, the forceps will be found efficacious.

In trunk presentations and pelvic deformities, if the head cannot be brought into the superior strait, pelvic version must be resorted to. I do not believe it will be necessary,—from my experience,—ever to sever the neck in these cases, even if the child is forced very far down into the superior strait. I have succeeded in turning the most difficult cases of this kind. After a firm hold has been secured upon the foot, slip a noosed pocket-handkerchief upon the ankle as before described, and make steady but powerful traction,—at the same time steadying the uterine tumor at the abdomen. After version has been accomplished and the trunk delivered, evacuate the contents of the cranium, through its base, as above already directed, and apply the forceps.

In all these trying difficulties we must keep the judgment clear, and take advantage of any innovation that may present itself to the mind, that is safe in its application. Abnormities are at once strange and varying, and we must try to be prepared for all cases of emergency, however new and difficult. Simplicity is the great art; and the greatest difficulties will oftentimes disappear under the patient application of the simplest means.

Delivery of the Placenta.

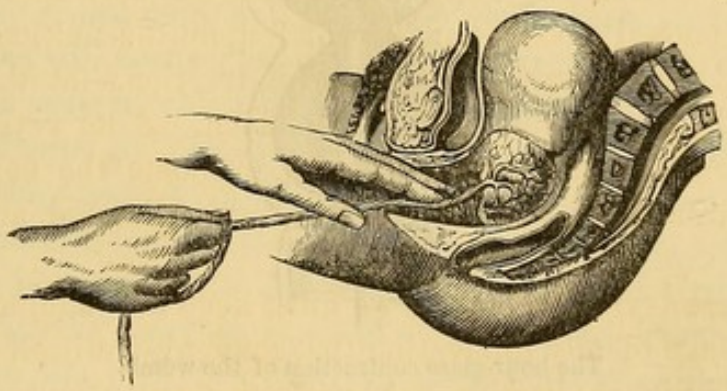
The delivery of the placenta constitutes the third stage of labor. The placenta being a spongy, non-contractile mass, does not follow the example of the uterus in shrinking to a very considerable degree after the expulsion of the fœtus; consequently, from the placenta

being unable to adapt itself to the changing size of the uterus, the one must become separated from the other. This is precisely what does happen; this explains both the cause and the mode of the separation. The uterus retracts and pulls itself away from the placenta, which latter of course becomes a large foreign body within its cavity, as was the fœtus at the outset of labor, and with about the same relative proportion of bulk when compared the one with the other. Next arises organic contractility, and the placenta is driven forth into the vagina, by whose contraction, aided by that of the uterus, it is expelled beyond the vulva.

Sometimes it happens that the placenta becomes detached during the latter part of the process of expelling the child; in these cases large quantities of clots, and sometimes even the placenta itself, escape with the child.

If left entirely to itself, the placenta will usually be delivered spontaneously in about fifteen, twenty, or twenty-five minutes after the expulsion of the fœtus. If it is not delivered in about this time, we may take hold of the cord with a dry napkin, and make slight traction in the axis of the inferior strait. But if it appears that the placenta is above the superior strait, we may place a finger or two

Fig. 133.



Mode of extracting the placenta.

on the cord above the inferior strait, which will cause traction to be made in the axis of the superior strait. If any crepitation be felt, as if the cord were about to separate from the placental mass, we must desist, unless the placenta can be reached by the finger, when it can quite easily be hooked down and delivered at once. But if the placenta be not within reach, or should seem immovable, there is reason to suppose that it has not yet been thrown off by the retraction of the uterus, and a remedy must be selected for the existing condition.

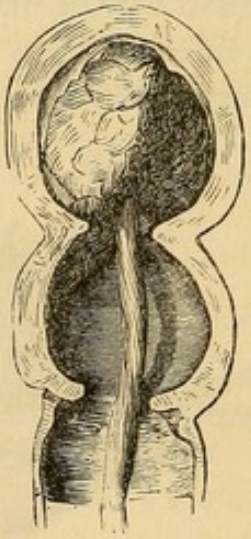
Sometimes also the placenta is found to be retained by a spasmodic

contraction of the neck of the uterus, so that it is impossible to extract the placenta till this spasm has been abated.

Sometimes again, and more frequently, we find what is called the hour-glass contraction, as shown in figure 134. Other abnormal contractions may occur, which will render utterly impossible the delivery of the placenta, until the proper remedy has been found and administered to relieve the morbid irritability which gave rise to such abnormities. *All* these anomalies have a vital origin, as well as all other abnormities; and we have only to interpret rightly the symptoms which they present, by exhibiting the corresponding remedy, and the whole difficulty will give way, as my own happy experience abundantly testifies.

In all these various irregularities, we must administer the remedy which corresponds most nearly with the presenting symptoms. And in these various abnormities, the following remedies have been employed with very great success:

Fig. 134.



The hour-glass contraction of the womb.

Belladonna. Where there are redness of the face, injected eyeballs, *much distress,* and great heat in the vagina, with dryness. The placenta may be spasmodically retained. Constant moaning. Hemorrhage hot.

Pulsatilla. This has been more frequently used, in these cases, than all the other remedies put together. It answers to a want of action in the uterus; and also to the spasmodic forms of the difficulty. The symptoms must decide its use,—which has a very great range. The patient is of a mild, yielding disposition. Rather tearful; weeps because she is not delivered. *Alternating hemorrhage.* Restlessness, &c.

Sabina. Pain, or an uneasy, bad feeling, extending from the sacrum to the pubis. A slight sensation as of motion in the abdomen.

Secale c. She has a constant sensation of bearing down in the abdomen; it seems to her too constant and too strong to be effectual. Passive hemorrhage. Every thing seems loose and open; no action. Particularly useful in thin, scrawny subjects.

Sepia. She complains of little sharp-shooting pains in the neck of the uterus,—sometimes with burning.

Caulophyllum, Gelseminum, Cimicifuga, and *Gossipium,** from clinical reports, bid fair to be extremely useful in these cases; but no special indication is yet known for their administration, except it be for:

Gelseminum—Cutting pain from before, backwards and upwards.

All placentas retained by spasmodic action of the uterus should be removed by administering the specific remedy; no mechanical effort or violent force should be employed in such cases. Hour-glass contractions, contractions of the external or internal os, and want of contractions, all are best remedied by medicinal agents.

Adhesions of the placenta are not always so easily managed, but even here the properly selected remedy may cause a spontaneous expulsion. It will be very, very rarely, and more and more rarely as Homœopathy comes more and more into general use, that these adherent placentas will occur; for they all arise from some diseased condition of the system, which Homœopathy dissipates when its practice is strictly adhered to. In some cases the placenta so adheres to the uterus that they seem to form one and the same tissue,—when it is utterly impossible to separate the one from the other. At the very best, we can in these cases only imperfectly tear off a portion. We may infer that the placenta is absolutely adherent, when, in making traction upon the cord, the elasticity of the uterus causes retraction of the cord again upon relaxing our effort at extraction.

Now if there is no hemorrhage to compel artificial interference, we may still wait the action of the remedies for twenty-four or thirty-six hours. If these still fail, the hands should be introduced as previously directed; and the attempt carefully made to insinuate the fingers between the placenta and the uterus; until the placenta is, if possible, entirely separated from the uterine surface,—See Fig. 136,—when it should be carefully scooped out, the hand following.

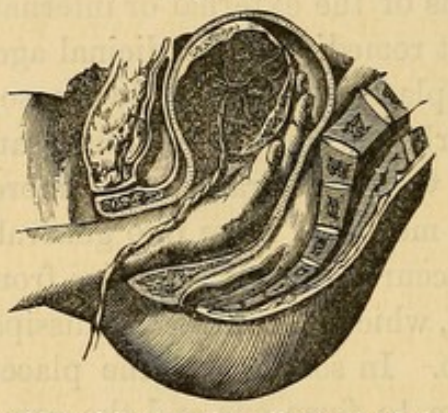
* See Hale's Materia Medica.

Should there be hemorrhage,—which may result from a partial adhesion,—which we cannot control, we must not wait till our patient is hopelessly sacrificed; but, after relying upon the selected remedy as long as we may feel safe in doing so, introduce the hand, and detach and deliver the placenta in the manner just described.

Should there be no hemorrhage, or none beyond our control, and the spasmodic action continue, we should wait for days rather than make artificial interference; for it is much safer to wait on the remedies than to force the spasm and deliver by such violence. But by judicious selection of the Homœopathic remedy we may be able to control all hemorrhages and all cases of retained placenta, without resorting to mechanical interference, excepting in those *very rare instances* of actual growth of the placenta upon the uterus.

For hemorrhages which occur during or subsequent to the delivery of the after-birth, see previous section on *Hemorrhages*, and treat as there directed. The greatest and most implicit confidence may be re-

Fig. 136.



The mode of breaking up the adhesions of the placenta.

posed in this mode of treatment. My experience has been very large, but not a case has ever occurred in all my practice, during a period of over twenty-two years, where I have ever resorted to mechanical interference of any kind; and I have never lost a case from hemorrhage.

When some portions of the placenta are retained and cannot be removed, we must treat the symptoms as they arise, and thereby ward off any danger that may accrue from putrid absorption.

When any difficulty appears in relation to the delivery of the placenta, we should always examine through the abdominal walls, in order to ascertain whether the uterus presents its regular globular form; or whether there may not be a depression in its fundus, showing a tendency to inversion; for it sometimes occurs that a complete inversion takes place in this manner.

If a tendency in this direction be discovered, and if a remedy cannot be found which will cause a return of the uterus to its natural condition, the hand must be introduced for this purpose. If there be *discovered already a complete inversion* with placenta attached, the placenta should first be peeled off, and the uterus returned by pressing it upwards and doubling its walls upon themselves in the opposite direction from that which resulted in the inversion itself. If the uterus be perceived to be but partially inverted, its restoration should be instituted upon the same principle,—inversely as it appears,—first, if necessary, peeling off the adherent placenta.

Lactation.—The Influence of Pregnancy upon Lactation.

The only injurious effect of pregnancy upon the milk of the nursing mother is to render it less nutritious. Every thing in nature conspires to the care of the new order of things within the womb, and the purest essences of the blood go there; consequently the nursling must suffer for want of that nourishment which would otherwise be devoted to its support; it feeds, as it were, upon the husks, and of course it becomes sickly and loses flesh.

It is best to make preparation for nursing, so that the nipples shall not be troublesome by becoming tender, cracked, or ulcerated. If they become tender or painful during pregnancy, some such remedy as Graphites, Lycopodium, Petroleum, Pulsatilla, Sepia, Silicea, or Sulphur, or some other (see Diseases of Pregnancy) will cure them, so that no trouble will be experienced during the nursing period. All these troubles of sore nipples arise from some dyscrasia, developed by pregnancy and nursing; hence they are especially curable even whilst nursing.

Agaricus. If the patient be troubled with chilblains, which itch and burn very much, and are red; or if the nipple itches and burns much and looks red.

Arnica. When in the first days of nursing the nipples only feel sore, as if bruised. It is often indicated; and often cures in a few days when early applied.

Calcarea c. An ulcer appears on the nipple discharging pus; the patient is otherwise a subject for this remedy.

Chamomilla. The nipples are much inflamed and are very tender. She can hardly endure the pain of nursing. She feels irritable and cross, with impatience.

Castor equorum. In neglected cases, where the nipple is nearly ulcerated off. It only hangs as it were by small strings.

Croton t. Every time the child draws at the nipple, a pain runs through to the scapula of that side. The pain is excruciating.

Graphites. The nipple seems to have little vesicles on it; at least it oozes out a thick, glutinous fluid, which forms a crust that is removed by nursing, when the same formation again occurs, and so on.

Lycopodium. The nipple bleeds very much and is very sore.

Mercurius. The nipple feels very raw and sore. She has sensitive gums; sore teeth; enlarged cervical glands; and other mercurial symptoms.

Pulsatilla. In mild, tearful patients;—who weep at every nursing. The pain from nursing often extends into the chest, up into the neck, down the back; and often changes from place to place.

Sepia. The nipples crack very much across the crown, in various places; deep cracks.

Silicea. The nipple ulcerates very easily and is very sore and tender.

Sulphur. After nursing, the nipple smarts and burns very much. It chaps badly about the base and bleeds. Constitutional symptoms will sometimes determine the selection of this remedy, in order to cure the nipples.

The proper mode of administering the remedy is to give one dose dry on the tongue, and to dissolve a few globules of the same remedy in water, or water and brandy, and apply the solution to the nipple immediately after nursing. In this manner all sore nipples may be cured more speedily and certainly than by any other means.

The child should be put to the breast soon after being born. After being washed and dressed, it may be allowed to sleep for awhile, but when it awakens it should be put to the breast, and not otherwise fed, unless it is not satisfied with the breast. In this case it may be fed with milk, or cream and water, two parts of the latter to one of the former. The child should be educated to regular periods of nursing; it should not be put to the breast or fed every time it cries; let it be turned over, or change its position, and be patted and quieted, till the period has expired, say two hours, two and a half, or three hours,—some definite period of interval should be decided upon, and most rigorously adhered to. If the mother has sufficient nourishment for her babe no other need be added, provided, she be sufficiently strong and healthy for the occasion.

If from any cause it becomes necessary that the child should depend in part or entirely upon other nourishment, that should be provided

which most nearly resembles the mother's milk. Cream diluted with water is the best. After five or six months, when the child requires more nourishing food, one of the most suitable articles is readily prepared as follows: take a quantity of flour, tie it very tightly in a bag or cloth, then dip it quickly into water just to moisten the surface, and then roll it in dry flour, then dip it in again, and so on till it is quite thickly coated with a sort of paste; now put this into boiling water and let it boil for four or five hours. The contents of the bag will then be thoroughly cooked, when it may be grated and made into pap as required for use;—for this latter purpose water or milk may be employed. A small pinch of salt and perhaps a little sugar will be useful. Wheat bread thoroughly baked, dried in the oven,—reduced to a powder, and made into a pap is also very useful. As the child gets more and more teeth, its diet may be more and more varied and liberal; but until its first dentition is accomplished, a meat diet should be as much as possible avoided.

Sometimes children will not take milk; then cocoa, made as ordinarily for table use, and an equal quantity of milk added, with a little bread, forms a very acceptable article of diet,—both healthy and nutritious.

Aglactia—Failure of Lactation.

When the mother has not a sufficient quantity of nourishment for her infant, the deficit is often owing to some unnatural state of her own system; and the proper Homœopathic remedy should be sought to change that condition, so that a natural supply may be afforded. The habit of forcing a supply by means of porter, or other similar stimulant, is alike injurious to the mother and to the child. It is an Allopathic remedy. The two-hundredth, or even some higher potency of the proper remedy will develop a healthy condition, and consequently a good supply of milk. Where there is a scarcity of milk from any cause, study the following medicines:

Aconite. The mammæ are congested, burning hot, hard and distended, with little or no milk.

Agnus c. Frequently indicated, particularly when a despairing sadness is the predominant symptom.

Asa f. When there is excessive sensibility of the vital organism; and the veins are unnaturally distended. More or less frequently indicated.

Belladonna. The breasts feel large and heavy. Headache, and the

eyes are congested. She does not sleep well; she lies half sleeping and half waking,—between the two.

Bryonia. Dry, cracked lips; dry mouth; constipation, as if the feces were burnt. No appetite; nausea after eating.

Calcarea c. In leucophlegmatic constitutions. Rather of a chilly nature. Menses had been too often and too profuse; usually subject to leucorrhœa.

Causticum. When, as an attendant symptom, threatened amaurosis exists. Pulsations and noises in the ears. Anxiety and despondency.

Chamomilla. When the mammæ are hard and tender to the touch, with drawing pains. Insulting, cross and uncivil in temper.

China. Where there is debility from loss of animal fluids,—particularly blood,—or from diarrhœa, or leucorrhœa. Much pain between the shoulders.

Coffea. Much excitability and sleeplessness.

Dulcamara. Particularly when there has been suppression from exposure to the cold and damp air. The milk is scanty; the skin is delicate and sensitive to cold, and liable to eruptions from being exposed to the cold.

Merc. sol. Milk scanty, with scorbutic gums, swelling of the glands, &c.

Phosph. acid. Scanty milk, debility and *great apathy.*

Pulsatilla. In mild and tearful females, in apparent good health, who have but little milk. This remedy is often called for in this affection.

Rhus t. Entire want of appetite, mental derangement and thoughts of suicide. Vitiated lochia, *lasting too long;* and powerlessness of the lower extremities.

Secale c. In females who are much exhausted from venous hemorrhage. In thin, scrawny females. The breasts do not properly fill with milk; there is much stinging in them.

Sulphur. Flushes of heat; weak and faint spells; heat on the top of the head; cold feet; very faint and hungry at about noon,—she cannot wait for her dinner, &c.

If the milk seems abundant, and yet *the child does not thrive,* the fault may be in the mother,—or it may be in the child. Administer, according to your best judgment, such remedies to the mother as Calc. c., China, Cina, Mercurius, or Sulphur; and to the child, Calc. c., Silicea, Baryta c., Borax,—or whatever may seem most appropriate, according to the particular indications and conditions.

Galactorrhœa and Excessive Lactation.

In cases of spontaneous flow of milk, keeping the breasts constantly wet, relief from such an uncomfortable state may be obtained by the appropriate remedy,—according to the indications given below. The function of lactation, being one purely physiological, and provided for in the economy by suitable forces, under the stimulus of the maternal instinct and affection,—most women enjoy perfect health during its continuance. Many indeed are never so well as when giving suck to their children. Under the influence of this process there arises a greater activity of all the assimilative functions at the same time, and in conjunction with a greater strength of appetite and corresponding energy of the digestive powers. The process of conversion of food is unusually rapid; the excess going to form the milk. Where a greater amount is thus formed than is required, the system becomes gradually exhausted, even in health, just as the preparation of a less amount may overtask the system when in a condition already enfeebled. This over-production in the former case may be due simply to excess of vitality; while in the latter case it may result from a corresponding effort of nature to supply the required material support, even under difficulties.

But there are cases in which an excess of the secretion of the milk seems just as much the result of some interior morbid condition, as its more or less complete failure would be. This is especially seen in the intimate relation which such excessive flow of milk,—or, what for all practical purposes amounts to the same thing,—*undue lactation,* bears to insanity. And in the following extract from the excellent work of Tyler Smith, the reader will see the injurious effects which may arise from excessive lactation, of either sort; and learn to anticipate the mischief from the first symptoms.

"The cases of insanity which occur as the result of *undue lactation,* are very similar to cases of puerperal insanity, only that their symptoms come on in a more gradual manner. When nursing women complain of loss of sight or hearing, or headache, either their nourishment and stimulus should be increased, or suckling should be at once discontinued. Where there is any predisposition to insanity, mothers should not, if possible, be allowed to suckle their children. In all cases of this kind, the dependence of the mania upon exhaustion is abundantly evident. *It is especially likely to happen when pregnancy and lactation are allowed to proceed simultaneously.*

"There are in the subjects of this form of disease the same suicidal

and homicidal tendencies as in puerperal insanity. I once met with a case in which a mother, delivered of twins, became affected in her mind from suckling, and a wet-nurse was procured in the person of a young girl who had given birth to an illegitimate child. She had nursed her own infant for some time, and then, while being drained by the twins, again became pregnant. Signs of insanity manifested themselves, and she was one day found dead, hanging behind the door of her room. This form of insanity comes on weeks or months after the close of lactation. I have no doubt that the woman Brough, who killed, two or three years since, several of her children at Esher, and who is now a confirmed lunatic at Bethlehem, had suffered from over-lactation. She had weaned a child not long before the dreadful tragedy, had complained of loss of sight and severe nervous disorder, and had suffered in her head in previous lactations. The preventive treatment in this form of insanity consists, of course, in weaning as soon as any marked signs of nervous disorder are perceived. In the management of such cases, great care in guarding the patient is necessary, and the treatment of this disease must be a supporting and stimulating one, combined with perfect rest, and the avoidance, as far as possible, of all moral and physical excitement."

Thus galactorrhœa, or excessive, or undue lactation, is seen to be capable of producing the most destructive results in the mental and physical economy. The symptoms which indicate that lactation is morbidly affecting the mother, are: "A sinking and fainting at the epigastrium, with a sense of emptiness, which lasts a long time, and soon returns even after food has been taken; a general weariness and fatigue; a want of refreshment from sleep, an aching and dragging in the loins, and pain between the blade-bones, or in the side, beneath the left breast; distressing exhaustion after the infant has been at the breast; the pulse is quick and feeble; the extremities cold; there are dyspnœa and palpitation on making the least exertion, or ascending the stairs. If the cause is continued, headache and vertigo, noises in the ears, numbness of the extremities, impaired vision, exciting fears of amaurosis, loss of memory, irritability and despondency, with thirst, dryness of the tongue, and night perspiration ensue. Pulmonary consumption may be developed; the general appearances of anæmia, menorrhagia, leucorrhœa, œdema of the face and extremities, and neuralgic affections of various kinds supervene, and mania has not unfrequently formed the sequel. Thus organic disease of the brain, lungs and uterus, may be added to the evils attendant on undue lactation."—*Leadam.*

Except in the most extreme cases of exhaustion from excessive flow of milk, or protracted lactation, we do not advise the use of any other stimulus than the appropriate remedy. There may be cases in which a little wine may be temporarily useful; but rest, cessation from nursing, and, if necessary, from all the care of the child in any way, suitable food, and the truly Homœopathic remedy, will do all that art can accomplish to restore exhausted nature.

In cases of *galactorrhœa*, or excessive spontaneous flow of the milk, use according to the particular attending symptoms and conditions: Belladonna, Bryonia, Borax, Calcarea c., China, Conium, Phosphorus, Pulsatilla, Rhus, or Stramonium.

In cases of *deterioration of health from nursing;* undue or protracted lactation,—where appear debility, loss of appetite, hectic fever, night sweats, &c., study Calcarea carbonica and phosphorica, China, Lycopodium, Phosphorus, Phosph. acid, Sulphur, &c.

Cramps in the stomach, from nursing, may require Carbo animalis, Carbo veget., or China.

For great sense of emptiness, in the pit of the stomach from nursing, study Carbo animal., Sepia, Ignatia, and *Oleander*.

Mastitis—Inflammation of the Breasts.

Inflammation of one or both breasts, with a manifest tendency to suppuration, is apt to be of frequent occurrence in nursing women. And in some persons this difficulty, orginally arising from constitutional predisposition, becomes almost a confirmed habit, since they seldom or never can nurse a child without experiencing the exceeding distress and annoyance of a gathered breast.

The inflammation may be located principally in the external mamma, affecting particularly the adipose tissue, and partaking of the nature of erysipelas. Or the inflammation may be seated more deeply in the substance of the breast. Or again the inflammation may be developed principally and especially in the mammary gland itself. Finally, there are cases in which the inflammation seems to involve the entire substance of the breast and structure of the organ in one indistinguishable mass. More often, however, the pains scattered through the breast, and the various diverging painful indurations, lead to the conclusion that the gland with its ramifications is the particular seat of the disease.

And in thus determining the nature of the affection, the cause of it, or the manner in which it arises, will often be of service. For if the breast evidently become inflamed from undue exposure to cold

air, in the delicate state of early lactation, a general inflammation may be expected to ensue; while difficulties belonging to the process of the secretion and discharge of the contents of the lactiferous tubes, may sometimes be seen plainly to precede inflammation in those tubes and in the gland itself. Much is due also to previous history and constitutional diathesis; influences which in some would prove perfectly innocuous, in others rapidly develop inflammation, which no less rapidly tends to suppuration. In such cases the greatest care, assisted by a dose or two of the antipsoric which seems most suited to the patient's constitution, will go far to prevent the suffering inseparable from a gathered breast.

Where the milk is copiously secreted, and either from inability on the part of the child,—in its absence,—or from obstruction of the milk-tubes, or from deficiency of the nipple, the milk cannot be freely drawn in the natural way, every effort should be made without loss of time to secure this end by such other means as may be possible. Sometimes the breast may be drawn by another child, or by a friend, or by young puppies; the proper remedy in the mean time should be carefully selected and faithfully administered, in order as rapidly as possible to remove all difficulty which may be amenable to such medication, or which may be resulting from the obstruction. In cold weather the inflamed breasts should be kept warmly protected; and besides this, the less external application is made to them the better. If the inflammation is caused and kept up by a tender and ulcerated state of the nipples, let these be particularly attended to in accordance with the directions already given. Properly used, the Homœopathic remedies may be made effectual in resolving the inflammation and averting suppuration, in a great majority of cases that are attended to at once.

Aconite. When a chill in dry, cold air, has been the exciting cause, and a true, synochal fever prevails.

Belladonna. When the breasts feel heavy; there are red streaks running like radii from a central point; she is occasionally chilly; a dull and stupid feeling prevails.

Bryonia. Her breasts have a stony heaviness in them; they are hot, hard and painful, but not very red. She feels sick on first sitting up in bed or in a chair; and still more sick on standing up. Rough, dry lips, thirst, and constipation; stools dry, looking as if burnt.

Carbo animal. Darting in the mamma, arresting the breathing, and aggravated by pressure.

Cistus c. Particularly indicated in scrofulous subjects, when there is the greatest sensibility to cold air. Inflammation and suppuration of the breast, with a sense of fulness in the chest.

Graphites. In all cases where there are so many old cicatrices from former ulcerations that the milk can scarcely flow. This remedy, high, will now cause the milk to flow easily, and ward off the impending abscess; it has proved perfectly efficacious in many such cases. The same success is claimed for Phytolacca, in similar cases. I have, however, the greatest confidence in Graphites; this remedy, although many times tried, has never failed me in a single case.

Hepar. When suppuration seems inevitable, and there is no other particularly characteristic symptom. Give a single dose, high, and await the result, either in resolution, or in suppuration.

Lachesis. When the breast has a bluish or purplish appearance and she has chills at night and flushes of heat by day.

Mercurius sol. Hard swelling of the breast, with sore and raw sort of pain; the milk is not good, so the babe refuses it. She has scorbutic gums and other general symptoms of Mercury.

Phosphorus. Inflammation of the mammæ even threatening ulceration, with stitching or cutting pain. (Hectic fever and night sweats.) In fistulous ulcers with blue appearance.

Phytolacca dec. Particularly where the hardness is very apparent from the first. Sensitive, and more or less painful; even after suppuration has taken place these characteristics continue.

Silicea. In fistulous ulcers particularly; the discharge being thin and watery, or thick and offensive. The substance of the mamma seems to be discharged in the pus; one lobe after another seems to ulcerate and discharge into one common ulcer, often with great pain; or there may be several orifices, one for each lobe.

Sulphur. Inflammation running in radii from the nipple. Suppuration profuse, with chilliness in the fore part of the day and heat in the after part. Some hemorrhoids, in complication.

Verat. viride. Bids fair to be serviceable in all cases where these troubles are complicated with great arterial excitement.

In some cases the milk seems spoiled. The child refuses to nurse after tasting the milk; it turns away with disgust, or with crying. In such cases, administer to the mother, according to the other circumstances, *Borax, Cina, Lachesis, Mercurius, Sulphur,* or *Silicea.*

In case the child vomits the milk soon after nursing, give the mother *Calcarea c., Silicea,* or *Sulphur.*

Directions for Weaning.

Weaning ought not to be attempted under ordinary circumstances until the child has become accustomed to other articles of diet. See in this connection the subsequent chapter on the Nutrition of Infants.

If the mother's health cannot be kept strong and vigorous, the child may be gradually taught to depend upon other sources at the age of six months; and in a short time it may thrive while receiving but little from the mother for the three or four subsequent months. The mother should never allow the child, from the first day, to sleep at the breast. Once let the child acquire this habit, and it will terribly exhaust the mother by lying on her breast all night. For this reason it is important that the children never begin to acquire the habit referred to. Other things being equal, it is better that the child should not be weaned until it has six or eight teeth.

The process of dentition is accomplished in groups; and the child should never be weaned during the evolution of one of these groups. The first group consists of the two middle, lower incisors—these usually make their appearance at about the sixth or seventh month, and within from one to fifteen days of each other. Then the child usually rests from four to six weeks. The second group consists of the two middle, upper incisors, and after their appearance there is another interval or rest, of a few weeks. From the sixth to the tenth month the lateral incisors appear, the two lower first, and after a brief interval, the two upper ones. Now a longer period of rest intervenes,—nearly two months; and from the twelfth to the fourteenth month, the anterior molars appear, two below first, then two above.

There is now another, and still longer period of rest, and from the fifteenth to the twentieth month the canine, or stomach and eye-teeth come forth,—the two lower first, then the upper two. And again, after another period of rest, and by the time the child is twenty-four or thirty months old, the last four molars are cut,—making in all twenty teeth. This work being fully accomplished, the period of infancy is completely passed, and the limit of this period of teaching ended. Yet if we are tempted to look a little further, we shall see that childhood properly ends with the casting of the deciduous teeth; youth extends to the complete establishment of puberty, and adolescence,—or manhood and womanhood,—ever after.

From the above review, it appears how necessary it is that we *select for so important an event as weaning, one of those periods of rest from*

the evolution of teeth. For the infant to be deprived of its mother's breast is a great change, morally and physically, and this change is much less shocking to the infant's system, and much more easily borne in all respects, if imposed when it is not cutting teeth.

CHAPTER THIRTY-SEVENTH.

PUERPERAL HEMORRHAGE.

FLOODING—UNAVOIDABLE HEMORRHAGE—PLACENTA PRÆVIA.

THE hemorrhage that may occur in non-pregnant women has already been considered. (See page 287 of the present work.) That which arises in pregnancy at any time previous to the latter months of gestation, has been discussed in connection with Abortion, in which it tends to result. Puerperal hemorrhage, our present theme, includes the flooding which occurs just previous to labor, during its progress, or subsequent to its conclusion. No complication of labor will be more dreaded by the young practitioner, since there is none capable of proving more rapidly fatal unless promptly arrested. Nor indeed can this indispensable result be produced unless the physician so completely retains his presence of mind in the most trying moments, as to be able to ascertain the cause of the mischief; institute the requisite procedure where direct interference is needed; and select the proper remedy where manual interference is not called for.

In the natural course of labor the child is delivered while the placenta still retains, more or less perfectly, its connection with the uterus. In such cases, little or no hemorrhage takes place up to this time. But with the first pains which occur after the expulsion of the child from the uterus, the placenta begins to separate from its adhesion to the uterine parietes; and from this moment, until the uterus has considerably contracted upon itself after the discharge of the placental mass, there is sometimes considerable loss of blood,—sometimes almost none at all. Where all goes well, and the placenta is delivered, as it usually is, within fifteen or twenty minutes after the birth of the child, the hemorrhage that does take place proves beneficial rather than injurious to the mother, by relieving the engorgement of the uterus and enabling the system in general, more readily

to adapt itself to the new conditions. But just in proportion as this hemorrhage becomes prolonged it becomes more and more dangerous, —whether it arise from causes which hinder the progress of the labor in the first instance; or prevent the subsequent contraction of the uterine parietes. Hence in order to be able intelligently to employ the requisite means, it is absolutely essential to learn what are the efficient causes of the flooding in each individual case. This knowledge is to be obtained from the history of the case; from the conditions and symptoms obviously present; and from digital examination.

The hemorrhage which occurs during the last month of gestation, threatening to bring on labor,—and that which appears at the commencement of labor itself,—results from the influence of one of the classes of causes dependent upon the relative situation of the placenta. That has been termed "accidental hemorrhage," which arises from the partial and accidental separation of a placenta occupying its usual position. While that has been termed "unavoidable hemorrhage," which results from the placenta being placed partially or wholly over the os uteri—(Placenta prævia.) Unavoidable, since the dilatation of the os must necessarily detach the after-birth. Thus each successive pain at the same time increases the dilatation; the separation of the placenta from its adhesions, and *a fortiori*, the unavoidable flow. The hemorrhage, often not very severe, which occurs during the progress of the labor, arises also from the premature,—and either partial or complete, separation of the placenta before the expulsion of the fœtus will allow the uterus to contract upon itself so effectually as to prevent the abundant flow of blood into its veins, and close the open mouths of its sinuses. While the flooding which occurs after delivery of the child, may be occasioned by the retained placenta,—either still adherent,—or even when separated, by its presence in the uterus preventing the necessary reduction of that organ. Or it may result from want of tone and contractility of the uterus itself, and from the consequent total absence of the after-pains, by which alone the uterine veins and open-mouthed sinuses might be effectually obstructed. In some of the worst cases of puerperal hemorrhage, these causes are successive and cumulative; the previous loss of blood so debilitating the system as to deprive the nervous energies of all power of contracting the walls of the uterus, and thus of preventing the flow from still continuing. In such cases, so vast and numerous are the exposed vessels of the uterus, and consequently so rapid and enormous is the hemorrhage, that the fainting by which

nature in other instances seeks to save life, by diminishing the force of the flow of the blood, comes too late; and the patient, unless otherwise rescued, becomes so thoroughly depleted as to be incapable of subsequent restoration,—even if she does not perish at once.

ACCIDENTAL HEMORRHAGE occurs when from any cause a portion of the placenta becomes detached from the uterus. The hemorrhage in this event may remain internal for a while; but at length its flow will descend between the uterus and the epichorion and appear externally. In these cases the hemorrhage continues constantly every moment, day and night, more or less profuse,—unless there is pain, when it ceases during the contraction. In cases of hemorrhage of this kind, the immediate cause of the flooding is the separation of some portion of the placenta, and the laceration of its vessels; since these cannot be closed by the contraction of the uterus while it is still full. This separation of the placenta may result from shocks or blows, or violence of any kind, fatigue, overexertion, straining from lifting, or otherwise. In some constitutions, plethoric or susceptible, the slightest influences suffice to bring on the hemorrhage; and in certain cases it seems to arise, as it were, spontaneously in the course of labor. The flow is not necessarily external; since, as already stated, the blood may be retained within the womb. In these cases the existence of the hemorrhage must be determined from the constitutional symptoms; these are, rigors, tension and sensation of fulness and weight in the abdomen and faintness. When such symptoms appear in the course of a labor, they should always excite strong suspicion of internal hemorrhage; and the state of the pulse may confirm the suspicion,—especially if weak, or sinking. "When the flooding is internal during labor, none may escape till after the expulsion of the child or placenta,—and the characteristic symptoms are gradual diminution or cessation of the pains with fainting, which may possibly be mistaken for symptoms of laceration,—but differing from this latter accident in the gradual cessation of the pains, and the absence, or recession of the head. At length, with or without pain, the discharge commences, varying in amount from a few ounces to a quantity sufficient to compromise the patient's safety."—*Churchill.*

The diagnosis of accidental from unavoidable hemorrhage is essential to its proper treatment; and it may be determined by means of the four following distinctions:

I. Accidental hemorrhage before labor, or in its first stage, usually results from some definite and ascertained external cause.

II. In accidental hemorrhage, the discharge takes place freely in the interval between the pains; but it is arrested by the pains themselves during their continuance, while in unavoidable hemorrhage,—from *placenta prævia*,—the conditions are exactly opposite, the flow occurring during the pain which expands the os uteri.

III. In accidental hemorrhage, the os uteri is free and closed by the membranes only; while in other cases, the presence of the placenta may be detected, over or near the os, by digital examination.

IV. By means of the stethoscope, the situation of the placenta and its presence in the fundus or body of the womb, or elsewhere, may be positively determined.

The *treatment* of cases of accidental hemorrhage, in Homœopathic practice, is at once simple, and in almost all instances perfectly successful. It consists in maintaining the patient in a state of perfect quiet in body and in mind; in sustaining her strength with nourishment suitable to the occasion; and in the exhibition of the medicine most exactly adapted to all the existing symptoms and conditions. Since even the exact cause of the mischief, as in cases of flooding resulting from a blow or strain, will often direct to the proper remedy. And the utmost care should be taken, and indeed the greatest pains will sometimes be necessary to arrest this kind of hemorrhage, which is usually very persistent. The remedies which will be required in cases of accidental hemorrhage will be found described already under the head of Uterine Hemorrhage, in a previous chapter of the present work. Neither *tampons*, nor any injections will be needed to arrest the hemorrhage, if the above rules are observed and the proper remedy selected.

When there are pains, or when it is evident that delivery alone can be expected to finally arrest the hemorrhage, remedies suited to the existing conditions in these respects must be selected,—remedies which will render available such desultory and inefficient pains as may be present, or bring on actual labor pains when these latter are entirely wanting. In these cases the hemorrhage softens the cervix uteri, and disposes it to yield more readily to the pressure of the head. And when the flooding is profuse and the danger imminent, the membranes may be ruptured in the usual manner; then the pains will increase and the hemorrhage diminish as the labor advances. This happy result comes from the fact that the bulk of the uterus being diminished by the evacuation of the liquor amnii, its walls more effectually contract upon the placenta, at least temporarily

arresting the flow from the uterine sinuses, and at the same time facilitating the expulsion of the fœtus.

Or in those cases in which the hemorrhage becomes truly alarming, before the full time has come, or before labor has actually set in, it will become necessary to induce labor. This can most safely be accomplished, by using the "Essex Enema Syringe," or any other syringe, by which a quantity of water shall be thrown directly upon the os and neck of the uterus, or, if the os be sufficiently dilated, the membranes may be ruptured at once. See Induction of Premature Labor, page 549.

Unavoidable Hemorrhage—Placenta Prævia—occurs when the ovule has descended in the early days of pregnancy and has become fixed to some spot near the internal os,—so that the placenta becomes developed either very near the os uteri; over a portion of it; or covers it completely, centre for centre.

In these cases it is very evident that as the uterus develops from above downward to the internal os, the disproportion between the placenta and the internal os must become very great after the sixth month of pregnancy; hence a rupture must take place and hemorrhage occur more or less abundantly, as more or less of the attachment becomes separated.

Unavoidable hemorrhages seldom occur till after the sixth month; and then they come suddenly, without any admonition or apparent provoking cause. The hemorrhage may start while the patient is quietly sleeping in bed; sitting at her sewing; at the piano, or yet in church or in the bed-room. The first occurrence is not apt to be so profuse as the subsequent attacks. And the flooding is always liable to become more and more profuse at every attack; for the disproportion between the placenta and the development of the lower segment of the uterus becomes greater and greater as the time for delivery approaches.

The *treatment* proper to be pursued when these hemorrhages occur, is to keep the patient as quiet as possible, and to prescribe such remedies as are recommended for Uterine Hemorrhage, till the patient seems quite well again. The course is pursued from time to time, till the arrest of the hemorrhage in this manner seems no longer possible. If we now make an examination per vaginam, we shall usually find the os uteri more or less open; and if the placenta be entirely over the os, the lips will be thicker than usual; or if the placenta covers one side of the os only, the lips corresponding to the attachment will be thickest, owing to the increased growth from the attach-

ment of the placenta. The finger will also remind us of the presence of a spongy mass, quite unlike the smooth surface of the membranes. We could only mistake this for a cauliflower excrescence;—and not that even, if care is taken to examine the lips, their uniform thickness, if the placenta is over the entire os and it is impossible to introduce the finger within the cavity of the uterus on account of the close adhesion all around just within the circumference of the os. If the placenta but partially cover the os uteri, then, only one lip or side will be thickened; and the condition will be shown by the inability to carry the finger up within the uterus on that side; and by the ability to carry it upon the other side and to feel there the smooth membranes. Add to the above condition the fact, that if there are labor pains, the hemorrhage will always be worse during the pains, and will lessen when the pain subsides. The cause of this circumstance is this: the object of the pain, or contraction of the uterus, is to dilate the os so as to complete the first stage of labor; and of course the more the os dilates the more its adhesions with the placenta will be broken up; and as it cannot expel a bag of membranes full of water, so the greater the pains the greater the hemorrhage during their continuance.

Now the only safe plan for deliverance is to draw off the liquor amnii, through the placenta,—thus the bulk of the uterus is lessened, it contracts upon itself and the hemorrhage ceases at once. As the contraction now takes place, the os is dilated without tearing up the adhesions of the placenta. And as dilatation is effected, the placenta separates between its cotyledons, and the presenting portion of the child follows and passes through its centre. And the placenta itself is finally delivered after the birth of the child, as in ordinary cases.

The time and mode of operating in this matter, are as follows: When it becomes apparent that the hemorrhage is no longer controlable, and the woman's life is in danger from further loss of blood, the finger must explore a sulcus between the cotyledons of the placenta, and with the same hand a female catheter, previously concealed in the palm, must be forced through the membranes during a pain. The liquor amnii now passes off freely through the catheter; the bulk of the uterus begins at once to shrink and the hemorrhage ceases. The finger may be used for the purpose of rupturing the membranes between the sulci, as in ordinary cases. But much care is needed in this event, in order that the waters do not discharge themselves too rapidly and thus produce atony from too sudden

relief, for then the hemorrhage would not cease. The liquor amnii *must flow slowly;* and as surely as it thus flows, so surely will the hemorrhage cease. After the water has pretty much escaped, the finger may take the place of the catheter, and aid in tearing the orifice larger, so that the presenting part can descend. If the shoulder is found presenting, or any other malpresentation, the hand must be introduced through the placenta; and the presentation corrected as in ordinary cases.

By this method of procedure, not a single mother was ever lost; and the child is almost invariably saved. No pain is inflicted upon the mother in tearing off the placenta as is recommended in the usual practice; but she rallies as if by magic, immediately after the puncture. Even seven and eight months' children are saved in this manner. But it must be remembered to *evacuate the liquor amnii very slowly;* every accoucheur knows the bad effect of emptying the uterus rapidly under such circumstances; the atony thereby produced is more to be dreaded than the former state.

When the placenta is only partially over the os, or even down to the edge, the same principle and practice hold good. We have not space to contrast the old and the new practice in these cases. Suffice it to say that in the method formerly pursued dreadful pain is inflicted in forcing the hand between the adherent placenta and the uterus. Another and still more important objection to the usual course of procedure, is the fearful mortality both of mothers and of children.

CHAPTER THIRTY-EIGHTH.

PUERPERAL CONVULSIONS.

THE two principal varieties of convulsions to which women are subject are the hysterical and the epileptic. Our present concern is with those only which appear during gestation or after its termination in parturition. The convulsions which occur during the first eight months of pregnancy are usually hysterical; although in some persons originally predisposed or actually subject to epileptic attacks, convulsions would be still more liable to appear in pregnancy, even in its earlier stages,—and they would of course partake of the same

epileptic nature. But in general only those convulsions which arise during the last month, and especially during the last weeks of gestation, are allied to epilepsy; and they are properly termed puerperal, because of their precise similarity in character to those which occur during labor and after parturition. Still in common language all convulsions of pregnant women may be termed puerperal,—whether they appear in the earlier or in the later stage of gestation; during labor, or subsequently in the puerperal state. And in fact such convulsions may arise in all these various conditions of the same individual. The hysterical form of convulsions appearing principally in the early months, in persons of a nervous or hysterical constitution, may be considered rather as an aggravated kind of hysterics; and studied in the preceding article and chapter on this disorder; see pages 144 and 148. And in the present section, we shall have reference rather to the epileptic form of convulsions, to those which more immediately precede, accompany, or succeed labor, and shall consider their *causes, symptoms* and proper *treatment.*

Causes.—The causes of puerperal convulsions may be most conveniently studied, by first dividing them into two general classes; the *Centric,* or those which arise from direct irritation of the great nervous centres; and *Eccentric,* or those which arise from more external influences reflected back upon these centres. The *Centric* causes are either physical, acting as material irritants of the nervous centres; or psychical, consisting in mental emotions. The physical causes may be either intra-cranial, such as act primarily upon the brain and medulla oblongata; or they may intra-vertebral, acting upon the membranes of the spinal cord and upon the substance of the spinal centre itself.

The most prominent of the physical intra-cranial causes consists in that derangement of the sanguineous system incidental to many cases of pregnancy, and known by the old term of plethora. "Pregnancy is usually and very justly considered a state of plethora; and it may be readily presumed that the balance of such plethora may determine towards the head; inasmuch as the great vessels of the abdomen must be supposed, during the latter weeks of gestation, to be liable to much impediment to their action, from the pressure of the gravid uterus."—*Davis.* Any agent which like a clot of blood,* serous effusion, or fulness of the cerebral circulation, causes undue or unusual pressure on any part of the brain, by causing also a

* Romberg, Diseases of the Nervous System, ii., p. 188.

counter-pressure on the medulla oblongata, may occasion convulsions. And the deprivation of the accustomed pressure, both on the brain and on the spinal cord together, must necessarily be attended with similar results. Thus cases of convulsions arise, either in plethoric conditions with red, bloated face and projecting eyes; or in anæmic conditions characterized by excessive pallor and debility. In cases of excessive and fatal uterine hemorrhage, convulsions always appear before death from this very cause. The *psychical* class of causes of convulsions consist in sudden and violent emotions of fear, of joy or of grief; or in deeper and more protracted influences, such as the sense of shame inseparably connected in many instances with pregnancy in unmarried females.

The intra-vertebral causes of puerperal convulsions have reference either to the quantity or to the quality of the blood. Too large a quantity relatively, exerting an undue pressure upon the spinal cord,—either directly or by means of serous effusion,—may give rise to puerperal convulsions; and a similar result, as already stated, will follow the opposite or anæmic condition. The abnormal character of the blood itself may cause convulsions. This may arise from deficiency in oxidizing this fluid, on account of the hindrance to respiration due to the encroachment of the abdomen upon the thorax; from that state of the blood which corresponds to albuminuria; from a true toxæmia or poisonous state of the blood due to its double function of eliminating the debris of the fœtal as well as of the maternal system; and from the fever connected with the first secretion of milk. Generally speaking, "the immediate causes of puerperal convulsions are often very obscure. They appear sometimes to depend upon a loaded state of the brain; at other times the brain appears to be influened by some distant irritation, either in the uterus or digestive organs; and again in some cases puerperal convulsions are induced apparently by a peculiar irritability of the nervous system. It has been remarked, that there has been a greater disposition to puerperal convulsions in those patients who have been in early life subject to convulsive attacks, particularly of an epileptic character; and also in those who have suffered similarly in former labors, and have omitted those measures usually employed as precautions."

The *eccentric* causes of puerperal convulsions consist in irritation of the extremities of the excited nerves. The greatest, and most frequent and important of all these, are found in direct irritation of the uterus itself, and of the uterine passages. This may be caused by

the pressure of the head, or of any other presenting part upon the incident spinal nerves of these organs. In some excessively nervous or epileptic conditions, the convulsions may be brought on by the changes of position of the fœtus in the first stages of labor; by the irritation resulting from over-distention of the uterus by excessive quantity of liquor amnii, and by the presence of a dead fœtus within the womb. The introduction of the hand into the uterus, for the sake of removing an adherent placenta, has sometimes immediately thrown the woman into convulsions. The same result may also follow the irritation caused by indurated feces; by purgative medicines; by irritability of the bladder, the stomach, and even of the mammæ.

Symptoms.—The symptoms of puerperal convulsions, may be divided into premonitory, and actual symptoms. And by a careful attention to the former, when they occur some days or even weeks before labor, we may be able to avoid the frightful complication of convulsions in child-bed.

The *premonitory,* or predisponent symptoms may sometimes consist in a sense of fulness in the head even to vertigo; of intense pain in a part or in the whole of the head; confusion of the understanding, a sense of ringing and of other noises in the ears; temporary confusion or the loss of power of vision, and temporary abolition of the power of thought, and even of sensation. For such symptoms, which may appear at any time in the later stages of pregnancy, Dr. Davis recommends the abstraction of blood; but a no less decided and much more beneficial result may be secured by the exhibition of the appropriate Homœopathic remedy. For convulsions threatened during labor, the same author gives the following predisponent symptoms: an excited state of the circulation; a gradual accession of cephalic symptoms, such as those above enumerated, with rigors, nausea and even vomiting; a great excitement of the heart and arteries; immense irritation and restlessness; great development of heat, unaccompanied by adequate moisture on the surface of the body; unusual strength and fulness of the pulse; engorgement of the vascular structure of the face, producing much turgescence and flushing; an approach to or actual delirium; great fulness and wildness of the eyes; often accompanied by an expression of extreme distress, or else of a state approaching to fatuity; perception of scintillations of light, or the fancied presence of divers other bodies; and in many cases, a sudden seizure with violent pains in the abdomen, differing in character from those of labor. Severe pain in the stomach, and an

intense pain in the forehead have been mentioned as premonitory of the worst kind of cases of convulsions. A tumid state of the hands and face sometimes precedes an attack; a dropsical swelling of the face alone, or face and upper extremities, is not uncommonly followed by convulsions, and if the urine is at the same time albuminous, this condition should excite strong apprehension of such a catastrophe. Sometimes, however, there are no precursory symptoms; and however similar such attacks may be to epilepsy, they differ from this disorder in seldom or never being preceded by the *aura epileptica.*

The *actual* symptoms of puerperal convulsions are indeed scarcely to be distinguished from those common to epilepsy itself. They are thus described by Churchill.* "During the attack the face is swollen, of a dark-red or violet color, and distorted by spasmodic contractions; the eyes are agitated, the tongue protruded, and the under jaw repeatedly closed with force, so as to wound the tongue. A quantity of froth is ejected from the mouth; which is generally drawn more to one side of the face than to the other. The muscles of the body are thrown into violent and irregular action; the limbs are jerked in all directions, and with such force that it is sometimes difficult to keep the patient in bed. The respiration is at first irregular, and being forced through the closed teeth and the foam at the mouth, has a peculiar hissing sound; it subsequently becomes nearly suspended. The pulse is quick, and at the beginning full and hard, but afterwards small and imperceptible. The body participates in the purple color of the face. The urine and feces are often passed involuntarily. This terrible paroxysm, however, is not of very long duration. After a period varying from five minutes to half an hour, the convulsive movements become less violent, and gradually subside; the countenance is less distorted, and assumes a more natural and placid appearance; the eyelids close, the respiration becomes more regular, though still sibilant, and the circulation is restored, the pulse becoming more perceptible, though still very weak; the patient rests quietly in bed, and the paroxysm has terminated for the time.

During the interval, the patient's condition is very variable. She may partially recover consciousness, so as to recognize persons around her, and to be aware of something extraordinary having happened, without knowing what, and without being able to express herself clearly. In other cases, the return of intelligence (without recollection) may be complete until the approach of the next fit,

* System of Midwifery, Phila., 1864, p. 473.

accompanied with great weakness, headache, and confusion. In the more unfavorable cases, the patients remain in a state of total insensibility, almost approaching to coma or asphyxia, with sibilant or stertorous breathing, and without muscular motion, or with a restless throwing about the body and extremities. This calm is however of no very long duration; it may be half an hour, or two hours, but sooner or later the paroxysms return, to be succeeded by an interval which in its turn gives place to a paroxysm."

Under the head of *eclampsia parturientium*, puerperal convulsions are thus described by Romberg.* The convulsions coming under this denomination break out suddenly, and the patient is at once deprived of consciousness. The face and neck swell, and become red and livid. The carotid and temporal arteries pulsate violently, and the jugular veins swell; the eyelids are distended, the eyeballs are elevated or stare rigidly and their vessels are congested, or they roll about under the closed eyelids. The tongue projects, and is bitten by the grinding teeth, causing it to bleed, and bloody froth issues from the mouth. The facial muscles twitch, the limbs are curved or stretched. and again contract with lightning-like rapidity. The whole trunk is at one time rigid, immovable, drawn backwards to one side; the next moment it is thrown about by twitchings and convulsions, so violent that the patient can scarcely be restrained. The muscles of respiration, and especially the diaphragm, are implicated; there is danger of suffocation. Vomiting supervenes, and urine and excrements escape involuntarily. The temperature is raised, the face drops with perspiration. The pulse is very frequent, full and strong, or weak and hard. The abdomen is tympanitic; the uterus is hard, and this hardness increases as often as convulsions are renewed.

These attacks are more apt to occur in primiparæ; although they are by no means confined to them. Some women even have the misfortune to be seized with them at each succeeding pregnancy; in such cases they are very apt to result in premature delivery. In different individuals these attacks terminate differently; some remain in a state of half stupor and great exhaustion for hours or days, and gradually recover; others become maniacal, and may even remain so for a long time, and eventually recover. In some cases the patient continues comatose, gradually passes into a state resembling apoplexy, and dies. In these cases the danger is said to be greater during the last months of pregnancy than during and after parturition. When

* Diseases of the Nervous System, II. p. 187.

the convulsions are originally associated with profound sopor and stertorous breathing, they are said to prove almost invariably fatal under the Allopathic treatment. Plethoric and robust women are in greater danger than weak and hysterical subjects. And when the intervals are very short between the paroxysms, or become imperceptible, death is at hand.

Dr. Hodge* states, that "after much anxious experience and reflection, it is evident to my mind that there is no essential pathological difference between the usual form of puerperal convulsions, and those which occur in the non-parturient state in hysterical women. I have seen so many cases in the latter, precisely similar, as regards their phenomena at the time and after the attack, to those of the former; and so many of the puerperal form resembling those of the hysteric as to the precursory, attendant and consecutive symptoms, that I must believe that pathologically they are virtually the same. The only real difference is the degree of congestion; this being comparatively trifling in the unimpregnated state, very great during gestation, and still more so during labor. The engorgement in this case arises from the almost universal plethoric state of pregnant women, which during labor is enhanced, particularly as regards the brain, by the "pains" and the bearing down efforts; these include of course the holding of the breath, the temporary suspension of respiration, and the consequent passive congestion in the lungs, right side of the heart, the brain, &c. Hence the danger and fatality of puerperal convulsions. The original nervous irritation is aggravated by this congestion, so that effusion of serum or blood may ensue, and the patient become comatose and die."

When this affection appears in the last months of pregnancy, the infant almost always perishes; but it may be saved when the convulsions appear during parturition; in these cases the fits will usually be found synchronous with the uterine contractions,—that is each pain is attended by a convulsion. But if there have been no pains before the fits come on, the os uteri most frequently begins to dilate; in all cases of puerperal convulsions of this kind,—that is during parturition,—the condition of the os uteri, as dilated, dilating, or as rigid, will afford important indications as to the course to be pursued and the remedies to be employed. In connection with these convulsions the uterine contractions are usually feeble and irregular, sometimes they either pass into the spasms or alternate with them. In

* Diseases peculiar to Women, p. 126.

some instances, according to Leadam, the opening of the os is the signal for the manifestation of convulsive action, each parturient effort being accompanied by a convulsion; in others, every paroxysm seems to cause a firm, spasmodic contraction of the os, and so interferes with and delays the progress of the labor. The convulsions sometimes continue at intervals until the birth, which, therefore, is an event looked forward to with great anxiety; and it has happened that labor has proceeded, even to the expulsion of the child and secundines, without the surrounding attendants being aware of it, in consequence of the convulsions so obscuring the parturient efforts that there was no outward manifestation of the labor. This shows the duty of ascertaining without doubt the actual condition of the uterus by a proper and timely examination. If delivery,—whether it be at the full time or not,—be inevitable, and if in spite of the application of appropriate remedies, the convulsions continue or increase, then it will be a matter of serious consideration whether the birth of the child can be expedited by manual or instrumental interference with safety to the mother. The sooner the child is born, the sooner may we reckon on the probable cessation of the convulsions, and the safety of the mother; although they do not always terminate when that desirable object is accomplished.

The proper course to be pursued, under the different conditions of *Convulsions in Parturition* will now be indicated.

First. Ascertain, by examination, if any loaded condition of the rectum, or of the bladder, offer any impediment to the progress of the labor; or predispose to the convulsions.

Second. Remove any such obstructions by the use of the enema syringe or catheter.

Third. Administer the similar remedy, according to the indications given at the close of the chapter,—either one of those mentioned or any other which may be more Homœopathic to the case.

Fourth. Should the convulsions not be relieved, it will be necessary to induce artificial delivery, as soon as the os uteri is found to be sufficiently dilated, or dilatable.

The course to be pursued in convulsions of pregnant women before the close of term, at first corresponds to that necessary in severe cases of hysteria, of which in fact these convulsions are usually but an aggravated variety. The exceptional cases will consist principally of those who have either had epileptic attacks in early life, or whose parents had been troubled with this affection,—or of those in whom the pregnancy itself has evidently developed the epileptic condition.

In each of these cases, the remedy Homœopathic to the existing condition should be administered, in as high a dose and at as long intervals as may coincide with the judgment of the physician. If the treatment fails, the convulsions grow more frequent and severe, and evidently threaten to produce miscarriage, the case must be treated as one of abortion from this cause.

The convulsions which make their appearance after parturition, are far more dangerous than those which precede and accompany labor; since they are usually the result of profound exhaustion of the patient's system. This exhaustion may be principally nervous, and analogous to the "shock," which constitutes the most fatal form of puerperal fever; or it may be vascular, resulting from excessive hemorrhage, during and immediately after the labor itself. The individuals most liable to the former class of exhaustion are those of a weak, nervous temperament; while the full-blooded and plethoric are most apt to suffer from severe losses of blood. In either case the condition is one of exceeding gravity; and unless the physician is sufficiently master of his business to enable him to give the right remedy without loss of time, he may have the mortification of seeing the convulsions become constantly more violent until the little remaining vitality is at last expended in futile efforts to maintain the respiration and circulation, and the patient is relieved by death!

And it should always be remembered that there is still another influence to which the puerperal woman is remarkably sensitive, and which may prove as efficient and as fatal a cause of convulsions after labor as either the nervous or the sanguineous exhaustion just mentioned,—and which comes with tenfold force if brought to bear upon patients already so exhausted. And this is fright, fear, or a sudden emotion of grief,—or even of joy. The least intimation to the mother during labor, that there was something wrong, has been known instantly to stop all pains, and necessitate the use of instruments, resulting in the final destruction of mother and child. How much more then should we carefully avoid shocking the feelings and wounding the sensibilities of our poor patients in their enfeebled condition at the close of a labor, which may have been far more exhausting than is apparent, by rudely announcing the death or the deformity of her child. These trying circumstances, through which the young physician may at any time be called to pass,—demand from him not only the most entire self-control and presence of mind under the most critical circumstances of labor, but also, and no less absolutely, the most careful and tender consideration for the *personal feelings* and

moral state, as well as for the physical condition of his patient afterwards. In all these alarming conditions, the Homœopathic remedies properly selected and administered, will be found endowed with an efficacy vastly superior to that of the cumbrous and destructive, because either debilitating or stupefying, means employed by old-school practitioners. And however discouraging the symptoms may be, especially to the young physician, let him be sure neither to "lose his head," nor to give up in despair; but let him patiently and perseveringly administer the proper remedies, and leave the event with Him who doeth all things well. Remembering at the same time, that very many cases are thus saved, even of those which he might deem not only desperate but perfectly hopeless.

Treatment.—Let it be the first duty of the physician to make sure that no ligatures or other encumbrances obstruct the circulation, or in any manner aggravate the existing difficulty; that there be pure and fresh air; and that all the attendant circumstances and conditions are rendered as favorable as possible for his patient. If the room is crowded,—as is often the case,—with friends anxious, distracted and rushing about in confusion, *let him at once restore the room to order;* otherwise he may chance to find himself inextricably involved in the same hopeless confusion. Then, if not before, let him administer the remedy which seems to him most Homœopathic to the symptoms and conditions of the case. Let him calmly and patiently wait for the action of the first dose, and before repeating it let him be fully satisfied not only that it is the right remedy, but that the beneficial action of this first dose is exhausted. If no improvement arise, and the appearance of new symptoms, or the further development of the old ones should convince him that the right remedy had not been chosen at first,—let him endeavor to select another in accordance with the present condition of the case. And in all cases let him remember that the more violent the symptoms, the less should he expect instantaneous relief; that the gradual subsidence of the nervous excitement and the corresponding gradual abatement of the spasmodic action is not only the best method by which the patient may improve, but that it is also the only method possible. In addition to the remedies already mentioned under Hysteria, the following may be studied with reference to the convulsions which precede, or accompany labor, and to those which subsequently arise in the puerperal state, viz.:

Aconite; Argentum nit.; Senega; Belladonna; Bryonia; Cantharis; Causticum; Chamomilla; China; Cicuta; Cocculus; Coffea; Cuprum;

Helleborus; Hydrophobin; Hyoscyamus; Ignatia; Ipecac.; Kali. c.; Lachesis; Laurocerasus; Mercurius; Nitric acid; Nux mos.; Nux vom.; Opium; Phosphorus; Pulsatilla; Secale c.; Stramonium; Veratrum; Zinc.

Aconite. In those cases where, in their incipiency, there is a hot, dry skin; thirst, restlessness; fear of death; more or less cerebral congestion;—in such cases a dose of Aconite, once every half hour acts like a charm.

Argentum nit. She has a presentiment of the approaching spasm. She is in constant motion from the time she comes out of one spasm till she goes into another. The spasms are violent, and are preceded by a sensation of expansion of the whole body; especially of the face and head.

Arnica. When the pulse is full and strong, and during every pain the blood rushes violently to the face and head; symptoms of paralysis of *the left side;* loss of consciousness; involuntary discharge of stool and urine.

Belladonna. She has the appearance of being stunned; a semi-consciousness and loss of speech; convulsive movements in the limbs and muscles of the face; paralysis of the right side of the tongue; difficult deglutition; dilated pupils; red or livid countenance. She may have paleness and coldness of the face, with shivering; fixed or convulsive eyes; foam at the mouth; involuntary escape of the feces and urine. Renewal of the fits at every pain; more or less tossing between the spasms; or deep sleep, with grimaces; or starts and cries with fearful visions.

Bryonia. Is often indicated after the spasms have been controlled, and there remain fulness of the pulse, abdominal tenderness and perspiration, dry parched lips and thirst.

Cantharis. Dysuria belonging to Cantharis. The presence of bright objects, the sight, the drinking, or the sound of water, and touching the larynx, seem to reproduce the spasm.

Causticum. When the paroxysms are complicated with screams, gnashing of the teeth, and violent movements of the limbs, &c.

Chamomilla. The spasms have been excited by a fit of anger; or she has one red cheek, while the other is pale. Starts and shocks during sleep. Great impatience and disposition to anger.

China. She has lost much arterial blood as the exciting cause.

Cicuta. Strange contortions of the upper part of the body and

limbs, during the paroxysms, with blue face and *frequent interruptions of breathing for a few moments.*

Cocculus. Spasms following difficult labors;—and those which are developed by changing the position of the patient.

Coffea. To quiet the extreme excitability of the nervous system, when spasms are apprehended; or if spasms have actually been developed, attended with cold extremities and grinding of the teeth.

Cuprum. Spasms complicated with violent vomiting. Opisthotonos with every paroxysm, with spreading out of the limbs and opening of the mouth.

Gelseminum. This remedy bids fair to become one of our most useful agents in this fearful disorder. It seems indicated by the premonitory symptoms,—where the head feels very large; or in those cases in which the spasms occur as the first symptom of the os uteri being unchanged or perhaps rigid. Distressing pains running from before backwards, and upwards in the abdomen.

Helleborus. A shock passes through the brain, as if from a shock from electricity,—followed by considerable movements in the body.

Hydrophobin. The spasms are excited whenever she attempts to drink water; or if she hears it pouring from one vessel into another. This remedy may also be indicated by the sight or sound of water affecting the patient unpleasantly, even though she desires the water.

Hyoscyamus. When there is a bluish color in the face, and twitchings and jactitation of every muscle in the body,—those of the face, eyelids and all.

Ignatia. Deep sighing and sobbing with a strange compressed feeling in the brain.

Ipecac. One constant sensation of nausea, the whole time,—with occasional convulsions. Such symptoms,—convulsions characterized by continuous nausea,—are always relieved by Ipecac. alone.

Kali. c. The spasm seems to be relieved or to pass off by frequent eructations.

Lachesis. The convulsions are particularly violent in the lower limbs, with coldness of the feet, stretching backwards of the body and crying out.

Laurocerasus. She is conscious of a shock passing through her whole body before the spasm.

Mercurius. Much salivation, a constant drivelling from the mouth; convulsions mostly in the extremities.

Nux mosch. Particularly when there is a convulsive motion of the head from behind forwards.

Nux v. Great torpor of the intestinal canal; in persons who are of an irritable disposition; and in those who are accustomed to wines and high living generally.

Opium. Sopor, with stertorous respiration;—the stertorous respiration continues constantly from one spasm till the next, and so on. Incoherent wandering, and convulsive rigidity of the body, with redness, swelling and heat of the face; hot perspiration, and insensible pupils.

Phosphorus. Previous to the convulsion a sensation of heat rushes up the back into the head. This was several times perceived as a forerunner of the first convulsion.

Pulsatilla. The countenance is cold, clammy and pale. Loss of consciousness, and of motion; stertorous breathing and full pulse. The labor pains are deficient, irregular or sluggish,—otherwise she is in good condition; mild and tearful.

Secale c. In scrawny, illy-nourished women, with too feeble labor pains. "Ergotismus convulsivus."

Stramonium. This medicine is particularly indicated where the patient shows such signs of fear as to cause her to look frightened and to shrink back from the first objects she sees after opening her eyes. If she has had no spasms she soon will have, after betraying such symptoms, unless *Stramonium* be immediately administered. The same frightened appearance occurs also after the convulsions commence. Sardonic grin. Stammering, or loss of speech. Puffed and red face; loss of consciousness and sensibility. Cries; frightful visions; laughter; singing; attempts to escape. The fits are renewed by the sight of brilliant objects and sometimes by contact.

Verat. viride. Great activity of the arterial system. Convulsions, or mania; or when the mania continues after the convulsions have ceased.

Zinc. Particularly if eruptions have recently disappeared, even old eruptions. Zinc has been known to cure obstinate puerperal convulsions after Phosphorus, being indicated, had failed.

CHAPTER THIRTY-NINTH.

CHILD-BED FEVER. PUERPERAL FEVER.

THE multiform disease which goes by the various names of Child-bed Fever, Puerperal Fever and Puerperal Peritonitis, has this double characteristic, that it attacks only pregnant and lying-in women, and involves in various degree the genital organs and the viscera more immediately adjacent. Scarcely any disorder which the physician is called upon to treat is more insidious or more dangerous; certainly there is none which runs a more rapid course or which may prove more suddenly fatal. And when we reflect that this frightful malady is not necessarily confined to individual cases, that it may become epidemic, and even most virulently contagious, it will be evident that a thorough understanding of this disease, as essential to its successful treatment, will at once assume a tenfold importance.

"The breaking out of an epidemic child-bed fever, or even the occurrence of a single case, commonly excites a feeling of sharp interest and alarm as far as ever the rumor of it extends: the public curiosity becomes speedily aroused; and among many physicians whose opinions are taken, how wide is the diversity of their sentiments! If the public do become greatly alarmed on these occasions, it is because they know that any one of our women, seized with child-bed fever, is at once placed in a most perilous position—and we know it even better than they; and half our distress and anxiety arises from this that we are ourselves uncertain what we have to do, what to contend with, and by what principles to be guided."* These very candid confessions from one of our ablest Allopathic writers will at once serve to show the dangerous character of this disease and the necessity which therefore exists for a thorough acquaintance with its essential nature and proper treatment.

No single form of disease, or class of diseases, has given rise to greater differences of opinion among medical men, as to its nature and causes; and in no others have serious physiological and pathological errors so manifestly led to erroneous and destructive methods of treatment. And although the Homœopathic physician, from general

* C. D. Meigs, M. D., on Child-bed Fevers.

principles avoiding some of those untimely interferences which have been seen to lead immediately to child-bed fever, and from selecting his remedies under the direct guidance of the existing conditions rather than under that of a supposititious and often mistaken diagnosis, has in general far greater success than his Allopathic neighbors;—he will none the less require, for the sake of his students, if not for his own, a clear exposition of the *Natural History*, *Essential Nature, Causes, Symptoms, Diagnosis, Course and Tendencies*, and *Treatment* of this disease.

I. NATURAL HISTORY.—Under this title we consider child-bed fever, or the disease commonly so termed, in a general manner only. This disease may appear in one or more isolated cases; and it is then termed *sporadic*. Such cases are supposed to arise in consequence of influences inherent in the constitution of the individual, or from such as are additionally developed by the incidental circumstances of her confinement. In general the cases of puerperal fever which appear as sporadic, are less difficult of cure than those met with in epidemics.

In different countries, and at different times, child-bed fever has assumed an *epidemic* form; raging with great virulence and fatality, and attacking almost every puerperal woman; but neither including any very extended range of territory, nor lasting more than a few months on any one occasion. Dr. Watson* states, that puerperal peritonitis "is observed to reign as an epidemic, especially in *Lying-in Hospitals*, and that it occurs at *irregular intervals*, sometimes leaving them quite exempt from its ravages for *years* together." The mortality of child-bed fever in private practice among the Allopaths has always been very great; and in the lying-in institutions and hospitals this disease has sometimes proved so dreadfully fatal as to render these public charities a curse rather than a blessing to the communities in which they were situated. Of the one hundred and sixty cases of severe inflammation of the uterus and its appendages which occurred to Dr. Lee, in London, from March, 1827, to the end of April, 1835, and of which he gives a tabular view,† eighty-eight, or a little more than fifty per cent. recovered. In another author mention is made of thirty-one cases being lost out of thirty-two;—or 96$\frac{7}{8}$ per cent.; while of twenty women in child-bed, in Hotel Dieu Hospital, Paris, in February, 1746, affected with puerperal fever, scarcely one recovered.

* Practice of Physic, p. 819.

† Lectures on the Theory and Practice of Midwifery, by Robert Lee, M. D., F. R. S., p. 478.

The question as to the *contagious* or non-contagious nature of child-bed fever has given rise to the most violent disputes and to the most opposite conclusions among medical men. A frightful array of facts may be collected from the works of innumerable authors, which seem to prove in the most incontestable and overwhelming manner not only that this disease is contagious, but that in many remarkable instances it has been confined to the practice of a single physician, every woman whom he attended during a course of weeks or months being stricken down with this fell disorder.* Dr. Churchill writes as follows: "It seems impossible to doubt that contagious matter capable of exciting puerperal fever may possibly be conveyed by a third party unaffected by it; for example in the cases on record following the services of medical men and nurses who were in attendance upon erysipelas immediately before. The instances are too remarkable and too numerous to be regarded as coincidences, nor would even the prevalence of an epidemic of puerperal fever at the same time invalidate our conclusions; it might certainly render the cause more influential." Dr. West, of Philadelphia, states, that "seven females delivered by Dr. S. Jackson, in rapid succession, were all attacked with puerperal fever, and five of them died. These were the only cases that occurred in that district, for the women became alarmed and sent for other assistance." Dr. Ramsbotham has known the disease to spread through a particular district, or to be confined to the practice of a particular person, almost every patient being attacked with it; whilst other practitioners had not a single case; and he considers the distemper as being capable of conveyance not only in common modes, but through the dress of the attendants on the patients.

At a meeting of the College of Physicians, in Philadelphia, Dr. Warrington stated that, "after assisting at an autopsy of puerperal peritonitis, he was called to deliver three women in rapid succession. All these women were attacked with different forms of what is commonly called puerperal fever." "A young surgeon, shortly after examining the body of a sporadic case that had died, delivered three women, who all died of puerperal fever." Mr. Davis states, "that in the autumn of 1822, he met with twelve cases, while his medical friends in the neighborhood did not meet with any, or at least, with very few. He could attribute this to no other cause than his having been present at the examination of two cases, and his having con-

* Vide "Puerperal Fever as a Private Pestilence," by O. W. Holmes, M. D., Boston, 1855.—Boston Med. and Surg. Jour., vol. lii., pp. 95, 410;—Ramsbotham's Obstetrics, p. 530.

veyed the infection to his patients, notwithstanding every precaution." Dr. Roberton, of Manchester, states, that between the 3d of December, 1830, and January 4th, 1831, a midwife attended thirty patients of a public charity, sixteen of whom had puerperal fever and all died. Other midwives of the same institution attended three hundred and eighty women during the same time, and none suffered from it.*

Hitherto we have only adduced proof of the direct communicability of puerperal fever, by physicians or nurses who have been in attendance upon previous cases of the disease; or by physicians going to women in labor, from autopsies of persons dead with the same complaint. But there are still other modes by which the poison which is capable of exciting this disease in puerperal women has been conveyed,—modes which are necessary to be known in order to a full understanding of the natural history of the disease itself. A practitioner had been attending cases of typhus fever. Within the space of four days he delivered five women. All these women were attacked with puerperal fever, and all of them died. This was in a country practice, and the cases were remote from each other. Different practices intersected the practice of this medical man at various points, but no other cases were known to have occurred in the neighborhood. Again, a patient suffering from typhus fever was admitted into a lying-in hospital, where she remained for a few hours only. In the beds on the right and left of this patient were two lying-in women, both were attacked almost immediately with puerperal fever, and both died. A medical man was in constant attendance upon a patient suffering from gangrenous erysipelas, and between the 8th of January and the 22d of March, he attended the labors of ten women; all had puerperal fever, and eight of the patients died. This was in a town of moderate size, and no other patients in the place were known to have had puerperal fever. "It has been made out very conclusively by Semelweïs and others, that the miasms derived from the dissecting room will excite puerperal disease. Exposure of the puerperal woman to the poison of scarlatina will give rise to puerperal disease in patients proof against the reception of scarlet fever itself. The mortality amongst child-bed women seized with small-pox is well known, and such persons die with the symptoms of puerperal disease, in addition to the variola."† The mode in which these several, similar, or different poisons develop the disease called child-bed

* Churchill's System of Midwifery, p. 549.

† Tyler Smith's Lectures on Obstetrics, p. 630.

fever, will be explained when in a subsequent section we consider the essential nature of this disease.

But since, as already stated, the opposite opinion, or that of the non-contagiousness of puerperal fever is strongly maintained by many able physicians, it is but proper that we allow them also to speak. The most powerful and influential among these is Dr. C. D. Meigs; we quote his testimony from his already mentioned, learned and elaborate work; on page 102, he says: "I have practised midwifery for many long years; I have attended some thousands of women in labor, and passed through repeated epidemics of child-bed fever, both in town and in hospital. After all this experience, however, I do not upon careful reflection and self-examination, find the least reason to suppose I have ever conveyed the disease from place to place, in any single instance. In the course of my professional life I have made many microscopic researches of child-bed fever, but did never suspend my ministry as accoucheur on that account. Still, I certainly was never the medium of its transmission." This statement is indeed remarkable; but it is difficult with any conceivable amount of negative testimony of this kind, to disprove the positive affirmative evidence of many other equally intelligent and no less trustworthy observers. The following words of the Abbe Spallanzani,* are very much to the point: "It is the custom of certain dabblers in philosophy to deny facts, however particularly described, and though related by persons of the highest authority, merely because their own endeavors (in the same direction) fail of success. But they do not reflect that this is acting in direct opposition to the principles of sound logic, by which we are taught *that a thousand negative facts cannot destroy a single positive fact.*" Thus the entire sum and substance of Dr. Meigs' testimony is perfectly expressed in the last phrase quoted from him; he certainly was not "a medium of transmission" of such poison; but this amounts to nothing in disproof of others being such mediums.

The full elucidation of this most important practical subject requires an additional statement in this connection. The statements already given,—mostly in the very words of the unfortunate actors in these domestic tragedies,—which prove the direct communication of poison sufficient to cause child-bed fever, comprise but a very small portion of those recorded in medical works; these prove what may

* Dissertations relative to the Natural History of Animals and Vegetables, London, 1789.

be termed *common communicability*, by means of which the poison may be directly conveyed from a variety of sources and under a great variety of circumstances. The testimony of Dr. Meigs (and that of others, similar,—if any such there be,) must be regarded as anomalous, and as furnishing an example of most *uncommon incommunicability*. But as nature is never one-sided, we shall find in the recorded evidence of medical men some corresponding anomalies on the opposite side. Some still more remarkable instances of most *uncommon communicability!* Thus Dr. Merriman* states: That he was present at the examination of a case of puerperal fever at two P. M. *He took care not to touch the body.* At nine o'clock the same evening he attended a woman in labor; she was so nearly delivered that he had scarcely any thing to do. The next morning she had rigors, and died in forty-eight hours. Dr. Gooch relates the case of a general practitioner in large midwifery practice, who lost so many patients from puerperal fever, that he determined to deliver no more for some time, but that his partner should attend in his place. This plan was pursued for one month, during which not a case occurred in their practice. The elder then being sufficiently recovered, returned to his practice, but the first patient he attended was attacked by the disease and died. Very similar was the experience of the unfortunate Dr. Rutter, formerly of Philadelphia, as related by Dr. Meigs.† This gentleman "seemed to be tracked by the cause of the disease, to judge from the numerous attacks of it in his lying-in patients.—He was charged with being a carrier of contagion.—Worn out with fatigue, and wounded in spirit by his cares for the unfortunate victims of an epidemic (?) disease, Dr. Rutter left the city for the purpose of regaining some strength, and to escape from the repetition of such disheartening labors." He spent ten days rusticating at a distance of thirty-five miles from the city; and on his return he caused his head to be close-shaved, took a warm bath, dressed throughout in clothes entirely new,—leaving behind him even his pencil and his watch,—and "went out to attend a lady in labor, who had a favorable parturition; yet was next day assailed by a horrible child-bed fever, of which she died!"—"Dr. Rutter repeated this attempt at personal disinfection at a subsequent period, which was two years later, and met with the same ill success." Dr. Gordon, of Aberdeen, Scotland, one of the earliest writers on child-bed fever, says: "I have abundant proofs that every person who had been with a patient in puerperal fever, *became*

* Lancet, May 2, 1840. † Child-bed Fever, page 105.

charged with an atmosphere of infection which was communicated to every pregnant woman who happened to come within its sphere." And he acknowledges that he was himself the means of carrying the infection to a great number of women.

Reference has already been made to puerperal fever arising from the effluvia of erysipelas; a few facts will show the constant relation of these two forms of disease,—the explanation of the cause of this relation will appear when we come to consider the essential nature of puerperal fever itself, in the following section. Dr. Drake, in his analysis of the several accounts of epidemic erysipelas in the Interior Valley of North America, states that pregnant, and especially lying-in females, were peculiarly liable to the erysipelatous inflammation, and the most fatal cases were the puerperal. Dr. Corson, describing a severe epidemic of erysipelas which occurred in Norristown, Pa., in the autum of 1847, says: "Old and young, male and female, fell before it, and yet there seemed to be one class that it preferred. The mother, as she lay helpless and exhausted from the labor and agony of giving birth to her child, was marked as a victim. The deadly poison was infused into her veins, and, in many instances, a few hours sealed her doom." In the latter part of March, 1852, epidemic erysipelas made its appearance in Palmyra county, Pa., "few lying-in women escaped its attack, and the ratio of mortality was quite large." Of a similar epidemic occurring in Montgomery county, in the same year, Dr. Geiger states "that it spared neither age, sex, nor condition. It marked the parturient woman for its especial victim. Not a single woman living within the range of the disease, who was delivered during its prevalence, escaped an attack."* In the erysipelas which prevailed as an epidemic in Dayton, Ohio, it was found that females advanced in pregnancy were especially prone to premature labor, and the period of accouchement was looked to by both patient and physician with the deepest anxiety and solicitude. But one parturient female within the range of Dr. Sutton's information, escaped an attack of puerperal fever,—and every one that was attacked died.

Thus we have shown: 1. That puerperal fever may be directly communicated from one to another, through the medium of a third person,—especially the nurse or physician. 2. That it is very sure to be thus transmitted by persons who have recently been engaged in making autopsies of such as have died of puerperal fever, and of

* Trans. Penna. State Med. Soc., vols. ii. and iii.

peritoneal or erysipelatous inflammation. 3. That it may be caused by the effluvia from dissecting rooms, from typhus fever, from gangrenous and epidemic erysipelas, and from scarlet fever. 4. That no amount of personal ablution, changing clothes, &c., will always prevent such communication of poisonous influence; since even the blood of the person acting as a medium is affected, and by the breath a certain infectious influence is given out which acts upon the blood of the puerperal woman through her lungs, and thus carries to her system the germs of the disease. 5. From the various facts of the personal experience of different physicians, it will be seen that some persons, like Dr. Meigs, seem to be incapable of thus absorbing and conveying this kind of infection; while others possess in a most remarkable degree this unfortunate faculty of retaining and imparting the poisonous effluvia for months and even years,—even as the odor of musk will remain for years in rooms which have once been impregnated with this perfume.

These facts might be deemed to have been introduced with needless prolixity, did they not suffice to exert a controlling influence over the conduct of the physician in such cases, and afford ground for the following admirable advice by Dr. Copland: "A physician or surgeon engaged in obstetric practice, upon the occurrence of puerperal fever in any of his cases, should either explain the matter to her friends, and call in a physician not engaged in this practice, to whose care she ought to be committed; or he should relinquish the care of puerperal females during his attendance on cases of this form, or even of erysipelas; or he should change all his clothes, and wash his hands after seeing cases of either of these maladies, before proceeding to a puerperal female." (This latter precaution would prove almost always unavailing; as shown by the cases above given; fumigating himself and his clothes with chlorine gas, and washing his hands, even beneath the finger nails, with a solution of chloride of zinc, would be more effectual.)

"An obstetric practitioner should not make an autopsy of a case of puerperal fever, or of erysipelas, or of peritonitis, or of diffusive inflammation of the cellular tissue of diseases occasioned by the necroscopic poison; nor even attend, dress, or visit any such cases, without immediately afterwards observing the precautions just stated, and allowing two or three days to elapse between such attendance and conducting engagements or visits to puerperal females."* In this

* Dictionary of Practical Medicine, part xiii.

last paragraph the prohibitions should be deemed absolute; since if they are violated the subsequently advised precautions may prove most disastrously unavailing.

Puerperal fever runs a very rapid course, sometimes terminating fatally in a few hours; in other instances, in which the uterus itself is less immediately involved, and the disorder assumes more closely the form of a peritonitis, its duration is much longer,—according to the treatment adopted. But in the Homœopathic, as in the Allopathic practice, it is important to be able to detect the first symptoms of the disease, and to apply the appropriate remedies in its earliest stages, and on the very first appearance of the evil.

II. Essential Nature. — A correct physiological knowledge forms the indispensable foundation for sound pathology; and sound pathological views of particular forms of disease are of course absolutely essential to diagnosis and prognosis; nor can they under any circumstances fail to exert some important influence in practice. For by such knowledge alone are we able to understand the relative value and especial significance of many more or less prominent symptoms, and thus to realize which are the most indispensable to be covered in selecting the remedy. No student or physician can be too well informed. And as regards therapeutics, pathology, while like fire a very bad master, may still be made a very useful servant. And indeed no physician in this age of the world, of whatever school, can possibly do justice either to himself, to his patients and friends, or to society, in relation to puerperal fever, who does not understand the actual pathological changes which transpire in the various forms of disease usually included under this general name.

The term *milk fever,* now used to express the constitutional excitement which precedes or accompanies the secretion of milk in women recently delivered, formerly implied much more, and involved certain physiological absurdities and some consequent pathological errors. In the old humoral pathology, the menstrual flow was supposed to consist of a fermentable mass, which, if retained in the system,—except during pregnancy,—occasioned various severe disorders. This flow was supposed to be replaced, during pregnancy, by milk which, originally secreted in the mammary glands, was thence in some way transferred and deposited about the uterine placenta, for the nourishment of the fœtus. After the birth of the child, the former menstrual necessity was supposed to be supplied at first by the lochia, and afterwards by the flow of milk directly from the mammæ. And this latter process being interrupted, it was believed that the pale or whitish

lochia represented the milk again determined towards the uterus and discharged therefrom. And the blood was supposed to be poisoned by such inward revulsion of the milk in the latter case, as by that fo the menstrual discharge in the instance first mentioned.

Now in order to correct this long train of error we need but to revert to the truly physiological nature of menstruation. In our explanation of the function of ovulation, in a preceding chapter, mention was made of the monthly periodic *nisus* which was at once preliminary to and typical of the grand *finale* of reproduction. And this periodic *nisus* was shown to be accompanied by a certain amount of uterine engorgement, which was relieved by the crisis of the menstrual flow. The whole of this is also still more closely a type of what occurs in pregnancy, and after parturition. During pregnancy, and especially in its more advanced stages, the uterine sinuses have become very largely developed, and the entire uterus may be said to have assumed a state of permanent engorgement, which is truly physiological as long as the fœtus remains to be nourished in the uterus. But with the expulsion of the fœtus at term all this is changed; the after-pains proceed to reduce the womb to its original condition, and by such contractions of the uterine walls the extra volumes of blood remaining or still flowing into the uterine sinuses are gradually expelled in the form of the lochia; the open mouths of the sinuses themselves are gradually closed up, and at the same time the former abundant flow of blood into the uterus,—now no longer needed in such quantity,—is gradually diminished. Thus the lochia are seen to result from the gradual disgorgement of the womb and its restoration to its normal condition before pregnancy. But the open mouths of the vessels upon the utero-placental portion of the parietes of the womb may become closed up before the womb itself is entirely reduced to its natural size, and so before an undue amount of blood is entirely prevented from being thrown into the uterus; under such circumstances the excess of blood flowing into the womb is relieved, not as at first by an actual hemorrhage (purely sanguineous lochia), but by an exudation which gradually becomes more serous and watery till it finally ceases.

Some writers have labored to prove that child-bed fever was truly a phlegmasia or local inflammation,—and not a veritable fever.—This distinction,—in reality without a difference,—forms the pathological basis for the most approved Allopathic treatment,—which consists in *immediate, copious and exhausting venesection, ad deliquium.**

* Meigs on Child-bed Fever, *passim.*

But although possessing a various and remarkable local development, child-bed fever no less truly involves the entire body in its course; since indeed it must have originated from causes no less universal in their influence upon the economy of the system. Child-bed fever, since it appears in persons of dissimilar constitution, and is developed under various influences, must necessarily assume very different forms, the principal of which are briefly mentioned here in order to present a clear view of the essential nature of the disease, reserving their more complete description to the subsequent section on *symptoms*.

In child-bed fever then there may be:

I. Inflammation of the peritoneal covering of the uterus, and of the general peritoneal sac; constituting what is usually termed puerperal peritonitis.

II. Inflammation of the uterus, or metritis; this may be either inflammation of the inner wall of the womb, endo-metritis,—with, or without, uterine phlebitis; inflammation of the whole mass, or muscular coat of the uterus (endangitis) with ramollescence and even putrescence of its entire texture; or, finally, inflammation of the external, peritoneal stratum,—exo-metritis.

III. Inflammation of and suppuration in the uterine sinuses,—whose canals are converted into abscesses filled with pus. In some of these cases of metro-phlebitis, the womb itself seems wholly to escape; while the suppurative process becomes very rapidly and insidiously developed.

IV. Inflammation of the ovaries and Fallopian tubes. In some instances these uterine appendages have been found very much diseased, while the uterus itself remained comparatively unaffected. In one remarkable case pus discharged into the abdominal cavity from the free extremity of the Fallopian tube was found to have occasioned fatal peritonitis.

That these varieties of inflammation may occur independently of each other, has been proved by repeated *post-mortem* examinations; but they are most frequently met with in different forms of combination. Puerperal peritonitis seldom occurs without some degree of inflammation of the uterine appendages; but both these structures may be severely affected while the muscular coat of the uterus, and the veins and absorbents, remain wholly exempt from disease. In a similar manner the vascular and muscular tissues of the womb are liable to severe attacks of inflammation, without any corresponding affection of the peritoneum by which they are covered; although it more frequently happens that inflammation excited origi-

nally either in the veins, absorbents or muscular coat, involves also the peritoneum. This form of inflammation in the vascular and muscular tissues of the uterus, may be so malignant as to become fatal even before thus extending to the peritoneal membranes. This is important to be borne in mind, since absence of pain and of tenderness in the abdomen does not preclude the possibility of a dangerous attack of child-bed fever. In cases of uterine phlebitis, purulent matter may be deposited not only in the veins of the womb, but in different parts of the body and even in the lungs; and in puerperal peritonitis the pleura and other serous membranes may sympathize with the peritoneal inflammation.

III. ETIOLOGY.—The causes of child-bed fever may seem sufficiently obvious in many cases; but in numerous other instances they are decidedly obscure. A natural and easy labor does not necessarily preclude an attack; nor indeed are the majority of difficult labors followed by this disorder. The particular influences which singly or in combination may lead to puerperal fever in any given case are not always assignable. Sometimes this disease appears to arise spontaneously and without our being able to attribute it to any causes whatever. In such cases, therefore, we are driven back to first principles, and compelled to seek in some profound dyscrasia of the individual constitution, or in what may be nearly the same thing, some hitherto unmanifested exhaustion of the patient's system, for the efficient cause of an attack which may prove as rapidly fatal in its termination as it was sudden and unforeseen in its onset.

As shown in a previous chapter, all the various forms of constitutional dyscrasia may develop themselves during pregnancy; so also may they,—till then held as it were in reserve,—finally ultimate themselves in still more dangerous manifestations of disease immediately after parturition. There are cases in which these morbid influences establish themselves, even before the full term, in the form of *febris gravidarum*, fever of pregnant women,—which by its continuance after delivery becomes entitled to the additional designation of *et parturientium*, and of those lying in. Sometimes these morbid influences terminate the pregnancy before term; and thus destroy the child at the same time that they threaten the life of the mother. The influence which epidemic, traumatic and gangrenous erysipelas, and the peculiar miasms of typhus and scarlatina, may exert in causing fever of lying-in women has already been sufficiently indicated in the examples previously adduced. And the epidemic influence of puerperal fever itself in extending its ravages is but too

well understood. And all that is meant by contagion, by the personal transmission of the poisonous effluvia of child-bed fever by physicians and nurses from one patient to another, is but a more direct and perhaps more highly concentrated development of what in its diffused form corresponds to the same epidemic influence. Every animal poison of a putrid nature, like that from *post-mortem* examinations of persons who have died from puerperal fever as well as that from dissections in general, seems equally capable of establishing this peculiar fever in lying-in women.

In some cases it is evident that the direct application of such poisons to the genitalia of parturient females by means of the hands of accoucheurs, or even the presence of such infected persons in the lying-in room has been followed in a very few hours by the most malignant attacks of puerperal metritis and metro-phlebitis. Not less fatal were those cases of puerperal disease which resulted from receiving the infection of this malady imparted through the respiration of persons who had indeed been exposed to the influence of this disorder,—but had not visited such cases for days, or months, or even years,—as in the case of Dr. Rutter, and in the instances above quoted from Drs. Merriman and Gooch. In these cases, certain individuals are shown to have been endowed with the most unfortunate faculty of retaining and perpetuating in their own persons a sort of concentrated miasm exactly corresponding to the general epidemic influence of this disease. And even as the raw utero-placental surface possesses a wonderful faculty of absorbing the subtle poison locally approximated to it; so the tissues of the peritoneum in the puerperal state seem endowed with a remarkable susceptibility of becoming specifically inflamed by means of the absorption into the general system of the *epidemic influence* of the same particular poison, or of its *personal influence* as imparted by the respiration of a person whose system has once been charged with it.

Suppression of the lochia has been regarded as one of the most frequent causes of child-bed fever. But of the two most distinct and most common forms of this disorder, metritis and peritonitis, the former alone appears to be any more than incidentally connected with such suppression. In cases of pure puerperal peritonitis, the lochial discharge will sometimes continue undisturbed; while in cases of inflammation of the uterus,—either in that of its interior surface, or of its muscular tissue, or of both, the lochia may be much diminished or even entirely suppressed. And yet in these latter cases, the young physician will be most wofully deceived who

allows himself to believe there is no child-bed fever because he finds no particular swelling or tenderness of the abdomen. Still suppression of the lochia by cold applications or by styptic injections administered in cases of uterine hemorrhage, may very rapidly bring on phlebitis and even gangrene of the uterus. It would scarcely seem possible that styptic or even cold injections could fail to produce such a repulsion of the lochial discharge as would in effect be equivalent to its reabsorption. In damp, moist weather puerperal fever is found to be much more prevalent,—in part perhaps from the more ready and penetrating diffusibility of the poison, and in part no doubt from the general debilitating influence of such weather upon the lying-in women themselves. Over-distention of the bladder; long-continued pressure of the fœtal head against the particular parts of the interior of the pelvis, in difficult labors; and compression and even rupture or laceration of the uterus itself, have been mentioned by different authors as capable of producing child-bed fever. "The presence of inflammatory ulceration of the cervix during the first stage of the puerperal period, has appeared to me powerfully to predispose the patient to puerperal fever. The uterus seems to retain a predisposition to inflammation in the puerperal state; even in the cases in which ulceration, having existed during pregnancy, has been cured (allopathically) before parturition occurred. I have met with repeated instances of puerperal fever under these circumstances."* But such a result can hardly ever arise from these accidents, unless there is present some additional miasmatic influence.

Fragments of the placenta, still adhering to the uterine parietes and there decomposing, may occasion metro-phlebitis. In like manner the open mouths of the uterine sinuses may become the receptacles of poisonous matters originating in the uterus itself; or even the form of adhesive inflammation by which these sinuses are naturally closed may, under certain conditions presently to be mentioned, lead also to phlebitis and even to gangrene of the uterus. But since in many cases the influences exist without producing such results,—since even the decomposition of portions of the membranes and of the placenta, occasioning an offensive lochial discharge, is not always followed by inflammation of the womb, or any other form of child-bed fever, and since, as already abundantly shown, this disorder will spring up apparently from the slightest cause, or from no

* J. H. Bennett, Inflammation of the Uterus, 1864, p. 169.

obvious cause at all—the question arises, how are these discrepancies to be accounted for?

With regard to those cases which arise from epidemic influence, or from any form of poisonous effluvia from without, nothing here needs to be said; since evidently the puerperal state is one which renders the patient remarkably susceptible to all these influences. But do we not even here approach the solution of the mystery of the sporadic origin of this disease? That condition of a mass which requires but the addition of a little external warmth in order to set it on fire, is in no very remarkable manner different from that which presently leads to spontaneous combustion. The exhaustion of the vital forces, that which in surgical language is technically termed "*shock*," affords the real clue to much that is obscure and anomalous in puerperal fever. Nature always puts her best foot foremost,—especially in this matter of gestation and parturition,—the former a long-continued and all-absorbing function, of which the latter may be an equally exhausting crisis. In some of these cases, where child-bed fever arises from no external cause, and proves rapidly fatal, we see reason to believe in such profound exhaustion of the vital forces as may lead to *ramollissement*, putrescence and gangrene of the womb, when such fatal degeneration has been only developed within a very few hours after delivery! To this final act of the grand function of reproduction are summoned all the remaining energies of the entire system; the work is indeed accomplished; but the instrument is destroyed; and the worker is no more! That poor womb has been compelled to expend an amount of vital force in a few short hours which ordinarily might have supplied the whole system for years. Or is it that these vital forces bear so near a relation to electricity, that their excessive development, through the nerves and muscles and blood-vessels of the womb, is followed by a disposition to putridity similar to that which is seen to take place when lightning strikes the whole body.* Such are the ideas associated with the shock of lightning; and not unlike are the consequences which follow such nervous "shock" as we have attempted to portray. What is most remarkable of all is that in some of these cases nature gives no signal of distress till she thus hauls down her colors in sudden despair. Similar indeed is the case in some instances of paralytic shock, in

* "In the most rapidly fatal cases, nothing has been met with beyond non-coagulability, thinness, and blackness of the blood. The blood in these cases resembles that of persons killed by lightning or by hydrocyanic acid."—*T. Smith.*

which the apparently strong man is struck down in an instant and without a moment's warning.

Such is the extreme pathological view of what fortunately takes place but seldom. The physiological condition, which we now proceed to describe, is that which occurs in other cases, in which the above described profound exhaustion does not obtain. Towards the one great end of sustaining the fœtus in utero, all the vital energies of the mother's system have been for months determined. In the fulfilment of this high use her own health may have been perfect, and her strength not overcome. And even through the last critical act of the drama, that of parturition,—in which all the muscles of her body and all the nobler powers of her system are called into action,—she may pass with comparative ease. True she is fatigued and weakened by such tremendous exertions. But a few days of rest would make ample amends for this,—if this were all. But it is not; for hitherto we have given but a superficial picture of the physiological reality. All the mother's circulation and the entire economy of her nutrition have been made to assume one single direction, and the great currents of her life have but flown in unison with the lesser currents of the living form within her. At once all this is stopped; the vital union between the two is rudely severed; and the living streams, flowing as before to supply the unborn babe, find in their place only the emptiness of desolation and are themselves wasted.

The whole physiological life of the mother receives a shock, which, if less fatally destructive than that already described as resulting from exhaustion of the vital forces, still profoundly disturbs her entire system. But a few brief hours before, all her vital energies moved on in vigorous harmony, as a fair ship moves on under the influence of a strong and favorable breeze. But now all is changed; the current of her life is suddenly arrested; and her entire system, so far as it had been engaged in supplying the young life within her, comes to a sudden stand-still,—in this respect resembling the condition of a ship taken aback in her course by failure of the wind, or rather when on the tack she loses the wind and the empty sails flap idly against the masts, leaving her helpless and at the mercy of any adverse influence. The "shock" from exhaustion is as if a vessel struck upon a rock; this "shock" from sudden arrest of the great function of nourishing the fœtus in utero, is like that experienced by a vessel which, losing the wind and having no longer steerage way, drifts helplessly upon the waste of waters. In the former

class of cases, sporadic child-bed fever may be spontaneously developed in the most malignant form of metritis and metro-phlebitis; in the latter, the slightest breath of epidemic peritonitis, erysipelas, or of any other of the animal poisons, may suffice to kindle at once the flames of puerperal fever.

Having thus at length shown how subject the puerperal woman is to influences from without, or from within her own body, which may develop child-bed fever,—it remains only to state what may already have been foreseen, that in her helpless, and peculiarly delicate period of transition, from the energetic performance of the great function of nourishing the fœtus in utero, in which she is safe as a ship at anchor, to that other and equally safe condition in which she subsequently comes of nourishing her babe, as in lactation,—during the whole of this transition state she is liable to be thrown into a fever which may prove a malignant puerperal metro-peritonitis or assume any other of the various forms common to child-bed fever,—by any of the influences above enumerated. And the same result may also follow violent mental or moral emotions. This latter class of influences is especially apt to be efficient in unmarried females, and particularly in cases of abortion. In such cases either the violence of the means employed to bring about the abortion, or the unsuitable external conditions and attendant circumstances, or the profound disturbance of the moral sphere by fear and grief, or all these combined, very often lead to fatal uterine and peritoneal inflammation.

IV. Symptoms.—These may be local or constitutional; and in most cases the latter are the first to make their appearance. And their general character will usually indicate either the one or the other of the three principal forms of child-bed fever; that in which the womb is principally affected; that in which the peritoneum seems to be the primary and chief seat of the disorder; or that which is known by the name of uterine phlebitis. In some cases however, the symptoms, from whichever source first arising, appear to involve all these structures as well as their adjacent organs nearly in an equal manner. And while the Homœopathic physician will always seek to give the remedy which most faithfully represents the totality of the symptoms, still it will somewhat conduce to a clearer understanding of this frightful malady, if we arrange its more prominent symptoms with some reference to the three most common and often distinct forms of the disease in which they may be expected to appear,—taking note also of the order of their appearance as near as may be in the rapid development of the disease.

In *puerperal metritis*, or that form of child-bed fever in which the uterus is principally affected, the symptoms may vary in intensity and malignancy in the most remarkable manner; and the disease itself may rapidly involve also the uterine appendages and adjacent peritoneal tissues. The attack may begin before delivery, or almost immediately after; such attacks are usually exceedingly malignant in character and inclined to run with great rapidity to a fatal termination. Usually, however, the disease begins on the second, third, or fourth day; although it may occur still later. It may begin with distinct rigors; or there may be merely an imperfect and scarcely noticed chilliness. The pulse is very rapid, full and soft,—varying from 120 to 150, or even more. In some instances there is neither pain, distension nor tenderness of the abdomen; in others the pain is very acute throughout, the distention enormous, and the tenderness exquisite. There may also be pain and tenderness at the epigastrium, with nausea and even vomiting. "Profuse sweating is a very common and distressing accompaniment of this disorder. In some cases this is so strongly marked and constitutes so large a part of the disease, that Dr. Blundell described it as a distinct form of puerperal fever, under the name of Hydrosis. The sweat and the breath are very often accompanied by a sweetish, pus-like odor. The sweating of puerperal fever does not diminish the secretion of urine, nor does it abate the quickness of the pulse. An intolerable thirst prevails, and the patient drinks immense quantities of whatever fluid she may be allowed. Dark spots or ecchymoses appear upon the wrists or other parts of the body." At first the lochia may be unaffected, they may even be increased in quantity; but more commonly they are entirely suppressed. The tongue is flabby, broad and slimy, and covered by a mucous or creamy coating. The countenance is pale and inexpressive; or, where the pain is acute, anxious and covered with perspiration. As the disease advances, usually about the third day, diarrhœa may supervene. The patient is nervous, depressed and fearful; the pulse is soft, small and increasing in rapidity; the respiration quick, hurried, high and often panting. And where this latter symptom occurs in connection with excessive distention of the bowels, it must be regarded as a very bad indication; since the impossibility of properly oxygenating the blood where the lungs have so little play, and the very rapidity of their movement,—attempting to compensate by the number of the respiratory motions what they lack in amount,—combine to degenerate the physical organization and exhaust the vital forces with the greatest

speed. The abdomen in many cases is swollen, tympanitic and painful; sometimes, from the extension of the inflammation to the peritoneum, it is universally tender,—sometimes tender in a particular part only. The lochia, if not entirely arrested, are generally, after a day or two, changed in quality and become fetid. The flow of milk is almost invariably checked; in the worst cases, sometimes it is entirely prevented; in other cases it is repressed after the secretion has taken place.

In an epidemic of puerperal fever described by Dr. Gooch, the cases began a few days after delivery; and the leading symptoms were, "diffused pain and tenderness with some swelling of the abdomen, a quick pulse, which was generally at first full and vibrating. Sometimes it was small, but still hard and incompressible; the skin was hot, though not so hot as in other fevers; the tongue was white and moist and the milk suppressed. As the disease advanced, the belly became less painful, but more swelled, and the breathing short; towards the end the pulse was very frequent and tremulous, and the skin covered with a clammy sweat; even in this state the tongue continued moist and the mind clear, and death took place about the fifth day." In a subsequent epidemic which appeared in Paris, the symptoms assumed the typhoid form from the first: beginning with a long and severe rigor, often a few hours after delivery; pain very intense over the whole abdomen, which rapidly became swollen; pulse feeble, compressible, undulating, often 150; respiration hurried, anxiety extreme, severe frontal headache; countenance sunk, pale, and covered with clammy sweat; constant vomiting of green matters; purging, stools fetid. The patients sank rapidly at the end of a few days or even hours. There was no regularity in either lochia or milk." In the commencement of this form of child-bed fever, the nervous system of organic life and the blood* appear to be suddenly and seriously affected, as shown by the general loss of vascular tone and of nervous power; by the disturbance of all the vital functions; by the rapid exhaustion of the powers of life; by the sudden death which often ensues, and by the accompanying softening and putrescence of the womb, as shown by *post-mortem* examinations. "Inflammation of the muscular tissue and lining membrane of the uterus is characterized by great disturbance of the nervous system, distressing cephalalgia, and is attended by fever of low type. Occasionally the cerebral symptoms are so intense as entirely to mask the uterine

* "In some of the worst examples, pathology has found no other change than fluidity and altered color of the blood."—*T. Smith.*

disease. It is ushered in by the same symptoms, as regards rigors, acceleration of the pulse, and state of the tongue, as those which attend the other varieties of puerperal inflammation. Its tendency is to produce softening, suppuration, and gangrene of the substance of the uterus, and it is one of the most fatal of all the puerperal inflammations."—*T. Smith.*

In *puerperal peritonitis,* or that form of child-bed fever in which the peritoneum appears to be primarily and principally involved, the disease may commence before delivery; but it is more apt to arise in from twenty hours to three days afterwards. Sudden rigors usually constitute the first obvious symptom; or there may be instead severe pain, but rising of the pulse generally precedes them both; then follow heat of the skin, thirst, flushed face, and hurried respiration. Next there may be nausea, vomiting,—which, by its spasmodic contraction of the abdominal muscles, greatly heightens the sufferings of the patient,—pain in the head, and increased sensibility of the uterus. In some cases the tenderness of the uterus is contemporary with the rigors, or immediately succeeds them. The abdomen becomes tender; the weight of the clothes is insupportable, and the least movement of the body attended with exquisite suffering. Sometimes there are pains, either slight or severe, continuous or paroxysmal, which beginning in the hypogastrium, or in one of the iliac regions, gradually extend over the whole abdomen. But while the excessive sensibility of the abdomen, aggravated by pressure and motion, is characteristic of the peritoneal form of child-bed fever,—the other distinct pains are not so constantly present. As the disease advances the abdomen becomes still more tender and sensitive to movement or pressure; not only is the weight of the lightest covering intolerable, but the patient lies on her back with her knees drawn up, in order as much as possible to avoid tension and pressure of the abdominal parietes. As the disease makes still further progress, the abdomen becomes tumid and tympanitic. This may be followed by effusion into the cavity of the peritoneum indicated by a peculiar doughy feeling.

The lochia are variously affected; in many cases this discharge continues undisturbed; or it may become fetid; or diminished in quantity; or entirely suppressed. The secretion of the milk is much more positively affected; if the attack begins before the flow is established, it is prevented; if afterwards, the secretion is suspended and the breasts become flaccid: and the patient may at the same time become entirely indifferent to the fate of her infant. Rapidity of

pulse is characteristic of this disorder; its range varies from 120 to 160; and the severity of the attack will be well measured by this symptom;—since as the disease advances the pulse becomes contracted, thready, intermittent, and towards the last almost imperceptible. The tongue generally has a whitish coating in the centre, with red around the edges; sometimes it is dry and brown in the centre, with yellowish or white fur at the edges. There may be nausea and vomiting, of the ingesta, of bilious, green, brown, or black fluids; and there may also be diarrhœa,—with dejections dark and fetid towards the close of bad cases. The urine is generally turbid, or high colored, scanty and in some cases passed with difficulty. The heat of the skin may often be not much more than is natural; but towards the last, the skin may become cold and clammy. The countenance will usually mark the advance of the disorder, by features drawn up and expressive of great distress. The dark areola surrounding the eyes, the dilated pupil, the glassy surface and bloodless conjunctiva, give a lustrous and unearthly appearance to the eyes in all cases of puerperal fever, whatever the special complication, whenever the disease is fully formed. The intellectual faculties often remain unaffected to the last.

Such are some of the most prominent symptoms, which will appear in different cases of this disorder, in different forms and combinations; for while their variety is so great that all do not appear in any single case, scarcely any are constant, if we except the rapidity of the pulse and the abdominal tenderness. In this as in the form of child-bed fever more immediately affecting the uterus, the disorder runs a rapid course, and the vital forces are manifestly very weak, even in cases which do not appear to assume the lowest or typhoid symptoms. In some cases, as already stated, this disorder is transferred or extends to the pleural sac; still more rarely does it involve the serous membranes of the brain; in either case the invasion of the inflammation will be marked by sharp, lancinating pains, worse on motion.

In *uterine phlebitis*, or at least in its earlier stages, the symptoms do not seem to vary remarkably from those common to other forms of puerperal metritis; in some cases there may be a greater freedom from pain; the pulse alone, ranging from one hundred and ten to one hundred and fifty, indicating the great danger. This form of disease, in the common and gross pathology of the schools, has been attributed to reabsorption of purulent matter from the utero-placental surface. But, even if this is possible, it is probable that the mischief

lies farther back and still deeper, in a primary disordered state of the blood itself. Puerperal fever, as described in its more malignant form under the head of Puerperal Metritis, may destroy patients in a few hours, even before there has been sufficient time for the occurrence of phlebitic inflammation; and in such cases, as already stated, no pathological changes are met with beyond a diseased state of the blood. And it is to this morbid condition of the blood in a milder form, and not to reabsorption, that we should look for the real cause of uterine phlebitis.

Before this form of disease is so far advanced as to be indicated by objective symptoms, by external suppuration, it may be recognized according to the following observations of Dr. Meigs by the (subjective) moral symptoms. "In peritonitis, pure and simple, the mind is clear, the nervous system not being disturbed by the presence of pus-corpuscles in the blood; the woman recovers, or dies, without those hysterical, or rather hysteroidal and even maniacal symptoms that invariably mark a purulent infection of the blood. The alarm I wish to awaken in your mind is one connected with the very great probability that hysterical or hysteroidal affections, in women recently delivered, and assailed with fever, are really the exhibitions of that curious influence that pus in the blood, or pyæmia, exerts upon the nervous system. In all the individuals, male or female, that I have attended in mortal illness, from wounds of veins in venesection, I have invariably noted this kind of hysterical intoxication, caused by purulent infection of the blood. As the diseases advances the more palpable phenomena attendant upon the formation of pus in the veins are developed by the deposit of purulent matter in various parts of the body, especially in the vicinity of the large joints. We find in such cases, swellings in the neighborhood of the articulations; erysipelatous blushes; and large suppurations in the vicinity of the joints, or patches of slough or gangrene form at the sides of the erysipelatous blushes."

V. Diagnosis.—There can be little real difficulty in distinguishing child-bed fever, in any of its various forms, from any other disease. Its occurrence soon after delivery, the gravity of the symptoms and their rapid progress, present a *tout ensemble* found in no other malady. And while the Homœopathic physician will always prescribe according to the symptoms and conditions present, without depending upon the name by which the affection may be characterized; still it is of the highest importance that he should recognize a case of child-bed fever at the earliest possible moment. And to this he will be im-

pelled by the gravest considerations, that he may from the very first afford to his patient that devoted and intelligent attention which such a case requires, perhaps more than any other; that he may make sure of not himself becoming the medium of transfer of the puerperal poison from one patient to another; and that he may secure himself from suspicion of ignorance and incompetency.

In most cases of child-bed fever, as shown in the preceding pages, the disease will be ushered in either by rigors more or less distinct, or by serious acceleration of the pulse. For the appearance of either of these symptoms the physician should therefore be on his guard,—especially if he has reason to suspect the possible presence of the epidemic influence of puerperal peritonitis, of erysipelas, or of any other of those influences already described as capable of developing fever in the puerperal state. He should make sure that the nurse is intelligent enough to inform him at once if rigors, or even chilliness appear; and he should himself carefully observe the pulse at every visit. As long as this is below one hundred the patient is comparatively safe; but when it suddenly rises above one hundred, there is serious reason to apprehend the onset of child-bed fever, if it be not already insidiously at work within the pelvis. And in fact any severe symptoms arising in the puerperal woman should at once command the most careful attention. The pains of peritonitis may be distinguished from the after-pains, by observing that the latter are attended by a perceptible contraction of the uterus; and that the after-pains are diminishing about the time,—the third day,—when the pains of puerperal peritonitis make their appearance; and that the last are particularly aggravated by pressure and motion, and that they become more and more severe. In like manner it will be observed that in child-bed fever the constitutional disturbance and hypogastric tenderness and even the acceleration of the pulse constantly increase day by day; instead of subsiding as would be the case were these symptoms dependent upon after-pains or hysteralgia alone.

VI. Course and Tendencies.—Child-bed fever, in either of its forms runs a very rapid course; it is capable of terminating life in a few hours; or it may continue for several days, more or less according to the nature of the patient's system, to the particular character of the attack, and to the kind of treatment employed. That form of the disease proving most rapidly fatal, in which there is a profound "shock" of the nervous system; that in which the vascular system is so disorganized as to induce softening and putrescency of the uterus

coming next in order of sudden fatality; then the low, adynamic form of typhoid metritis or malignant child-bed fever; then the primary puerperal peritonitis; and finally uterine phlebitis. Some cases of this last form of the disease have been known to prove fatal, after the first developed symptoms of peritonitis had been (under Allopathic treatment) removed. The general tendency of child-bed fever is to a fatal termination, unless arrested by efficient treatment. But this tendency pursues in different cases a variety of courses; in some the nervous system is "shocked" and destroyed; in others there is "dissolution of the blood," which may destroy life at once, or subsequently by means of pyæmia; in others there is disorganization of the tissues; in others, finally, the vital forces are exhausted by the intense suffering, by the gradual loss of oxygenation of the blood inseparable from excessive tympanitis, and by the general severity of all the symptoms.

VII. TREATMENT.—In treating cases of child-bed fever, it is of the first importance to regard the moral state, both in the selection of the remedy, and with reference to securing the patient from all disturbing emotions, especially of fear. Every thing should be as quiet and as cheerful and pleasant in the room of the puerperal woman as possible. See remedies on pages 143, 144, 145, 146 and 147. These were purposely arranged for the treatment of Metritis, Peritonitis and Puerperal Fever.

CHAPTER FORTIETH.

THE CHANGE OF LIFE.

THE Change of Life, by which is meant the cessation of the double function of ovulation and menstruation, does not usually occur all at once, or at any definite time. The critical age,—another of the phrases employed in this connection,—may embrace a period of several months; or extend over two years or more. While during the whole of this period the menses will occasionally make their appearance,—being in many cases as disorderly in other respects, as they are irregular in their periodical return.

Some women cease to menstruate, and consequently to be capable of fecundation, as early as their thirty-second year; while others are regularly "unwell," and even bear children when they are already

fifty or even sixty years of age. But while such extreme cases are rare on either side, the possibility of their occurrence in any given instance should always be borne in mind. There is no rule absolute; and nowhere do circumstances more remarkably alter cases than in these affairs of the change of life. It is observed, however, that, other things being equal, the average duration of the period of ovulation and menstruation and consequently of the susceptibility of fecundation, is about thirty-two years. Still those who commence to menstruate early in life do not lose the function at exactly the corresponding period; since in these it continues two years longer. So those who commence to menstruate quite late in life are found to continue this function but little over twenty years.* The average period at which menstruation first makes its appearance being at about the age of fourteen, the general average of the period of the change of life will be found to correspond to the above statement, and to be therefore about the forty-fifth or forty-sixth year.

But there are many influences, as well in health as in disease, which accelerate or retard the change of life, in individual cases. There are persons who seem to have a sort of hereditary idiosyncrasy in this respect,—to experience the change of life at a very early period, or to menstruate to an unusually advanced age. Others, who have borne several children in rapid succession, seem to have exhausted their vital powers in this respect, and to have fallen into a sort of premature marasmus,—and consequently arrive at the change of life much sooner than is common to those in health. And very many forms of disease, especially such as induce an anæmic condition,—and all that large class of functional disorders and structural diseases of the organs of generation and of those connected with them, exert a remarkable influence in determining the change of life at an early age.

On the other hand, those who commence to menstruate late in life, as well as those who are naturally endowed with an unusual degree of vitality and longevity, may be expected to retain the function of menstruation to a much later period. Those who,—otherwise in perfect health,—menstruate for the first time at twenty, may be expected to continue this function till they are fifty, or even older. And even where we are unable to discern any such particular reason to suppose a patient is about experiencing the change of life at an earlier or later period than is usual, we ought always to be on our

* E. J. Tilt, M. D., Change of Life in Health and Disease, London, 1867, p. 47.

guard. For many cases of apparent change of life, are in reality nothing more than *irregular menstruation,*—which we may cure; and which we ought to cure, therefore, without first subjecting our patient unnecessarily to the imputation that she is "an old woman,"—for which we should receive but little thanks; and without subjecting ourselves to the odium of lacking in judgment! For the physician who tells a patient she is having the change of life,—she afterwards entirely recovering and becoming regular and even bearing children, and such things have occurred,—commits a blunder no less palpable than that of the dentist who pulls the wrong tooth!

In proportion as women enjoy good health, and especially in proportion as the menses are normal in quantity and regular in their recurrence, may we expect them to pass through the trying season of the change of life at about the usual age,—or a little later,—and with comparatively little suffering. While in proportion as their health has been poor and their menses imperfect and irregular, shall we have reason to apprehend that for them the change of life will prove indeed a critical age, and that it will require all our care and skill to bring them out of it in safety and with health improved instead of being rendered much worse. For the change of life once well passed, the woman settles down with a new form of life, and it may be with a new lease of life, and has a right to look forward to a happy old age. While on the other hand, if this critical period is not thus successfully passed,—our patient may experience a long train of sufferings which will either render her whole life wretched and miserable in the extreme, or presently develop some rapidly fatal organic disease.

In many cases the change of life comes on so gradually that the system accommodates itself to the new order of things with no shock of the nervous system,—and without disturbing the accustomed harmony of the general circulation. In such cases the intervals between the menstrual periods become more and more prolonged, and even the menstrual discharge itself may gradually diminish in quantity. "The most frequent and least dangerous symptom is an irregular return of the menstrual flow, every week, or every two or three weeks, or every two, three, four, or six months, and being more or less irregular as regards the quantity or quality of the menstrual blood. Serious and alarming hemorrhages frequently set in, especially among plethoric and nervous women, or such as have indulged in sexual excesses. Sometimes these hemorrhages alternate with whitish or yellowish leucorrhœa, which often has a fetid smell, is

acrid and extremely copious. This leucorrhœa may continue long after the menstrual discharge has entirely ceased to appear. At this period we likewise meet not unfrequently with colic, uterine cramps, pains in the sides, weight in the loins or distressing itching of the parts. In some cases the abdomen swells as during pregnancy, with sympathetic development of the breasts, until the swelling suddenly disappears after the expulsion of a mole, or after the emission of a quantity of gas, or after a hemorrhage, or a profuse discharge of serum."—*Jahr.*

Symptoms of Change of Life.—These vary in different individuals, according to their respective temperaments; for in the change of life, as well as in other conditions, women present the Plethoric, the Chlorotic, or the Nervous type. Thus in those of the plethoric type, the symptoms will resemble those of congestion; there may be flushes of heat, rush of blood to face and head; uterine and other hemorrhages; leucorrhœa and even diarrhœa. In those of the chlorotic type, the symptoms which, at or near the proper age, would indicate the approach of the change of life, are the sallow complexion, semi-chlorotic skin, weak pulse, and various other indications of debility. In those of a nervous type, there is, as the change of life approaches, an evident disturbance of the nervous equilibrium, not unlike that which in similar cases precedes the original accession of the menstrual function. Hence the over-anxious look, the brimful eye, the terror-struck expression as if apprehensive of seeing some frightful objects, the face bedewed with perspiration, and the remarkable tendency to hysteria which are sometimes to be met with.

The unusual development of hair on the chin and upper lip generally coincides with final cessation of the menses; so does an unusual power of generating heat, indicated by the habit of throwing off the clothing and opening doors and windows. There are a large number of more or less distressing symptoms or forms of disease which in fact result from the change of life,—and which thus certainly indicate that the system is either actually undergoing that change,—or under the influence of causes which if not arrested will finally bring it about, and that too in a manner by no means safe for the patient. Among these may be mentioned the long list so admirably summed up by Jahr: "hæmoptysis, bloody urine, piles, nose-bleed, and other hemorrhages; pulmonary phthisis likewise takes a fresh development and frequently terminates fatally. In other cases we meet with diarrhœa, weakness of the stomach, flatulence, vomiting, and other derangements of the digestive canal, which

are sometimes accompanied by consumption and profuse sweats. Some women complain at this period of attacks of rheumatism of the shoulder or thigh, or a considerable swelling of the joints; others experience attacks of hysteria, hypochondria, and even nymphomania; others again are attacked with various eruptions, such as tetter of the genital organs, acne, rosacea, or erysipelas. The most distressing maladies which break out at this period and often terminate fatally, are ulcers and polypi of the uterus, and carcinoma of this organ and of the breasts."

Temporary cessation of or irregularity of the menses, when such symptoms arise in connection with chlorosis; inflammation of the neck of the womb; uterine polypi; uterine fibrous tumors; uterine hydatids; uterine cancer, and even pregnancy, have all been mistaken for the change of life.

Puberty, "pregnancy, parturition, lactation, are all critical periods, curing some complaints and giving greater activity to others; and when after having lasted thirty-two years, the action of the reproductive organs is withdrawn from the system, prolonged ill-health is the frequent result. Then arise a series of beautiful critical movements, the object of which is to endow the woman with a greater degree of strength than she had previously enjoyed." Thus the floodings, leucorrhœa, diarrhœa, and perspirations which occur in the great majority of cases of the change of life are eminently critical and restore to health a large proportion of those who are judiciously treated. And there are many women who have suffered in various ways, for years with general poor health, who, upon the occurrence of the change of life, may either spontaneously recover, or will oftener be entirely cured by means of the appropriate medication. What is called by some authors the *dodging time*, covers the period which extends from the first beginning of declining and irregular menstruation, till the final cessation of this function. This period may vary from a few months to six or seven years; and while it affords a most important season for the application of Homœopathic remedies, it will be very much abbreviated by their skilful employment.

But in addition to those forms of disease, which as purely critical may be regarded as the salutary results of vital action,—such as the occasional hemorrhages, leucorrhœas and diarrhœas already referred to,—there are other and more positive disorders, developed under the general influence of the profound disturbance of the nervous and sanguineous systems which in many instances is inseparable from the

abrogation of the long-accustomed nervo-sanguineous function of ovulation and menstruation. All these require to be treated, in the usual manner,—by remedies carefully selected to meet the existing conditions; and with strong hope of success, even in the severest cases;—a hope all the greater from the fact of the temporary nature of the influence which stimulates and sustains these forms of disease. And this remark applies even to those malignant and cancerous forms of disease which are so frequently developed at the critical age. Unless the system has been previously exhausted by the hardships and sufferings imposed upon a constitution originally feeble, there is always hope for success in the early application of Homœopathic medicines in these cases.

Treatment.—In this place it will be sufficient to refer to the different disorders already described and to their corresponding medicines,—such as Hemorrhage, Flooding, Diarrhœa, Cancer, &c., &c., for the treatment of the various forms of disease that arise at the change of life. Let the *similar remedy* be always found for the existing symptoms and conditions of the individual case; let it be given in the best form (not too low); and let its full action be patiently awaited, and the physician will have the unspeakable satisfaction of seeing permanent health take the place of the most complicated, distressing and protracted forms of disease at the critical age. The remedies most frequently useful in disorders of the critical age will be found indicated under the head of menstrual disorders, such as Amenorrhœa, Dysmenorrhœa, Menorrhagia, Metrorrhagia; and also under the head of Diarrhœa, and other affections which may be the most prominent of those which attend the change of life.—The remedies which are remarkably adapted to relieve the disorders incident to change of life, and which therefore are found to be most frequently called for are: *Lachesis; Cocculus; Pulsatilla; Sulphur; Crocus; Conium; Sepia; Ignatia;* and *Sanguinaria.* But whatever remedy includes the symptoms of the patient in the most characteristic manner, *i. e.* has as its own characteristics the characteristics of the patient,—will prove curative. And in the more severe forms of tumors, cancers, or other organic disease which may be developed subsequent to or in connection with the change of life, endeavor always to find the remedy which has all the constitutional and characteristic symptoms and conditions of the patient, as well as those relating to the particular form of structural disease which presents.

CHAPTER FORTY-FIRST.

DISEASES OF CHILDREN.

PHYSIOLOGY AND LESIONS OF INFANTILE NUTRITION.

THE most remarkable circumstance connected with the young infant is its rapid growth. In comparison with the very great activity of its nutrition, in a state of health, most of its other functions seem nearly dormant. And it follows that most of the disorders of the young infant are either direct lesions of nutrition, or the consequences of such lesions.

A brief notice of the normal physiological growth and development of the young infant will prepare the way for a more intelligible account of the disorders which are but deviations from such growth, —and at the same time afford opportunity for explaining the causes of such deviations. Just after the birth of her child, and before the secretion and flow of milk sufficient to nourish the babe, the mother is in a condition of temporary rest. The same is true of the corresponding period in the life of the babe. Before birth it had been nourished directly through the sanguineous circulation of the mother. After its birth comes that brief interval of repose in which its system may be supposed to consume all the last remaining elements supplied through the mother's veins. To this succeeds a state of hunger, in which the system becomes prepared to receive its necessary food in a form entirely new and by means of an organization equally different and distinct.

Next to her blood itself, the mother's milk is the simplest and most nourishing form of food, and one that requires to undergo the least possible change in order to be capable of assimilation by her child. The milk contains all the elements which enter into the composition of the blood and of course into the construction of the body. And in maternal lactation this is freshly prepared as needed; and imparted to the babe from time to time in small quantities, and under the beneficent influence of physical and moral circumstances which in a remarkable manner tend to promote its kindly reception into the infant's system; its grateful assimilation; and the consequent exceedingly rapid growth and development of the infant itself. For

the animal heat of the mother's body, imparted to the babe in her arms, is not more necessary and more grateful to the infant's physical system, than is the moral influence of the cherishing kindness and tender affection of the mother's love essential to the whole spiritual, intellectual and physical growth of her offspring. The grosser material life of the babe is indeed sustained by the abundant supply of milk which it receives from the maternal fountain; yet even this material supply will be found to have been deprived of a large part of its efficient vitalizing force, when it loses the indwelling spirit of the mother's love,—of which it naturally forms the material body, and of which in great part it constitutes the medium of communication between the mother and her child. This in some measure accounts for the great mortality of those who are attempted to be brought up by hand instead of being nursed by their own mothers as intended by nature. "The infant whose mother refuses to perform towards it a mother's part, or who, by accident, disease, or death is deprived of the food that nature destined for it, too often languishes and dies. Such children you may often see with no fat to give plumpness to their limbs, no red particles in their blood to impart a healthy hue to their skin, their face wearing in infancy the lineaments of age, their voice a constant wail, their whole aspect an embodiment of woe. But give to such children the food that nature destined for them, and if the remedy do not come all too late to save them, the mournful cry will cease, the face will assume a look of content, by degrees the features of infancy will disclose themselves, the limbs will grow round, the skin pure red and white; and when at length we hear the merry laugh of babyhood, it seems almost as if the little sufferer of some weeks before must have been a changeling, and this the real child brought back from fairy-land."*

The mortality of infants in foundling hospitals is vastly greater than that of those who, although deprived of their natural mothers, are still brought up in private families. And yet these extreme cases will serve all the more plainly to show the mischievous results produced by a violation of the laws of nature in this most important respect. The following statement of the course pursued and results obtained in the three principal foundling hospitals in France, compared with the subsequent statement of the almost universal mortality in the largest foundling hospital in America, will fully explain itself. At Lyons, each infant on its reception is given into the charge of a

* West, Diseases of Children.

wet-nurse, and its stay in the hospital does not exceed a very few days, after which it is sent to be nursed in the country. At Rheims, the stay of the infant in the hospital is equally short; but neither while there nor afterwards when at nurse in the country, is it brought up at the breast. At Paris, the stay of the children in the hospital is often very much longer; but they are usually though not invariably suckled by wet-nurses. The mortality under one year of the children admitted into these institutions is: At Lyons, 33.7 per cent.; at Paris, 50.3 per cent.; at Rheims, 63.9 per cent. At the Foundling Hospital on Blackwell Island, New York, the pastor in charge states, "that of the five hundred motherless infants that he had baptized within the two years preceding January, 1867, only about twenty-five were living, most of the balance having been returned dead within about twenty days after their admission. Their food was cow's milk only. On the first of November the same reverend gentleman informed me that he had baptized one hundred and sixty since the first of March, of whom only six remained living; the most of them having died within twenty days after arriving at the hospital."* These children were fed upon milk obtained from cows kept and fed upon the island.

Other unfavorable influences, of the sea air, the cold and damp east winds, in addition to the usual unhealthy circumstances inseparable from extensive hospital establishments, must have contributed very largely to the production of this almost universal and unprecedented mortality. Still the remarkable and very early fatality itself, after making all due allowance, deserves attention in part from its relation to the comparative viability of infants brought up at the breast and by hand, and in part from its relation to the quality of the food best adapted to support life in these little ones, when they cannot be nursed. And the question becomes a very practical and important one, in many cases in which the poor health or the unsound constitution of the mother gives reason to conclude that if the child's life can be preserved in its tender months by other means, its whole constitution and future health may be very much benefited by the same method. But this will be again considered subsequently; and yet it may be proper to remark here that, even in those cases in which it may be impossible or inexpedient for the mother to nurse her child entirely, it is still very important for her to suckle her child for a while,—however short the time in which she may be able to do so; and that her own milk should be the babe's only food

* Hahnemannian Monthly, vol. ii., p. 357.

during this period. Although this is contrary to the opinion commonly entertained among the people, the young infant will thus obtain a start in life in the right direction, and be better able to be nourished by foreign food, should that subsequently become inevitable. Just as the mother's milk is found to adapt itself to the changing condition of the babe as it becomes older and stronger, so during the first few days after the infant's birth, the milk possesses peculiar qualities, and not merely abounds in fatty and saccharine matters, but presents its caseine in a more easily assimilable form than subsequently. So delicate and peculiar are the digestive organs of the young infant, and so especially adapted is the mother's milk to their comparatively feeble digestion, that it becomes no easy task to provide a substitute which shall in like manner be constantly suited to the varying conditions and wants of the infant's daily growth.

But since there will always be cases, owing to the sickness or death of the mother, or to her inability to nurse her children from other causes, in which it will also be impossible to procure a wet-nurse, and in which therefore it becomes necessary to provide the next best substitute, particular directions for this purpose will now be given. The milk of cows is the most accessible; and in many instances forms the only substitute which can be procured.* But since the proportion of caseine or cheesy matter is larger in this,—while there is less sugar and generally less fatty matter,—than in breast milk, it becomes necessary to alter this in order to adapt it to the stomachs of infants,—especially of those quite recently born. For this purpose should be chosen the milk of a perfectly healthy cow,—one that is fed upon her natural diet of hay or grass, and pure water alone;—a "new milch cow" is best. This milk should be allowed to stand from two

* The following table, from the most reliable authorities, will show the composition of several kinds of milk:

Constituents.	Cow.	Ass.	Goat.	Ewe.	Woman.
Water	86.28	91.65	86.50	85.62	89.20
Butter	4.38	0.11	3.32	4.20	2.60
Sugar of Milk	5.27	6.08	5.28	5.00	6.00
Caseine	3.80	1.82	4.02	4.50	2.00
Various Salts	0.27	0.34	0.58	0.68	0.20
Total	100.00	100.00	100.00	100.00	100.00

As the mean of eighty-nine analyses of human milk, MM. Vernois and Becquerel obtained the following result: Water, 889.08; solid matters, 110.92. These solid constituents are composed of: sugar, 43.64; caseine and extractive matter, 39.24; butter, 26.66; incombustible salts, 1.38; total 110.92.

to four hours after being drawn from the cow; then the top part only, being the richest in fatty matter, should be dipped off and diluted with an equal part of pure warm water; the whole to be sweetened with pure white sugar, *or sugar of milk*,* till its taste in this respect resembles mother's milk. By this process the proportion of cheesy matter is diminished, the butter and saccharine qualities increased, and a very excellent imitation of human milk obtained. Care should always be taken to present the infant's food at the proper temperature; this should be as nearly as possible the same as that of the mother's milk; and a thermometer will be found very useful in enabling the food to be given always at a uniform and healthy temperature. No less important is it to prepare the food often enough, to secure it from becoming soured in the least; either before or after it is consumed. For rancid milk is even more destructive to these little ones than is putrifying food to adults. And if the *sugar of milk* be employed to sweeten the infant food, instead of common cane-sugar, it will be very much less capable of becoming sour in the child's stomach and of thus inducing serious gastric and intestinal irritation.

As the child grows older, the proportion of water may be gradually diminished. As the child becomes still older and the teeth become more developed, some portion of good, well-risen domestic bread may be added to the milk.

By carefully pursuing the course here pointed out, the new-born babe may be fed without fatally deranging its digestive organs before it has acquired any strength of its own by assimilating suitable food; and its food can be made gradually more hearty in order to comply with the increasing demands of its daily growth,—and thus prevent it from becoming atrophied by starvation, or diseased from want of nutriment of the proper kind. For these reasons also it becomes always the first duty of the nursing mother to take care of herself in order that she may maintain her own system in a state suitable for sustaining the young and tender life which is dependent upon her. This indeed unassisted nature teaches in general; our art simply requires that we see to it that such persons live on a plain, nutritious diet, make use of no unsuitable or highly-seasoned food, and in all other respects observe all the hygienic rules which belong to the period of lactation.

* Every Homœopathic physician should furnish to his friends this invaluable article; and persuade them always to employ it in preparing food for infants,—since *from being far less likely to become rancid* it is found to be immeasurably superior.

Infants at the breast require food sufficient in quantity, as well as to receive it at short intervals. When the milk is secreted very abundantly, as is often the case, the child overloads its stomach, the excess is rejected by vomiting, or rather by regurgitation, with little effort and no distress. But if the flow of milk is scanty, the child worries the breast in vain, and is always unsatisfied. The milk also varies in quality in different women, as well as in quantity,—and in the same mother under different circumstances and conditions. Some slight modification of the healthy standard of the milk can be borne, for a while at least, without any immediate and apparent alteration in the child's health. But let this change be more strongly marked and the child's health will begin to fail at once; its life may be exhausted in a few hours by convulsions; or almost instantly destroyed by nervous "shock," as in cases of sudden and violent emotion on the part of the mother. These violent emotions, which sometimes prove so suddenly fatal to the infant at the breast, are evidently conveyed into its delicate system with all their deadly force, through the milk which passes so rapidly into its circulation and poisons its blood.

Antipsoric Prophylactic Treatment.—From the Treatise of Dr. Leadam, we quote the following excellent remarks on the antipsoric prophylactic treatment of infants: "Dr. Gastier, of Paris, has entered largely into the subject of the prophylactic treatment of children, with the view of preventing the hereditary dyscrasia, which come under the denomination of Psora. He has also declared that the vaccine virus does not usually take effect in those subjects whose constitutions have been acted upon by this treatment, and that they are, *a fortiori*, unsusceptible of the small-pox. (With the greatest respect for the prophylactic treatment here recommended, we still doubt whether it can be depended upon to do all that Dr. Gastier here claims for it.) This may be open to dispute; but experience alone can decide the question. If observation should confirm it, it will evidence a renovating and conservative power in the Homœopathic remedies which Hahnemann himself could scarcely have dreamt of.

The plan recommended by those who have paid particular attention to the subject, is to administer to the infant, soon after birth, two globules of a high dynamization of *Sulphur*^{200}, by placing them on the tongue,—and to repeat this same dose at the end of four or five weeks, if no morbid symptoms demand any other medicine. After this, at about the third month, a similar dose of *Calcarea* is to

be given, which has the advantage of facilitating, in a surpassing manner, the development of the teeth. Under this treatment, the infant expands and thrives with a physical and moral energy which indicates health; while the root of much bitterness has been destroyed by the prophylactic treatment above-named." In addition to the recommendation of *Sulphur* by Dr. Gastier,—or rather in place of it, in certain cases we advise to use a high preparation of the remedy which is the exact Homœopathic simile to the psoric miasm of the parent,—where any particular indication of this kind can be derived from either parent. And this we think can be done in many instances; *Calcarea* in some cases, in others *Arsenicum*, in others *Graphites*, will be found in affinity with the constitution of the parent; *and a single dose of the very highest preparation of the remedy*, given to the young infant, will exert a beneficial influence, in rendering much less violent and dangerous all the subsequent illnesses to which children and youth are necessarily exposed.

Atrophy of Infants.

The atrophy of infants is the very opposite to their healthy nutrition; and consists in a general marasmus, or wasting away of the entire system. This condition may result either from the unhealthy or unsuitable character of the food with which they are supplied; or from their own inability to assimilate it, on account of some inherent hereditary disease. In reference to each case therefore it is very important to distinguish as to which of these two classes it belongs. In the previous section on nutrition, full directions were given respecting the mother's and nurse's milk and their substitutes when the natural sources failed. And in the present section our remarks will principally apply to those cases in which infants become gradually atrophied from actual inability to digest and assimilate the most suitable food that can be provided for them,—whether this be that furnished by their own mothers, by nurses, or in default of both of these, such artificially prepared food as has previously been recommended.

The nature of the difficulty will be best understood by reference to some extreme cases, such as have already been referred to. Infants are sometimes born into the world in a remarkably wrinkled, withered and shriveled condition,—in whom the process of atrophic degeneration, even before their birth, seems already to have become far advanced. Such babes never increase in weight, but rather constantly decrease,—till they die, in the course of from two or

three days to as many months. Some, it might perhaps be safely said, all these cases are the victims of a profound, scrofulous, syphilitic, or other malignant dyscrasia,—which so materially affects the organism that the function of the assimilation of food is never developed into activity. These helpless beings pine in wretchedness as long as their meagre bodies can supply the substance for their own support; and then they perish, as many others do even before birth, from congenital lesion of nutrition.

In other cases the atrophy, infantile marasmus, or wasting away, appears after the child has begun to thrive. In these the symptoms are various; sometimes the food is rejected as soon as swallowed, or presently after; sometimes it passes from the bowels in an undigested condition; and sometimes there is diarrhœa with whitish-colored stools,—indicating deficient action of the liver. But in all cases of infantile atrophy, the child is restless, peevish,—fretful, crying, as if continually distressed, and always growing thinner and thinner, whatever the other symptoms may be.

In some instances the mischief may be occasioned by the severe derangement of the digestive apparatus incidental to dentition. Here the loss of sleep and the exhaustion of the nervous forces inseparable from difficult and painful dentition, cannot but weaken the stomach. Thus the food is in part rejected; in part it becomes sour and curdled, and thus by its very presence and influence adds to the original gastric irritation; and finally, in an imperfectly prepared condition it is transferred to the intestines only to extend the same distressing irritability throughout their entire tract. The indigestion, thus commenced in the stomach and continued through the intestines, becomes in the next stage of physiological disorder, a non-assimilation, and confirmed atrophy is the necessary consequence. In other cases, the seat of the difficulty may be an original disorder in some portion of the digestive apparatus,—such for example as enlargement and induration of the mesenteric glands. This is the most common form of atrophy in scrofulous children. And even where this constitutional miasm is not present in sufficient force to develop such disease of its own accord, the irritation occasioned by diarrhœa from indigestion, or by worms, or by the destructive effects of calomel may combine to give rise to such tuberculous affection of these glands as shall become an actual *phthisis intestinalis*, or fatal consumption of the bowels.

The following are given by Leadam, as the principal symptoms which precede or accompany atrophy: "Frequent belly-ache, with

irregular bowels, the motions being too frequent and variegated, or clay-colored and watery; acid odor, not only of the evacuations, but also of the breath and perspiration; fickle appetite and much thirst; the urine often turbid and white; the child is fretful or quite sullen and indifferent, less playful than usual and cries peevishly. The countenance changes color frequently, and the tongue is creamy, or morbidly clean and red. There is swelling and hardness of the belly, with emaciation; sometimes irregular, small tumors are to be felt, through the parietes of the abdomen; the skin becomes shriveled, the complexion earthy, the appetite voracious; diarrhœa supervenes, if it has not existed throughout; there is slow, continued or remittent, fever, augmenting towards evening, with flushing of the cheeks, a hot, dry skin and incessant cough, extreme restlessness, increasing debility, and finally hectic. In this form of scrofulosis, the bowels and the secretions poured into them require to be regulated, not by purgatives, however, but by remedies which are consonant with the general state of the patient."

The irritation occasioned by dentition is peculiarly apt to develop the morbid enlargement of the glands just described, in which the little sufferer emaciates just in proportion as its abdomen grows larger and its appetite more voracious. This affection, usually termed *tabes mesenterica*, is indeed hardly ever fully developed in the first few months of infant life; still the foundation is early laid for it, in the profound debility resulting from insufficient food and still more from injudicious nourishment; from the close, foul air so common in the sleeping rooms in cities and even in the country; and from the deprivation of light. "Children confined in badly-lighted and ill-ventilated apartments, are uniformly unhealthy; so those brought up by hand, in a city, seldom do well; in the country their chance of living and thriving is much greater, because the purity of the air renders their digestive powers more vigorous."*

Treatment.—In the treatment of cases of atrophy, or failure of nutrition, the very first indication will of course be to seek the special cause of the difficulty. And if there is any thing about the diet, regimen and care of the child itself, or any thing in its habitation and surroundings, which seems capable of exerting an injurious influence, this must be amended first of all. Thus removing, so far as possible, all the external causes of the marasmus, we shall the more readily succeed in promoting that recovery of the little patient which might otherwise defy all our skill. Where the cause of the

* Warren on Scrofula.

malady appears in the quality of the food,—whether it be that of the mother, of the nurse, or some artificial substitute and preparation of cow's milk,—such change should be advised as will secure the most healthy nourishment possible in the circumstances. Sometimes the mother's milk is unwholesome; the milk of a particular cow may disagree; or the milk served by the milkmen in the large towns may be and indeed often is adulterated with lime or chalk. The long-continued use of any of these unhealthy articles of food cannot fail to develop, sooner or later, what may easily become fatal disorder of the digestive apparatus. Nor is the artificial food at all improved by mixing lime-water in the diet, as is sometimes done in hospitals for foundling infants, for wherever this course is long pursued the little ones will all die. In fact observation shows, in this case, just what the Homœopath would predict, that these calcareous additions to the food, while they may indeed render the stomachs of the infants more tolerant of it,—do but cause still severer disorders in the bowels,—just such disorders as the Homœopath is accustomed to cure with the dynamized preparation of the same drug.

Finally, therefore, as a most essential adjunct to the appropriate remedy in these cases,—always serious, often apparently hopeless,—the utmost care should be exercised to give the little patient every possible advantage in the way of light; fresh air; suitable food, and, —what is often entirely overlooked,—sufficient quiet to enable it to take its natural and necessary rest undisturbed. Then the remedy should be selected with the most particular reference to all the symptoms and conditions of the child,—and even with regard also to the peculiar form of psoric or scrofulous dyscrasia which it may be possible to discover in the constitution of its parents.

Aethusa cynapium. The child throws up its milk soon after nursing, *with great force, suddenly,*—then falls asleep as if from exhaustion, to awaken for a fresh supply.

Aloes. The child passes substances looking like jelly-cakes,—sometimes small, at other times large,—but they adhere together like congealed mucus; they may be green-colored, or transparent.

Argentum nit. Diarrhœa of green fetid mucus, passing off with much flatulency.

Arsenicum. The stools are painful, offensive, and contain quantities of undigested food; there is much debility, and a pale, waxy look.

Belladonna. Particularly for precocious children with blue eyes and fair hair. They do not sleep much, but are drowsy; half-sleeping and half-waking.

Benzoic acid. The urinary odor is very strongly ammoniacal.

Bryonia. The food is thrown up immediately after eating, and there is constipation; the lips are dry and parched; the mouth is dry; and the child wishes to keep very still.

Calcarea c. Clay-like evacuations; dry and flabby skin; enlargement and induration of the mesenteric glands. Large open fontanelles; much perspiration about the head in large drops,—which wets the pillow far around when the child is sleeping. Cough, with rattling of mucus in the bronchia.

Chamomilla. The child must be carried all the time, for it is only quiet then. Diarrhœa, green and watery, and slimy; or like chopped eggs and spinach. Odor like decayed eggs. One cheek red, the other pale.

China. Offensive, painless, undigested stools; abdomen distended with flatulency.

Cina. The child picks its nose very much; is very restless; cries; and is very unamiable.

Conium. Hardness and distention of the abdomen; with *frequent sour evacuations.*

Ferrum. Frequent vomiting of food; stools undigested; redness of the face.

Graphites. The child has moist blotches on its skin, that exude a transparent glutinous fluid.

Hepar. The child *has a sour smell,* and white, fetid evacuations.

Iodine. A brown color of the face, and copious and papescent stools.

Ipecacuanha. Nausea is the most predominant symptom.

Kreosote. Fetid evacuations, and excoriation of the mucous surfaces generally.

Lycopodium. Much commotion, rolling and rumbling in the abdomen. The child is worse after four P. M., and gets better at eight or nine in the evening.

Magnesia c. Green, watery, very sour-smelling diarrhœa, and great emaciation.

Mercurius. Much straining at stool, which is slimy, often bloody. The child is never so well during damp weather. Enlarged glands; night-sweats.

Nux v. Constipation of large, difficult stools; no appetite; does not sleep after three or four in the morning.

Oleander. The food passes off unchanged in a remarkable degree and very easily, and almost unconsciously.

Petroleum. Emaciation, with diarrhœa by day, and none at night.

Phosphorus. Copious stools, pouring away like water from a hydrant, followed by exhaustion.

Phosph. acid. Stools yellowish and very offensive, and the child is very listless,—wants nothing and cares for nothing.

Podophyllum p. Emaciation; many stools daily, all of which are natural. Diarrhœa in the morning.

Pulsatilla. The diarrhœa is worse at night; no two stools alike, they are so changeable. For a time the child seems much better, then it gets worse again without any appreciable cause. The appearance of the child changes in this manner several times the same day; but it is usually worse towards evening, and *always seems better in the open air.*

Rhus t. The child always gets particularly worse after twelve o'clock at night; it has then more colic,—more diarrhœa,—more restlessness.

Stannum. The child is always relieved in its abdominal sufferings by pressing hard upon the abdomen,—leaning upon something.

Sulphur. The child frequently awakens from sleep with screaming; great voracity; wishes to put into its mouth every thing it sees; watches eagerly for every thing,—cups, tumblers, vessels of food; it wants to swallow every thing it sees. Its passages excoriate the anus. The child jumps and starts and screams fearfully.

Indigestion.

Sour Stomach; Vomiting; Colic.—The infant equally with the adult is subject to attacks of indigestion; and the disorder in the one case bears a certain general similarity to that in the other, even as the same general cause is common to both. Stated in the simplest terms, this cause consists in a want of harmony between the food and the digestive force. In an infant whose stomach is perfectly healthy, this *faut de rapport* may follow the introduction into it of food either too abundant in quantity, or unsuitable in quality. Or on the other hand the disorder may arise, in spite of the utmost hygienic care, from some innate pathogenetic influence which finds an easy form of development through the high physiological excitement of the digestive apparatus. Should neither of these two conditions, of digestion primarily deranged, or of original dyscrasia finding vent through a digestive apparatus healthy indeed but highly excited, be present in force, the indigestion will prove symptomatic of some other malady.

The vomiting which precedes an attack of scarlatina affords an excellent illustration of this.

When the stomach is simply overloaded, or rather over-filled, it relieves itself of the excess by vomiting; and this act takes place with little effort and no suffering. And the process of digestion of the still remaining food goes on undisturbed. But if on the contrary the indigestion arises from the unsuitable quality of the food,—whether this be due to the unhealthy character of the milk of the mother or nurse, or to the imperfection of its substitutes, the mischief is not so soon arrested. In this case the imperfect food passes from the stomach into the intestines in an imperfectly prepared condition, and occasions there a still greater irritation; an intestinal indigestion always succeeds to that of the stomach. In some rare cases, but especially in the first three months, this may give rise to constipation; but diarrhœas of different kinds and of greater or less severity more commonly follow. Where the indigestion is not due to excess in nursing, and where nothing indicates an original disorder of the stomach itself, it is necessary to understand that there is something in the milk of the mother or nurse, or in the substituted food, which disagrees with the child. And besides this it is often observed that change in the accustomed diet on the part of the mother, violent mental excitement or distressing moral emotions, the return of the menses, coition, or other temporary causes, very greatly disturb the character of the milk; and result in the sudden and severe indigestion of the babe. For such cases, arising from influences usually unforeseen and not always obvious, the physician should be on his guard; nor, whatever conclusions he may arrive at as the result of inquiries more or less direct, will it always be proper or safe to avow them. The knowledge that the child was suffering from a severe fit of anger or other passion of the mother, will enable the physician to give directly to the babe, and perhaps, on some pretence of soothing her nervousness, to the mother also, such remedies as will do good. But the simple consciousness on the part of the mother that the Doctor knows the exact cause of the illness of her babe, will sometimes complicate the excitement and render the case of both patients still more difficult to treat in the most successful manner. The physician must always hear and see and act with the greatest circumspection; but sometimes the less he says the greater will be the satisfaction of the parties more immediately concerned and the more gratifying his own professional success. When the babe is thus suffering from unusual external influences, conveyed through the

medium of the milk, from the mother's disturbed nervous system, every effort should of course be made to remove the cause as rapidly as possible, and at the same time alleviate the morbid symptoms induced in the babe itself. While in any state of undue excitement, the mother should refrain from nursing her babe. When suddenly overwhelmed by the news of the death of her husband, the young wife and mother finds in her babe an exquisite consolation; she flies to the cradle, she clasps her babe in her arms; but if she allows it to nurse, it may die!

Aconite. The infant has a dry, hot skin; is sleepless; restless; cries much; bites its fists; and suffers from green and watery diarrhœa. A dose or two of Aconite cures all these difficulties in a few days.

Arsenicum. The food passes undigested, the stools are offensive; much crying during and after nursing, or as soon as the child begins to take food. Emaciation; restlessness.

Baryta c. Useful in colic of dwarfish children, those who do not grow.

Belladonna. The child cries out suddenly, and after awhile it ceases crying as suddenly as it began, and appears as if nothing had been the matter.

Borax v. The child cannot bear a downward motion, not even during sleep. It cannot be put down out of the nurse's arms; it awakens and cries on the attempt being made. It has much colic and indigestion.

Bryonia. She must evidently be kept very still, in order to relieve her colic and other sufferings. The stools are dark, dry, and hard, as if burnt.

Calcarea c. In children of leucophlegmatic temperament; with large fontanelles. Profuse perspiration of the head; white chalk-like stools.

Chamomilla. Very irritable and fretful; must be carried. Distress after nursing. Sleepless; starting and jerking while asleep.

China. Colic comes on at a certain hour every afternoon.

Cina. The child is always cross and troublesome when awake. It will not sleep unless it is kept in constant motion. It is seldom still and quiet, whether sleeping or awake.

Coffea. Great restlessness and wakefulness with nervous excitability; much crying; hot skin.

Colocynth. The child writhes in every possible direction, doubles itself up, and seems in great distress; it cries very hard.

Dulcamara. When the child gets worse at every cool change of the weather.

Hepar. Colic, with dry, rough, pimply eruptions, that itch very much.

Ignatia. When the trouble seems to arise on account of grief of the mother or nurse.

Ipecacuanha. There is much sickness of the stomach; the more constant the nausea, the more certainly will Ipecac. be indicated.

Jalapa. When the child is "good" all day, but screams and is restless all night.

Lycopodium. The child always cries and screams before passing water; and is relieved immediately afterwards. Red sand is found in the diapers. Much rumbling and rattling in the abdomen.

Magnesia c. Very much colic, which is finally relieved by a green, liquid stool. This occurs very many times day and night.

Mercurius. Much colic, which is relieved by a slimy, bloody stool, with straining.

Nux v. Much colic, with constipation. The child cries much, draws its feet up and then kicks them out again, etc. Its mother lives on highly-seasoned and stimulating food.

Opium. The whole trouble seems to have arisen from fright of the nurse.

Podophyllum p. An attack of colic at daylight every morning. Severe colic, causing an absolute retraction of the abdominal muscles.

Pulsatilla. The child always gets worse towards evening, and remains so till towards morning.

Rheum. Much colic, with very sour stools.

Senna. The child cries terribly, and seems full of incarcerated flatus; it even turns blue all over during its cries. Sometimes it has frequent and bloody stools.

Silicea. Colic with difficult stools; they slip back into the rectum when nearly evacuated.

Stannum. The child's colic is relieved by pressing firmly upon its abdomen. When it is crying with colic, relief is at once obtained by carrying it with its abdomen resting upon the point of the nurse's shoulder.

Staphysagria. The child seems to be suffering from a fit of chagrin, or indisposition of the nurse. Indicated in the sufferings of pot-bellied children, with much colic and humid scald-head.

Sulphur. The child has a tendency to excoriations, wherever the skin is folded upon itself. Pimply eruptions filled with pus. Red-

ness about the anus after an evacuation. This remedy very often cures the colic and derangement of the stomach of infants.

Veratrum. Terrible colic with coldness of the forehead. Very cold feet with the colic. The sufferings cause a cold sweat to stand upon the surface, particularly upon the forehead.

Dentition.

The development of the teeth in their regular order, although a perfectly natural process, is often attended with much suffering. And when the dentition of young infants is slow, retarded and difficult, it not only becomes of itself a serious disorder, but it involves also a long train of morbid symptoms and actual diseases, which may exhaust the patient's strength and finally destroy its life. The primary difficulty in such cases is in the nutrition; and as we often see in older children a remarkable backwardness in the development of the osseous system in general, so we often find in earlier periods of infantile life a corresponding slowness in the development of the teeth. And both these forms of imperfect development, occurring, as they often do, successively in the same children, are to be attributed to some profound constitutional dyscrasia which affects the nutrition.

Even when the teeth are grown and cut through in the easiest and most natural manner, there is usually some constitutional excitement, which may variously manifest itself, in the form of fretfulness, worrying, restlessness, inflammation of the gums, heat about the head, and more or less general fever. Where the dentition is difficult and retarded, there is prolongation of all the constitutional disturbance; great aggravation of the symptoms already mentioned; and the addition to them of others still more severe,—such as vomiting and diarrhœa. The still increasing debility of the system resulting from the nervous exhaustion inseparable from so much suffering, and from such derangement of the digestive function, cannot but augment the original constitutional lesion of nutrition. And unless the mischief is arrested by suitable medication, the patient may sink from inanition; from colliquative diarrhœa; from hydrocephaloid, or from convulsions. And perhaps in no other morbid condition of the human system is the Homœopathic practice more evidently superior than in this,—where the medicines may relieve much of the nervous suffering and prevent the injurious effects ordinarily resulting from disorders of the digestive apparatus, at the same time that they promote the growth and development of the teeth, by remedying the primary and constitutional lesions of nutrition.

In order that the physician may judge of the degree of deviation from the normal standard of dentition in any given instance, we proceed to state here the mode and order of the appearance of the teeth in health. But first it should be observed that there are anomalous cases in dentition; but as was previously observed with regard to the non-appearance of the menses in young women at the usual time, delay in the appearance of the teeth should not be regarded as requiring active interference, unless other, morbid, symptoms were also present. The non-appearance of the teeth at the usual time, unless accompanied by symptoms indicative of constitutional disturbance, really furnishes less occasion for apprehension than their premature appearance would. Even in the condition of apparently perfect health, some infants begin to cut their teeth very early, even by the third month; while in others this process commences at a very much later period.

In the early months, the infant's mouth is naturally dry; this dryness is relieved by frequent nursing. But usually about the fourth or fifth month a very considerable change takes place in this respect; the mouth is now found constantly full of saliva, and the child is constantly driveling,—or drooling, as it is vulgarly termed,—"but no other indication appears of the approach of the teeth to the surface, except that the edge of the gums becomes broader than it was before. No further change may take place for many weeks; and it is generally near the end of the seventh month, oftener later than earlier, before the first teeth make their appearance. The middle incisors of the lower jaw are generally the first to pierce the gum; next in order appear the middle incisors of the upper jaw; then the lateral incisors of the lower. The first molars next succeed, and often without any very definite order as to whether those of the upper or of the lower jaw are first visible,—though in the majority of cases the lower molars are the first to appear. The four canine teeth succeed; and lastly the four posterior molars,—making in all the number of twenty deciduous teeth." There are, however, intervals of rest between the successive irruptions of teeth; thus a period of six or eight weeks generally intervenes between the lower and the upper central incisors; the lower lateral incisors come very soon after. But a pause of three or four months may occur before the first molar teeth make their appearance; another of equal length may occur previous to the appearance of the canine teeth; and still another before the first dentition is completed by the irruption of the last molars.

In some few cases the teeth come through so readily as scarcely to disturb the smiling serenity of the infant; but more frequently indeed the mouth becomes hot and the gums look tumid, tense and shining, while the exact position of each tooth is marked some time before its appearance by the prominence of the gum; or the irruption of the teeth is preceded or accompanied by a somewhat different condition of the mouth, in which there is much heat and intense redness of the mucous membrane, an extremely copious flow of saliva, and a disposition to the formation of small aphthous ulcerations on the tongue, at the outer surface of the alveolæ, or at the duplicature of the lips, though the gums themselves may not be particularly swollen and painful. Either of these states is usually attended with some degree of febrile disturbance, and apparently with considerable suffering to the infant, who is constantly fretful and peevish, or cries out occasionally as if in pain. A third morbid condition of the mouth is sometimes seen, which is usually ushered in or attended by very considerable fever and disorder of the chylopoetic viscera. The gums then become extremely hot and swollen, and unusually tender, especially over some tooth or other in particular, and in that situation we find the gum swollen up into a kind of little tumor. Small, unhealthy ulcerations, with a sloughy appearance often form upon the summit of the gum, and especially around any tooth which has partially pierced through it. To this affection, which is often very painful and difficult of cure, the name of *odontitis infantum* has been applied."— *West.*

As if from a common centre, almost all the various disorders peculiar to infancy and early childhood may be seen to spring from difficult dentition. Especially is this true of those lesions of nutrition already described under the head of Indigestion, Vomiting, Diarrhœa; and of some of the diseases presently to be mentioned, such as aphthæ, convulsions and hydrocephalus. Thus, sooner or later, all cases of protracted dentition, requiring medical assistance, will be found complicated with some one or more of these forms of disease. In treating such cases, therefore, regard must be had to these consequences of the original disorder,—as of the one grand cause of all. All these troubles are developed in a successive series; and at whatever point of the series we are called in, then we must begin and try back, as it were; and by thus carefully attending to all the successive developments, of vomiting, diarrhœa, aphthæ, &c., seek to find the one remedy which shall remove the whole train of symptoms by reaching its original and primary cause in constitutional

lesion of nutrition, and its secondary cause in the protracted and difficult dentition. And with these views, it will be seen to be requisite to consult and compare the remedies advised under diarrhœa where that condition obtains, and those mentioned under vomiting, aphthæ, &c., where these conditions appear; as well as those more especially recommended at the close of this article.

A single word with reference to lancing the gums. This operation is in almost all cases unnecessarily performed; and in many it proves positively injurious. And yet it sometimes affords the most important and immediate relief. Where the gums are red and inflamed, in our opinion, they never need to be lanced; but only when in their very slow growth they have changed the gum over them to a dense, firm and unyielding cartilaginous formation, thick and of a whitish color, through which the teeth vainly attempt to make their way; and the irritation of the child's system threatens to destroy its life by sheer exhaustion, or by inducing fatal convulsions.

Before proceeding to indicate the remedies to be employed in disorders of dentition, we remark: that the tooth does not mechanically cut its way out of the gum; but its growth causes slight pressure by the crown of the tooth,—a pressure which excites the absorbents to remove the impediment. In this manner the absorbents do absolutely, when the infant is in a perfectly healthy condition, open up the way for the tooth to escape without pain or suffering. The same law and the same principle pertain in ovulation; but were neglected to be stated in the proper place. Now the duty of the physician to the infant is so to direct the course of events that the evolution of the teeth shall become as painless as any other process of development. All the laws of health should be rigidly enforced, and every prescription most carefully made; and finally, when the period of dentition fairly commences, if suffering is experienced, or difficulty arises, the following remedies should be carefully and particularly studied and administered, — or others, whose strong characteristics present the picture of the opposite of an orderly and painless process of dentition.

Aconite. When the child has much pain,—as appears from constant restlessness, biting its fingers and even its whole hand. Sleepless; much crying; feverish; heat of the head, &c.

Apis. Frequent waking at night with violent screams. Red spots here and there over the whole body. This remedy must sometimes be repeated, in water, day after day, for a week or two.

Arsenic. Undigested, fetid stools, emaciation, dry and shriveled skin.

Belladonna. Much moaning. Awakens from sleep and looks frightened with staring eyes. Face and eyes red, with dilated pupils and hot head. Convulsions followed by sound sleep. *Violent* starting and jumping whilst sleeping; and at other times.

Borax. The child becomes very nervous, starts and jumps at the least noise, even of the rumpling of a paper, or of a silk dress. It cannot bear a downward motion, even during sleep.

Bryonia. Dry, parched lips; dry mouth and constipation, the feces being dry, and dark as if burnt.

Calcarea c. In children with large open fontanelles. The head perspires much during sleep,—so as to wet the pillow far around. Stools hard and of a chalky appearance. Suitable for very pale and fair children.

Chamomilla. The child starts and jumps much during sleep. It is very cross and wants to be carried; this alone pacifies. One cheek red and the other pale. Diarrhœa, watery and slimy; green and like chopped eggs. Dry hacking cough.

Cina. The child rubs its nose much and is restless in its sleep, and seems unusually hungry. If there are any teeth already, these are grated during sleep. Hacking cough.

Coffea. The child is very excitable and sleepless; it seems in a state of exaltation. It cries and laughs easily. While crying it suddenly laughs quite heartily, and finally cries again.

Ferrum. When an obstinate diarrhœa is the result, composed of slime and undigested food;—the diarrhœa is painless, excoriating and exhausting.

Ignatia. The child awakens from sleep with piercing cries, and trembles all over. Convulsive jerks of single limbs. Frequent flushes of heat, with perspiration.

Ipecacuanha. The child seems to be sick, nauseated all the time, with no remission, and an occasional vomiting. Diarrhœa, fermented, or of many colors.

Kreosote. Very painful dentition; the teeth commence to decay almost as soon as they appear.

Lycopodium. The child sleeps with its eyes partly open—throwing its head from side to side, with moaning. It cries and screams before passing urine. Red sand in its diaper.

Magnesia c. Green and sour-smelling diarrhœa, lasting a long

time, and the child rather emaciating,—the teeth do not come through. Green and frothy diarrhœa,—which may be quite scanty.

Magnesia mur. Slow dentition with distended abdomen and constipation. The stools are usually large and crumble as they pass the verge of the anus.

Mercurius sol. Copious salivation with slimy diarrhœa streaked with blood, or green stools with much straining.

Nux v. Large, hard and difficult stools, escaping in a mass. Dry cough. The child is worse at three or four o'clock every morning.

Podophyllum. Painful diarrhœa with screaming and grinding of such teeth as are cut. Rolling of the head from side to side, often with green stools.

Silicea. Scrofulous, wormy children, with profuse salivation, frequent or almost continued grasping at the gums, fever towards evening and heat in the head.

Stannum. In case where Cina is indicated but does not cure. The child will not be quiet except when lying upon its abdomen. Epileptiform convulsions from teething.

Sulphur. White, sour diarrhœa, causing a redness around the anus.

CHAPTER FORTY-SECOND.

DISEASES OF CHILDREN—CONTINUED.

APHTHÆ.

APHTHÆ or Thrush, and Noma or Canker, are the names of those diseases in the mouth of infants and children, which correspond respectively to stomatitis and stomacace in adults. As described by Leadam,* the thrush often attacks the infant in the second week, and is characterized by the mouth and tongue being covered with minute whitish blisters, which are rubbed off by the action of sucking,—a succession of these vesicles is constantly taking place so long as the disease lasts, which is sometimes five or six weeks. It is often preceded by a granular appearance of the tips of the tongue a few days after birth,—which is caused by enlargement of the papillæ. The thrush often runs in families, and is a disease of debility; but it is generally caused by irritating secretions in the alimentary canal,

* Diseases of Females and Children.

from bad digestion or improper food; or by the acidity of the food in the stomach, as well as of that remaining in the infant's mouth. This affection generally traverses the whole length of the digestive tract; and develops a redness and excoriation at the anus corresponding to that originally appearing in the mouth.

Thrush may constitute a temporary and comparatively trivial disorder, apparently unconnected with any constitutional disturbance. But more often it appears as one of the first of a long train of symptoms indicative of severe gastro-intestinal disorder. And finally, in the last stage of such disorder,—towards the close of life,—the tongue, the inner surface of the cheeks, and even the margin of the lips and corners of the mouth, may be covered by a whitish, paste-like formation, a true vegetative growth,—which being forcibly removed discloses a surface red or raw.

In all except the very mildest forms of thrush, the disorder renders nursing a painful operation to the child; but as it usually appears in connection with or in consequence of serious derangements of the stomach and bowels,—such as vomiting and diarrhœa, the proper remedy will be found among those indicated for such conditions. It should always be borne in mind, however, that if the surface of the child is kept constantly clean, and if it is not dressed too warmly, it will seldom or never be troubled with the thrush. But where the thrush appears by itself and is unattended as yet by other morbid symptoms, it may be removed, and the still deeper mischief, to which it would lead, anticipated, by the exhibition of *Calcarea, Chamomilla, Borax, Bryonia, Mercurius, Sulphuric acid, Arsenicum,* or *Muriatic acid,*—according to the character of the accompanying conditions, and to the particular appearance of the infant's mouth. We give indications for a few remedies.

Arsenicum. When the aphthæ assumes a livid or bluish appearance,—attended with great weakness and diarrhœa.

Borax v. The child frequently lets go the nipple, showing signs of pain in the mouth from nursing.

Bryonia. The mouth is unusually dry with thirst; dry lips, rough and cracking; the child does not like to take hold of the breast; but when once its mouth is moistened and it is fairly at work, it nurses well.

Carbo veget. The mouth is very hot, the tongue almost immovable, and a sanguineous saliva escapes occasionally.

Chamomilla. When the child exhibits much uneasiness and *must be carried* all the time.

Mercurius sol. Much salivation, or more than usual moisture in the mouth. There is inflammation in the whole buccal cavity. Ulcers upon the gums.

Staphysagria. When the aphthous patches seem to bleed easily and the gums are spongy.

Sulphur. The child does not take its usual long sleep; it awakes often. The general appearance of the child indicates Sulphur.

Sulphuric acid. The mouth appears very painful; and the child is very weak. Ecchymoses.

Pure molasses, applied by means of a piece of muslin, or linen, or by the finger, constitutes the best (healing) wash,—where one seems to be needed.

Constipation.

Even very young infants are sometimes affected with Constipation; in fact during the first two months of infantile life, constipation is frequent, while diarrhœa is comparatively rare. This may be occasioned by some hereditary predisposition, and be maintained by the constantly imparted influence of a costive habit on the part of the nursing mother.

In most cases of infantile constipation, the difficulty consists, so far as the child is concerned, in an inactive state of the bowel. Some mothers are in the habit of relieving this by the stimulating irritation of a roll of paper or other small object, anointed with lard and introduced within the rectum. The employment of purgatives of any kind, as indeed in all other forms of constipation, is worse than useless. In some cases the constipation may be due to functional derangement of the liver, as in children affected with jaundice,—where the stools may be hard, dry and clay-colored, showing a deficiency in the secretion of the bile.

There are also cases of complete inaction of the bowel and retention of the feces from birth, which are due to imperfect development, or actual malformation of the intestine. In these cases the rectum may be perfect, but with its canal closed by a false membrane which obstructs it either at its orifice or higher up in the intestine; or the canal of the rectum may be obliterated for a greater or less extent by the adhesion of its opposite sides. These cases may be relieved by a very simple incision, where the hard and protruding accumulation of feces furnishes a sure guide to the operator.* But there are

* See cases of this kind reported in the American Journal of Homœopathy, for 1854, p. 16, vol. viii.

other and more complicated varieties of malformation,—such as those in which the natural aperture of the bowel is absent, and the intestine terminates by opening into the urethra, bladder or vagina; or those in which the intestinal canal is not only malformed but altogether absent for an extent more or less considerable. All such cases require in their treatment no small amount of surgical skill; and the particular directions for the operations they involve will be found in the best works on practical surgery; or better still in West's recent and elaborate Treatise on Diseases of Children.

In the medical treatment of the constipation of infants, recourse must always be had to the cause; if this is found in the nursing mother, the proper remedies should first be administered to her. Should there be any thing in her diet,—such as the use of coffee,—which may be capable of rendering either herself or her babe constipated, this also should be attended to. With scarcely a single exception, cases of costiveness in nursing infants will be found dependent upon the influence of its diet; hereditary and constitutional weakness and inaction of the bowel; or actual derangement of the liver. The remedy should, however, be selected in accordance with all the symptoms; a single dose administered, and allowed entirely to exhaust itself before either repeating it, or making a new prescription.

Aconite. Much heat about the child's head; it is feverish; sleepless, restless; gnaws its fist; and its stools are hard and difficult.

Alumina. There seems to be a want of action in the rectum; the child has to make a very great effort, even for a soft stool.

Apis m. The child is restless, screams out in its sleep, and has bright red pimples on its skin.

Bryonia. The stools are very dry, as if burnt, and of a dark color; dry lips and mouth.

Calcarea c. Hard, undigested stools of a light color.

Graphites. The stools are of an uncommon size,—very large; and the child has more or less humid eruption over its body, behind its ears, in its face, on the chin, in its groins. This eruption exudes a watery, transparent, gelatinous fluid.

Lycopodium. Red, sandy, urine, the sand is seen in the diaper; much flatulence; difficult stools,—which it is almost impossible to evacuate.

Mercurius. When the general symptoms of mercury are present;—salivation, sore throat, glandular swellings, frequent efforts to evacu-

ate; all these symptoms become more prominent every time the child takes cold.

Nitric acid. This remedy cures many cases where the pain of evacuating is great during and after the passage, as though the little sufferer had fissures of the anus. See Fissures of the Anus, page 414.

Nux v. Stools large and difficult, or small, frequent and painful, with much colic. When the nurse takes much coffee, or highly-seasoned food. The child is quite sleepless and restless.

Opium. The stools occur in hard round black balls.

Platina. The stools adhere to the rectum and anus like soft clay, so that it is difficult to discharge them.

Plumbum. The stools are composed of conglomerate balls, like sheep's manure.

Sepia. The stools are very difficult to discharge; they seem to remain in the lower part of the rectum, and to require the assistance of the nurse in order to facilitate their discharge.

Silicea. The stools are with difficulty forced to the verge of the anus, when they slip back again.

Sulphur. The child has intertrigo, pimply eruptions; swelling of its skin; soreness of the anus, so that it screams with every attempt to evacuate the bowel,—it seems to have piles.

Veratrum. There seems to be a paralyzed condition of the rectum, requiring much straining, when a cold sweat appears on the forehead.

DIARRHŒA.

This symptom, for infantile diarrhœa can hardly be termed a distinct disease, constitutes one of the most frequent and serious of all that occur in infancy and childhood. Of itself alone diarrhœa does not often prove directly fatal; but its long continuance seriously weakens the patient and endangers the health; and it constitutes, moreover, a very grave complication of other forms of disease.

Diarrhœa may appear without fever, or other constitutional disorder; this is usually termed by medical writers *simple* or *catarrhal diarrhœa.* Or it may be accompanied by more or less fever; then properly termed *inflammatory diarrhœa;* this may become an actual dysentery or inflammation of the bowels. In its mildest forms, infantile diarrhœa corresponds exactly to the easy and painless vomiting already described as the means by which the overloaded stomach relieves itself. This may be either a lienteria, in which the food passes undigested; or a diarrhœa *crapulosa,* in which the excess

of food mixed with feces is passed in large and frequent quantities. Or again, as is still oftener the case, the diarrhœa may be of a purely mucous character; a condition which results from disordered (excessive) action of the gastro-intestinal muciparous glands and follicles. In this latter form, the mucus designed to facilitate the digestive process is secreted in such abundant quantity and in such altered quality, that it exerts an influence entirely different. For this primary derangement of the muciparous glands, by sympathy affects all the neighboring organs of the gastro-intestinal tract, whose secretions are intended to promote the accomplishment of the function of digestion. In some instances this mucous diarrhœa seems to become a real blennorrhœa, or catarrh of the bowel. This form may arise from cold and dampness; from careless exposure, and from want of sufficient covering over the abdomen.

The *causes* of the principal forms of diarrhœa may be arranged under three general heads. I. Those which are connected with the organism itself; II. Those which depend upon the quantity and quality of the food; III. Those connected with atmospheric influences, and changes in the weather.

I. The diarrhœas which spring from interior causes, are such as those just described as catarrhal,—arising from excessive action of the muciparous glands. To this form of diarrhœa many children are so remarkably predisposed, that the slightest change of weather or personal exposure renders them subject to it. The extraordinary activity of the whole digestive apparatus in young babes, renders the access of diarrhœa of some kind, the almost inevitable result of the irritability induced by the process of *dentition*. And in addition to these it should be borne in mind, that the changes taking place in all parts of the alimentary canal and of its dependencies, in order to fit them for the proper reception of the varied food upon which the infant will soon have to subsist, cannot but render these organs still more susceptible to this form of disorder. The change which takes place in the mouth during the period of lactation, is exactly equalled by a corresponding change in all the organs of digestion and assimilation. Hence it happens that very few children entirely escape the attack of diarrhœa in their first dentition; while one-third,—at least under the ordinary, Allopathic treatment,—suffer from it severely.

II. The manner in which food too abundant in quantity or unsuitable in quality occasions diarrhœa, has already been explained under the head of Indigestion. In many of its forms at least, diarrhœa itself is little other than a symptom or consequence of intestinal indigestion.

And of course those external accidents of food too profuse in quantity, or disagreeable in quality, but serve to aggravate the pre-existing disposition to diarrhœa, arising from the before-mentioned internal or constitutional conditions.

III. As to the third class of diarrhœa, that dependent upon climatic or atmospheric conditions, it will be sufficient to recall the immense proportion of cases of this disorder which occur in particular seasons, in order to realize how largely even young infants are subject to such influences. Thus, on a comparison of the results of eight years' observation at the Children's Infirmary, in London, Dr. West found that in the six winter months, from November to April, inclusive, diarrhœa formed seventeen and three-tenths per cent. of all the cases of disease; while in the six summer months, from May to October, inclusive, diarrhœa formed thirty-eight and three-tenths per cent. of the cases of disease.* Exposure to the night air will often occasion an attack of diarrhœa in young infants. And the dysentery, or actual inflammation of the bowels, so notably depends upon certain conditions of the weather,—either magnetic or atmospheric,—that when they recur, especially in the autumn, this disorder prevails as an epidemic throughout the whole district.

Symptoms.—The different appearances of the stools, in diarrhœa, deserve careful attention, since in many instances they greatly aid in the selection of the appropriate remedy. Thus at the onset of the disorder the discharges are at first purely fecal; presently they may assume a bright-yellow color, like that of the yolk of an egg; often they are intermixed with slime; and in other cases they present a frothy appearance. Under exposure to the air, the bright-yellow color of the evacuations often though by no means always changes to green. In other cases the green and yellow colors appear intermingled in the evacuations; while the presence of the small white specks, the caseine of the undigested milk, shows that the function of the stomach is disturbed by the same cause that produces the over-action of the bowels. From the admixture of the white and yellow, in these cases the stools have the appearance of chopped up eggs. As the disorder advances, the stools become more frequent and they are attended with much more distress,—each motion being evidently preceded or accompanied by griping or other pains. The symptoms of simple diarrhœa are, however, very variable in their character as well as in their intensity. Sometimes there is much suffering; sometimes very little, even in severe cases. In many instances the

* West on Diseases of Children, Phila., 1866, p. 508.

child does not seem, for a while at least, to be much weakened by the disorder; in others it very rapidly runs down. But these latter are rather cases of the severe or inflammatory form of diarrhœa, into which the simpler variety is very often apt to run if continued more than a few days.

In the inflammatory diarrhœa, so called, we find all the symptoms of true inflammation of the bowels and sometimes also of the stomach, in different degrees of violence; there are fever, thirst, tenesmus; colic; abdominal tenderness and heat; frequent, painful, slimy, bloody or even offensive discharges; great and rapidly increasing exhaustion; and evident tendency to hydrocephaloid, coma, or convulsions. Either the severity of the pain and fever, the putridity of the stools, or the occurrence of tympanitis, will indicate very great danger. When the attack comes on suddenly, it often commences with vomiting, and sometimes the irritability of the stomach becomes and continues so extreme that the least drop of fluid is immediately rejected; and frequent and distressing efforts to vomit occur when the stomach is entirely empty. Almost simultaneously with the vomiting occurs the relaxation of the bowels; and the child may have twenty or thirty, or even more evacuations in the course of twenty-four hours. These may be slimy and streaked with blood, or greenish and watery; or serous; or they may consist of intestinal mucus intermixed with feces and more or less streaked with blood. Where the stools are scanty there is usually much tenesmus followed by the discharge of a little mucus or a few drops of blood. With all these severe local symptoms the constitutional disorder is no less distressing; the pulse is quick, the skin hot and dry; and the child is either fretful and irritable when disturbed, or lies sleeping, apparently, with half open eyes. "The tongue at first is moist, coated slightly with mucous fur; its papillæ are often of a bright red, as are also its tips and edges, while if the disease continues the redness becomes more general, and the tongue grows dry, though it is not often much coated. The thirst is generally intense, the child craving for cold water and crying out for more the moment the cup is taken from its lips, and the thirst is quite as urgent even in those cases where the stomach is so irritable that it immediately rejects whatever is swallowed."—*West.*

Aconite. The skin is hot and dry; restlessness and much excitability; stools watery and often of a dark color. After the fever has subsided, we have but to wait and the diarrhœa will also disappear without the use of another remedy.

Antimonium c. White-coated tongue, some nausea, and watery evacuations; sometimes hard lumps of feces with the water.

Argentum nit. Much loud flatus passing with the stool.

Arsenicum. Much exhaustion and rapid emaciation, stools undigested; offensive and painful stools immediately after taking nourishment. Stool and vomiting at the same time.

Belladonna. The child is very drowsy, half sleeping, and half waking; much moaning.

Bryonia. Diarrhœa from hot weather; or it is aggravated by the return of every hot spell of weather.

Calcarea c. In children who have large heads and open fontanelles. The head perspires much, so as to wet the pillow far around. Muscles soft and flabby. The child awakens at three A. M.

Carbo veget. If Bryonia does not cure under these circumstances.

Chamomilla. Stools watery or greenish; or like eggs beaten up. The child must be carried; it is very feverish and cross. The stool has the odor of rotten eggs.

China. Painless and undigested, putrid stool; very copious stool, worse every other day.

Colocynth. The passages are small and frequent, with very much pain, causing the child to writhe and twist, as if in great distress, and to draw itself double.

Croton t. Colic and diarrhœa immediately after nursing. The stool escapes suddenly, as if with an expulsive spasm.

Dulcamara. Every cool change of the weather excites the diarrhœa;—it is excited also by exposure in cold, damp places.

Ferrum. Undigested stools, with easy vomiting of ingesta,—often with a very red face.

Graphites. Very frequent and small stools, with eruptions on the skin, from which oozes a gelatinous fluid. The stool is often sour and excoriates the external anus.

Hepar. Fetid stool,—the child itself smelling sour.

Ipecacuanha. Much nausea or vomiting; almost constant nausea. Fermented stools, particularly indicated at the period of weaning when food disagrees.

Lachesis. Excessively offensive stools; the child always awakens in distress.

Magnesia c. Stools resembling the scum of a frog-pond. Stools green and slimy, or watery and sour.

Mercurius sol. Much pain before the stool; great relief immediately after. Stools frothy, slimy, bloody, or dark-green,—with much

straining. The child's thighs and legs are cold and clammy, particularly at night.

Nux v. Alternate constipation and diarrhœa. Indigestible food has been the cause of the diarrhœa; the passages are small and frequent and painful; much fretfulness. Worse at four A. M.

Opium. Diarrhœa from fright.

Phosphoric acid. The diarrhœa does not seem to debilitate much, although of long continuance, and the mother wonders that the child remains so strong with it all.

Podophyllum p. Morning diarrhœa, green or watery; or the stools may be quite natural, only too frequent. Prolapsus ani and diarrhœa.

Pulsatilla. The stools are very changeable, no two alike; much worse at night.

Rheum. Very sour-smelling stools, attended with much pain. Very sour smell of the child, which cannot be removed by any amount of washing and care in keeping it clean.

Rhus t. Worse particularly after twelve at night; very restless after that hour.

Sepia. There is an almost constant oozing from the bowels.

Sulphur. Particularly in children of delicate parents. Much redness around the anus; or excoriation between the thighs, and upon the parts adjacent. Eruption of pimples upon the skin;—or if the child after getting better under other remedies, always gets worse again.

Veratrum. Much exhaustion after every passage,—with cold sweat upon the forehead and upon the skin in general.

Dysentery, Colitis — Inflammation of the Large Intestines.

Inflammation of the large intestines,—descending colon, rectum, ileum,—seldom occurs except in connection more or less obvious with that of the small intestines. As indeed this latter,—especially in infants and little children,—is usually connected with a greater or less amount of gastro-enteric inflammation. Thus dysentery, or colitis, as it is sometimes termed, may come on as a consequence of the extension of inflammation, which commencing in the stomach involves the entire digestive tract in its course. There are however many instances of pure idiopathic dysentery, which are directly traceable to exposure of the child to the cool, damp air,—especially at night,—with its abdomen and lower limbs insufficiently clothed. According to Dr. Condie, "Colitis would appear in the majority of cases to be the result of sudden transitions of atmospherical tempera-

ture, particularly the sudden change from warm and dry, to cold and damp weather. It is most prevalent during the latter part of summer, or the commencement of autumn, when the days are hot, but the nights chilly and damp. It is apt to prove *endemic* in unhealthy localities, especially those favorable to the production of intermittent and remittent fevers, and often prevails *epidemically*, with fevers of a catarrhal character. A few days of cool, rainy weather, occurring in the summer, will often cause the prevailing bowel complaints of children to assume a dysenteric character."

Except when the result of such endemic or epidemic influences, aggravated perhaps by personal exposure, dysentery is seldom met with in children before dentition has commenced. In these latter cases it evidently arises in consequence or in continuation of the gastro-enteric inflammation which so frequently attends difficult dentition.

Symptoms.—Dysentery is usually attended with considerable fever, with evening aggravation and thirst; there may be vomiting, especially of the copious drinks, or other ingesta; but usually the development of colitis tends to relieve in some degree the previously existing gastric irritation. The abdomen is tense, and tender to the touch, especially along the course of the descending colon. But the most characteristic symptoms of this disorder are the *painful discharges* per anum,—which are very frequent; but very small in quantity, and either composed of bloody mucus, pure blood, or mucus alone; —and the *tenesmus* which precedes, attends, or follows the discharges, or which may very frequently compel an abortive and exceedingly distressing effort at stool. In some cases the irritation is kept up by the presence in the bowel of retained feces; the usual peristaltic action of the intestine having been suspended by the influence of sudden change in the temperature. Such cases are marked by incessant calls to stool and almost constant tenesmus, which are either totally ineffectual, or result in the evacuation of minute portions of fecal matter with much slime tinged with blood.

But the symptoms of dysentery are so evident, that there is no necessity for enumerating them more at length; select that one of the following named remedies, or any other, which most exactly corresponds to the condition of the patient; and be particularly careful of exposure to the night air, not only during the continuance of the disorder, but even after convalescence has set in, for the relapse which would be sure to follow might prove more intractable than the original disorder.

Aconite. Much fever; dry heat; restless distress; an irritable or inflammatory state of the system. This remedy is often the specific for the entire case.

Aloes. Stools in consistence like jelly-cakes; a quantity of clear jelly, which may be green or white.

Alumina. Has to strain at stool in order to pass water; can pass water only while so doing.

Apis. Frequent bloody stools, without pain.

Arnica. Frequent stools of clear mucus, with tenesmus.

Belladonna. Much tenderness about the abdomen, so that even a little jar is painful. Flushed face, red eyes; much bearing down pain.

Bryonia. When caused by cold drinks; or by very hot weather.

Cantharis. The discharges are apparently the scrapings from the mucous membrane, streaked with blood; the urine is burning and very scanty, often passed in drops, and with much pain.

Carbo veget. In very advanced cases; coldness of the breath; heat about the head; desire to be fanned; putrid evacuations; great debility; a venous condition is gaining the ascendency.

Chamomilla. One cheek red, the other being pale; very cross and fretful; thirsty; bloody and mucous stools. The child wants to be carried all the time. The difficulty has been caused by checked perspiration.

China. The child is worse every other day; much flatulency, and distention of the abdomen, particularly in the afternoon.

Colchicum. Autumnal dysentery; passages like transparent mucus; or like jelly.

Colocynth. The crampy pains are very severe, causing the child to double up with every stool.

Dulcamara. If the dysentery is caused by exposure to cold and damp; or if it becomes worse as the weather grows cooler.

Ipecacuanha. Much nausea and vomiting, or constant nausea.

Mercurius corros. Very much pure blood is passed with the stool, with much tenesmus.

Mercurius sol. Not so much blood, more bloody mucus,—with tenesmus before and after stool.

Nux v. A small portion of natural feces is passed with every evacuation; no appetite; sleepless towards morning.

Phosphorus. Green and bloody passages, the anus remaining constantly open. If able to talk, the child will complain of a weak, empty feeling across the abdomen.

Podophyllum p. Evacuations of bloody and green mucus, with tossing of the head from side to side. (Worse in the forenoon.)

Pulsatilla. Mucus streaked with blood, worse in the evening and through the night; no thirst.

Rhus t. Is almost if not quite a specific where the pain runs in streaks down the limbs with every evacuation. Useful in cases with typhoid type.

Sulphur. The passages make the perineum red all around the anus. In scrofulous patients, and in those with eruptions more or less numerous upon the body.

Veratrum a. Great prostration after every evacuation, with cold sweat upon the forehead.

Cholera Infantum.

Much of what has already been said under the head of Diarrhœa, will apply to Cholera Infantum. This disease very often proves fatal, even under the best of treatment, since it appears usually in the latter part of the summer, when the young infant's system is already somewhat exhausted by the previous heat; when the air is impure and the weather sultry, or warm and damp,—and since it seems to spring up as an epidemic from some atmospheric miasm which is little less than malignant. In this worst form of infantile diarrhœa, all the symptoms seem to vie with each other in intensity; and the disorder runs a very rapid course. This course, however, is not always marked by a steady uniformity; sometimes the violence of the gastric symptoms will temporarily abate, and the diarrhœa continue in intensity; at other times the diarrhœa appears to become less frequent and painful, and the stomach more severely affected in proportion. And sometimes also a similar lull may be observed in the force of the whole disease; and the poor, worn-out mother can hardly realize that her child is not out of danger; can scarcely understand the physician who sadly explains to her that the improvement should come in a gradual decline, and not in a sudden subsidence of the symptoms. The former condition affords ground for hope; but the latter, in some distressing cases that have come under my observation, but preceded the onset of fatal convulsions.

In *Cholera Infantum* the *vomiting and diarrhœa* form the most remarkable symptom. The stomach is so irritable that it rejects immediately, and sometimes with violence, every thing which it receives; in the advanced stages of the disorder, the vomiting becomes spontaneous and the fluids ejected resemble those thrown

off from the bowels. The discharges from the bowels are ordinarily composed entirely of a perfectly colorless and inodorous fluid,—often containing minute mucous floculi. These stools are discharged without the least effort,—sometimes unconsciously. In some cases, however, they are very small in quantity and are squirted from the anus, as if from a syringe. In such cases there is usually more or less tormina and tenesmus. Sometimes the stomach seems to lose its irritability, and to allow whatever food or drink is taken in to pass through both it and the intestines unchanged, and to be immediately thrown off from the bowel in the same condition. But the extreme languor and prostration, and rapid emaciation, are as characteristic of this affection in infants and very young children, as of the corresponding Asiatic cholera in adults.

As the disease advances, the discharge becomes still more frequent, involuntary, "profuse, dark colored like dirty water, or the washings of stale meat, and very offensive. The emaciation of the patient becomes extreme; his eyes are languid, hollow, and glassy; his countenance pale and shrunken; his nose sharp and pointed; and the lips dry, thin and shriveled. The surface of the body becomes cool and clammy, of a dirty brownish hue, and often covered with petechiæ. The tongue is dark-colored, smooth and shining, or covered, as well as the parietes of the mouth, with aphthæ. In many cases the child lies constantly in an imperfect doze, with half-closed eyes, and so insensible to external impressions that flies will frequently light upon the half-covered eyeballs, without the patient exhibiting the least consciousness of their presence. The abdomen becomes more or less tympanitic, and the hands and feet of a leaden hue, or pallid and œdematous. The fauces becoming dry, causes a sense of uneasiness, which often induces the patient to thrust the hand deep in the mouth, as if to remove some offending substance. (*Belladonna.*) The patient, unless relieved from his sufferings by a judicious treatment, becomes daily more and more exhausted, rolls his head about when awake, and utters constantly short, plaintive, scarcely audible cries. He falls at length into a state of complete coma, death being frequently preceded by a convulsive attack. Not unfrequently, at an early period of the disease, the brain becomes affected, and the child dies with all the symptoms of acute meningitis."—*Watson.*

Antimonium c. White coating on the tongue; nausea, retching, coughing,—sometimes vomiting and watery diarrhœa.

Arsenicum. The child is very weak; the slightest effort seems to

exhaust it, such as vomiting, &c. Intense thirst, with vomiting immediately after drinking. Vomiting and purging at the same time. Coldness of the extremities; worse after midnight.

Bryonia. When hot weather, seems to develop the attack. The child vomits its ingesta immediately. Lumpy diarrhœa; colic, with much thirst; lips dry and parched.

Calcarea c. In leucophlegmatic children during teething. Swelling and hardness of the abdomen; flabby muscles; skin dry and shriveled; hair dry; with the hair looking like tow.

Camphor. The skin is cold as marble, yet the child will not remain covered; much prostration and diarrhœa. Sometimes these cold spells only come on at night and pass off in the morning.

Carbo veget. Similar to Bryonia,—may be used when that remedy appears to be indicated, but fails to cure.

China. Very flatulent diarrhœa, containing portions of the ingesta, stools fetid, and occurring immediately after eating. Partaking of fruit may have been the cause of the attack.

Croton t. The stool occurs suddenly,—one gush and it is finished.

Dulcamara. Every cool change in the weather, or an unusually cool night, causes a relapse; or such condition of the weather appears to cause the attack at its first onset.

Gratiola. Violent vomiting and purging of yellow substances, and much flatulency.

Ipecacuanha. *Much nausea* and vomiting, or almost constant nausea,—these symptoms predominate. Watery diarrhœa, or green, or still more particularly, fermented stools.

Mercurius sol. The child has colic, slimy, and sometimes bloody stools, with tenesmus, the colic being relieved immediately after the stool. There is often much perspiration, particularly upon the thighs,—where it is cold and clammy. The child is worse in the early part of the night, and is very weak.

Nux v. In cases where some marked error in diet has caused indigestion; or we may think of Nux after Ipecac. has failed.

Podophyllum p. Exceedingly offensive stools, which are most frequent in the morning. Moaning during sleep, with half-closed eyes, and rolling the head from side to side.

Secale c. Great debility, vomiting and diarrhœa; much thirst; pale face, sunken eyes, dry heat, quick pulse, restlessness, and sleeplessness.

Sulphur. When there are repeated relapses; or when the case

seems to linger; with excoriations, redness about the anus; eruptions; weak spells; sleeps with frequent waking.

Veratrum. The least motion increases the nausea. Cold sweat on the *forehead,* from vomiting, with great prostration. Pulse almost imperceptible. The least quantity of liquid excites vomiting, which is followed by cold sweat on the forehead. Prostration, with cold sweat and cold breath.

Vomiting.

Vomiting in infants and little children constitutes one of the most obvious symptoms of indigestion. This, as already stated, may be merely an effort of nature to relieve the overloaded stomach. But, in a large number of cases, the vomiting, while it forms but a single one with other symptoms, indicates a still more serious disorder of the stomach. And from the explanation, above given, of the nature and progress of indigestion, it will be seen why vomiting should often be accompanied with diarrhœa. In the more severe forms of gastro-intestinal disease this is always the case; and this connection was especially shown in the consideration of cholera infantum in the preceding section, where these two characteristic symptoms were discussed together.

Vomiting differs in different cases, in accordance with the nature and extent of the morbid influence upon which it depends. Thus, we may note several kinds of vomiting which may occur in infants:

First. That simple regurgitation of food taken in excess, already sufficiently described.

Second. Acid and sour-smelling vomiting; vomiting from indigestion; and such as appears to result from gastric or general fever.

Third. Bilious vomiting,—vomiting of greenish or bitter fluids, either separately or mingled with food. This form may imply functional disturbance of the liver; or it may simply result from gastric irritation and straining to vomit, which causes an actual regurgitation of the bile.

Fourth. The vomiting which accompanies severe forms of diarrhœa, as in cholera infantum, inflammatory vomiting and diarrhœa; the discharges from the stomach may be watery.

Fifth. *Vomiting of blood;* a rare form of disease in very young infants; occurring within a few days, sometimes within a few hours after birth; and accompanied by *purging of blood.* This seems to result from engorgement of the liver and abdominal veins, and may

arise from interruption of the circulation by external compression in difficult labor.— *West.*

Sixth. Fecal vomiting, indicative of obstruction of the bowels,— as in cases of most obstinate constipation, of intussusception, and of strangulated hernia.

Seventh. Vomiting which occurs as symptomatic of other diseases. Of these we mention, that which appears as one of the most important symptoms of *incipient cerebral disease:* "Nausea and vomiting are seldom absent. I am not acquainted with any one symptom which should so immediately direct your attention to the brain, as the occurrence of causeless vomiting, and especially its continuance. At first, perhaps, the child vomits only when it has taken food; but before long the stomach will reject even the blandest fluid, and then the efforts of vomiting will come on when the stomach is empty, a little greenish mucus being rejected with no relief, the retching and vomiting soon returning." This may continue for several days before any other indication of cerebral disease is discovered; and, in this connection, the bowels are usually, although not invariably constipated. The persistence of intractable vomiting, in the absence of any other cause, either in the quality of the food, or in the state of the digestive apparatus, will occasion a very strong suspicion of deep-seated dyscrasia, powerfully affecting the organic nervous system, and threatening to develop itself in the form of hydrocephalus, either acute or chronic. The vomiting which so constantly precedes the attack of scarlatina is well known; and in this case, as in that first mentioned of incipient cerebral disease, the severity and persistence of the symptomatic vomiting bear some proportion to the gravity of the subsequent disorder. For further consideration of this subject, see succeeding section on Hydrocephalus.

In the treatment of vomiting, careful attention must be given to all the accompanying symptoms and conditions, even to the observation of the state of the pupil of the eye; to the scrutiny of the discharges themselves; and to the absence or presence of known causes and attendant circumstances.

When there is *vomiting of blood,* first be sure that the blood does not come from the nipple; if it does, a little pressure upon the neck of this organ will cause it to appear.

For the several kinds of vomiting, study the following remedies:

Vomiting of blood:

Arnica. May be needed if the child has been injured.

Arsenicum. The child seems weak and much exhausted.

Ipecacuanha. Much nausea and vomiting of blood.

Nux v. Constipation; violent vomiting of arterial blood.

Regurgitation, or vomiting of milk:

Bryonia, Calcarea c., Cina, Iodium, Ipecacuanha, Lycopodium, Nux vomica, Silicea, Sulphur.

Vomiting of ingesta:

Calcarea c., Cham., China, Ipecacuanha, Lycopodium, Nux vomica, Phosphorus, Pulsatilla, Sulphur.

Bilious vomiting:

Arsenicum, Bryonia, Cham., China, Ipecacuanha, Mercurius, Nux vomica, Pulsatilla, Sepia, Veratrum.

Fecal vomiting:

Belladonna, Nux vomica, Opium, Plumbum.

CHAPTER FORTY-THIRD.

DISEASES OF CHILDREN—CONTINUED.

LESIONS OF THE RESPIRATORY MUCOUS MEMBRANE.

THE great majority of the disorders incident to infants and young children consists in affections of the gastro-intestinal and respiratory mucous membranes. The latter organs, especially, are so exceedingly delicate as to offer but inefficient resistance to the many noxious influences inseparable from atmospheric vicissitudes; and, at the same time, they form the seat of development for various constitutional dyscrasia, and actively sympathize with morbid processes in other organs. Although it is stated on the authority of Professor Jörg, of Leipsic, that the great sensibility of the lining membrane of the respiratory apparatus does not exist in the same degree in the first month or two of infantile life that it does afterwards. "The exposure of an infant two or three weeks old to a low temperature, or to a vitiated air, will be followed by disturbance of the functions of the liver and the occurrence of jaundice; or perhaps by such depression of the muscular power as to render the child incapable of taking a full inspiration, so that its lungs collapse, and it dies from disease of the respiratory organs, but without the cough or bronchitic symptoms, which would not fail, if it were a little older, to announce the irritation of the mucous membrane of the air-tubes." To this remark,

however, coryza forms an exception; since this affection is often seen to prove very annoying at an early period of infantile life. *Catarrh*, *Bronchitis*, and *Pneumonia*, seem to follow in order, in unison with the development of the child's physical system; and each disorder prepares the way for that which may follow,—the last form seeming in some cases to be but the extension and development of the first.

Coryza.

Coryza, *snuffles*, or cold in the head, is one of the earliest and most common affections of the young infant. Sometimes the first that is known of it is, that the infant's nose is stopped up, so as to hinder its respiration while at the breast. The swelling of the mucous membrane of the nares, and especially the accumulation of the secreted mucus, not only hinder the little sufferer from breathing through its nose, as is its wont in nursing, but occasion also during its sleep the peculiar snuffling sound,—similar to snoring in adults,—which gives to this disorder its popular name. In some cases there is a considerable flow of mucus; and all the symptoms resemble those seen in the epidemic influenza of older children. Here the *Euphrasia* deserves attention,—in addition to the remedies commonly used,—since it will often be found to correspond in a remarkable manner with the totality of the symptoms.

In other cases there appears to be "something more than a simple inflammation of the Schneiderian membrane, since it either secretes a very tenacious mucus in extreme abundance, or becomes coated with a false membrane, which sometimes extends even to the tonsils and palate. Cases of this kind are usually associated with extreme depression of the vital powers, and have received on this account the name of *Coryza Maligna*. I have no doubt of their identity with diphtheria,—of which they constitute the form known as nasal diphtheria."—*West*. In addition to the *Kali bi.*, those two more recently proved remedies, *Cubebs* and *Arum triphyllum*,* will be suggested to the Homœopathic practitioner, to whom the totality of the symptoms of each case is every thing, while the name by which the disease may be designated is of small account.

Where the coryza tends to become chronic, and to maintain itself in spite of the indicated remedies, we must look still deeper into the nature of the case, if not before. Since this very disposition to persistence evidences some constitutional taint,—either scrofulous or

* Hahnemannian Monthly, vol. II., pp. 213 and 459.

worse,—which had not otherwise been discoverable. Indeed, chronic coryza fully developed and established, wants only the intolerably offensive odor of the discharge to become a veritable *ozæna*. This latter will of course consist in an ulcerated state of the mucous membrane of the nares; and may be purely scrofulous in its origin,—or dependent upon some more or less remote syphilitic taint in the system. The history of the case and the attendant symptoms will usually show the nature of the affection; and in his diagnosis the physician may sometimes be assisted by observing in spots the minute traces of a characteristic, copper-colored eruption. By thus adapting his remedies to all the conditions and symptoms of the case, he may well hope, in a short space of time, to remove the primary affection of the nasal mucous membrane of the young infant, which if not thus early eradicated will presently extend itself to the adjacent mucous surfaces and become a much more formidable and intractable kind of disease.

Calcarea c. This medicine may be appropriately given after Chamomilla, when that remedy seems indicated but fails.

Carbo veget. If the coryza return in the evening.

Chamomilla. When there is a watery or mucous discharge. The child is quieted, and in fact relieved by carrying it up and down the room.

Dulcamara. The child gets worse at every cold change in the weather, or from exposure to cold air.

Kali bi. An invaluable remedy when the discharge from the nose is tough and stringy; sometimes it seems to extend to the throat and to cause choking.

Mercurius. The nostrils are red, raw and ulcerated.

Nux v. The catarrh is worse at night, particularly towards morning, or in the morning. Through the night the nose is very dry.

Pulsatilla. Coryza much worse every evening; better every morning.

Sambucus n. The nose seems *perfectly dry* and completely obstructed.

Sticta p. There is a constant irritation in the nose, to blow it,—but no discharge.

Tartar e. Obstruction of the nose, and at the same time much rattling in the bronchia.

Catarrh of the Bronchia.

The catarrh of the bronchia, to which infants are remarkably liable, may appear simply as an extension of the above-described coryza or cold in the head. This affection may arise from slight variations of temperature; and it may appear simply from sympathy of the respiratory mucous membrane with the irritation of teething; and in this connection it occurs sometimes in alternation with attacks of diarrhœa. And the same disposition to alternate bronchial catarrh may also be observed on the still broader scale of the different seasons of the year. In the summer months, and also in September, the atmospheric and other morbid influences almost invariably tend to develop disorder in the bowels; while in the earlier months of spring, in the later months of autumn and during the winter, the same morbid influences would manifest themselves in bronchial catarrh, or in some more positive inflammatory disorder, not only of the respiratory mucous membrane, but also of the subjacent tissues and organs.

Bronchial catarrh, in little children and very young infants, may result from a primary inflammation or actual bronchitis; or it may appear as the original and essential morbid condition, and constitute the whole disease. It is in this latter point of view, and the one which more frequently occurs in little children, that we principally consider this disorder here. Like simple catarrh in old people, this affection occurs most frequently in those who are delicate and weakly; and the more delicate the patient the more profuse is the discharge. Nor is this contradicted by the fact that very fat or fleshy and leucophlegmatic infants are peculiarly liable to this catarrh, and to suffer severely from it, even to be very dangerously affected by it.

In the consideration of the danger of this affection, its seat and exact extent will require especial attention. For so long as the catarrh is evidently restricted to the larger bronchia, the disorder which it occasions is by no means severe. And in fact many attacks are either self-limited and transient, or pass off under the influence of the simplest domestic treatment. But when the catarrh extends to the bronchial divisions of the second order,—to those which are medium sized,—the disorder assumes a gravity much greater than that presented by similar cases in adults. But when the catarrh extends still further and involves the ultimate ramifications of the air-passages, the danger is extreme; since, in addition to the serious impediment to the vital function of aëration, offered by such more or less complete closing of the air-cells, such infiltration of the minuter bronchia

is almost necessarily followed by a true lobular pneumonia. And, besides all this, the profuse secretion is itself exceedingly debilitating.

Study the remedies indicated under Bronchitis.

Bronchitis.

In the preceding section, under the head of Catarrh, was described what by modern pathologists would be termed the sub-acute form of bronchial inflammation. In this form there is little fever, but much catarrhal secretion; and the disorder principally invades the delicate and the weakly. The acute form of bronchial inflammation, that which is generally understood by bronchitis, displays at first more fever; upon the subsidence of this the catarrhal secretion may make its appearance as a critical discharge. This form of disease is the one which oftener attacks children apparently robust; and in some,—whose constitutions are far from being so good as they seem,—the disorder runs a very rapid course, and is succeeded by a mucous secretion, dangerous in proportion to its abundance,—and abundant in proportion to the plumpness and apparent heartiness (and real weakness) of the child.

The disease results from exposure to a low or damp temperature, or from a sudden transition from heat to cold; sometimes it appears to prevail epidemically. Sometimes also it appears as a complication of epidemic eruptive fevers,—especially measles. It commences with the ordinary symptoms of cold in the head,—such as sneezing, running at the eyes and nose, hoarseness, cough, dry, hot skin, and accelerated pulse. In fact a severe attack of bronchitis usually consists in an extension into the air-passages of inflammation originally commencing in the form of influenza. The child cries when it is put to the breast or attempts to swallow; it is disturbed by frequent fits of coughing, which is at first short and dry, but soon becomes wheezing and rattling, and it appears oppressed with tightness of breathing. As the inflammation extends more and more through the ramifications of the bronchia, the febrile symptoms become more developed and the skin burning, hot and dry; the pulse is rapid; there is considerable restlessness, panting of the breath, tossing of the head about from one side to the other, flushing of one or both cheeks, the cough being constant with little or no expectoration, and on putting the ear to the chest sibilant or whistling, with harsh mucous or subcrepitant râles are heard at different parts, proving the extension of the inflammation throughout the whole chest. The symptoms are aggravated towards evening; and as the disease subsides, the respiration becomes

more free and the cough loose and easy,—the sound of the cough itself being the only guide in this respect in young children, since the phlegm is always swallowed. When the disease occurs in the most acute form, the catarrhal symptoms are frequently absent and the attack sudden; on the other hand, a low form of sub-acute bronchitis, which has originated in a slight catarrh or influenza, often constitutes a protracted and dangerous variety of the disease.

Bronchitis arising from an extreme and sympathetic irritability of the mucous lining membrane of the air-passages, constitutes a very distressing complication in measles. In such cases, where the cough is dry and almost spasmodic, incessant, accompanying every breath, with imminent danger of congestion, *Ipecacuanha* has given immediate relief. In the severer forms of acute bronchitis, the subsidence of the primary fever is succeeded by a profuse secretion of (tenacious) mucus, which chokes the bronchial tubes and effectually excludes the air from a considerable portion of the air-cells and blood-vessels. The little sufferer is in great danger of perishing, in such cases, from slow suffocation. The countenance becomes livid, the extremities cold and lead-colored, drowsiness supervenes,—which may be followed by coma, convulsions, and finally by fatal asphyxia. To the above description of bronchitis,—drawn principally from Leadam,—it may be sufficient to add, that this disorder in its initial stages may be distinguished from pneumonia, by the external, catarrhal symptoms; subsequently by the distressing and paroxysmal nature of the dry and almost spasmodic cough; by the absence of the shortness of breath; by the wheezing and whistling sounds; and finally by the very copious, sometimes stringy and suffocative secretion of mucus, which in the third stage of the disorder either concludes it, by a favorable resolution, or destroys the patient's life by suffocation.

Aconite. When the fever runs very high; hot skin; much distress and great restlessness.

Arnica. The child cries every time it coughs.

Arsenicum. When there is great prostration; restlessness after twelve at night; it drinks little and often.

Belladonna. The mucous râles are large and crepitous, hoarse cough; much moaning; moaning at every breath.

Bryonia. Respiration much oppressed; dry, cracked lips; cough worse after drinking; constipation of dry, black, burnt-like looking stools.

Calcarea c. Much mucus in the chest. In phlegmatic children

large and open fontanelles; much perspiration on the head, so that the pillow is wet far around.

Chamomilla. The child is very cross and fretful; one cheek red, the other pale; must be carried to be appeased.

Cina. Vermiculous symptoms prevail; such as picking the nose; nothing satisfies the child.

Drosera. The fever and the cough,—which is very hoarse,—are worse after twelve at night.

Dulcamara. The disease has been induced by cold damp air.

Hepar. The child seems croupy, decidedly so, and the phlegm is loose and choking.

Ipecacuanha. Much nausea and vomiting of mucus; the cough is strangling and suffocating, so much mucus seems to be accumulated in the bronchial tubes.

Lycopodium. There is much oppression of the chest; and the *alæ nasi* are seen to dilate or spread out wide, like the large end of a trumpet, and then to contract alternately.

Nux v. The child is always worse after four o'clock in the morning.

Phosphorus. Severe and exhausting cough, which the child dreads and avoids as long as possible. The case becomes worse in the evening; and continues so during the night. The fever is often very high; and the pulse very rapid.

Pulsatilla. The cough is very loose, and with all the fever there is but little or no thirst. The child gets worse towards evening; and it has more difficulty of breathing when it lies on its side.

Silicea. In children who have large bellies; perspiration about the head; of a scrofulous constitution.

Sulphur. The child has papular eruptions upon its skin; rather inclined to excoriation; much rattling of mucus in the chest; sleeps in very short naps, frequently awaking.

Tartar e. Much thirst; wishes to drink little and often. When the child coughs there appears to be a large collection of mucus in the bronchial tubes; and it seems as if much would be expectorated, but nothing comes up.

Pneumonia.

As an idiopathic disease, inflammation of the lungs is comparatively rare in infants, never occurring, it may be affirmed, except in those who have a decided constitutional predisposition to such affections. Such predisposition may be traced in little children whose parents,—one or both,—have suffered with pulmonary phthisis.

Infants born from such parents,—one of whom may have recently died with consumption,—when but a few months old, have been observed to fall victims to pneumonia developed in a very rapid manner, and under the influence of scarcely noticeable external causes.

It is not always easy to determine, at the first, and with any degree of positiveness whether an infant is suffering with pneumonia, or with bronchitis; nor in fact is it absolutely necessary for the Homœopathic treatment. Since we carefully select the remedy which is the exact simile of the existing symptoms and conditions; nor will the prescription be properly influenced by our *pathological interpretation* of these symptoms. And indeed in many cases both forms of inflammation,—that of the parenchyma of the lungs and that of the mucous lining membrane of the air-passages,—run into each other; and the pneumonia of infants is as apt to be associated with bronchitis, as that of adults to be complicated with pleurisy. The *sputa*, alike characteristic in bronchitis and in pneumonia, afford no aid where the patient is either an infant or a very young child,—since these little folks never expectorate. The existence of the mucous râle distinctly confined to one lobe of the lung, and a circumscribed redness in the cheek of the same side, would afford strong presumption of pneumonia. In this latter disease, also, the cough is less violent, though frequent and short, and it is not so much attended with rattling of mucus; there is often a circumscribed redness of the cheek of the same side with that of the inflamed lung; and the child evidently prefers lying on the affected side. Where the pneumonia invades both lobes of the lungs,—which, however, may be a successive development,—there will be still more evidence of congestion; flushing of the face and hurried and short respiration, and rapidly increasing exhaustion. The history of the case, and its relation to hooping-cough, to influenza, or to measles,—either of which may remarkably tend to develop such phenomena,—will greatly aid in the diagnosis; and the same is true of the previous history of the patient and of his hereditary proclivities.

In pneumonia, at its onset, as in bronchitis,—the fever comes first, with dry cough; then the fever abates somewhat, as the cough becomes more loose and catarrhal. But in no stage of the disease does the cough assume the paroxysmal and almost spasmodic form so often seen in bronchitis, and which results from the tenacious nature of much of the secretion in this latter disease and the consequent difficulty of starting it from the bronchia. The first stage of pneumonia

is characterized by nervousness, fretfulness, and restlessness; constipation of the bowels and sometimes vomiting; redness of the tip of the tongue, the latter coated white in the middle; the child breathes through the open mouth, instead of through the nose; he sucks by starts, because he cannot breathe as usual through the nose while nursing; he "seizes the breast eagerly, sucks for a moment with greediness, then suddenly drops the nipple, and in many instances begins to cry."

In the second stage the little patient becomes languid, sometimes drowsy; the respiration is more evidently hurried, "the *alæ nasi* are dilated with each inspiration, the abdominal muscles are brought into play to assist in its performance, and any change of posture renders the breathing more labored and more hurried. The cough becomes much more frequent; it is still hard, sometimes evidently painful, so that the child cries at each cough; at other times it is an almost constant, short hack." As the disease still advances the bright flush of the face and the florid tint of the lips subside; the body remains very hot, while the extremities may become cool; the face may appear pale and the lips assume a livid hue where the pneumonia is very extensive. The babe becomes still weaker, vomits the food, which it takes greedily from the severe thirst; and finally, through the hurried nature of the respiration, becomes incapable of nursing at all.

In the third stage, the respiration becomes more labored and *irregular*, though less frequent. The little sufferer loses its voice; or becomes very hoarse and almost entirely incapable of coughing. The face is sunken, the extremities cold; the pulse extremely small, and so frequent as to be almost impossible to count. The child is restless at intervals, or lies in a state of half-consciousness; and suffers very much from dyspnœa on being moved. The face and nails exhibit a livid hue, if the disease advances unchecked; and coma and convulsions close the sad scene.

During dentition, under the attack of measles, and the prevalence of influenza, infants are especially liable to become subject to pneumonia; at such times, therefore, the physician will most carefully scrutinize every symptom which might indicate the onset of a disease that is alike insidious and fatal in the aged and in the very young. The only other form of disease for which infantile pneumonia might be mistaken is incipient hydrocephalus; to this error, the vomiting, the fever, restlessness and constipation,—which are alike common to both diseases,—might easily lead those not on their guard. And this

the more especially, since according to Dr. West, to whose work we are much indebted in the above description,—the cough in some cases of pneumonia is at first so slight as scarcely to be noticed; and even where it is more strongly marked, it might easily be mistaken for the sympathetic cough which is sometimes present in the early stages of hydrocephalus.

Aconite. If the child has a truly synochal fever; is very restless, with much oppression of the chest and anxiety. It can scarcely cough, the suffering is so intense.

Belladonna. Face very red, and eyes injected. The child moans with every breath. Its skin imparts a burning sensation to the hand.

Bryonia. The child cannot bear to be moved,—the least movement so greatly increases its sufferings. Dry and parched lips; mouth dry; constipation,—feces hard and dry as if burnt,—usually of a dark color.

Lycopodium. Decided flapping, or fan-like motion of the alæ nasi,—they dilate widely and extremely and then contract alternately.

Mercurius. Much fever; thirst; salivation; a profuse perspiration which affords no relief.

Phosphorus. Particularly in tall and slender children; cough violent,—sounding dry or loose,—panting respiration; hoarse towards evening.

Sulphur. In cases attended with pustular eruptions; skin rough, and scaly; and other indications for this remedy.

Calcarea, and **Hepar,** should also be studied; the former in very fat children especially.

Croup—Cynanche Laryngea, or Trachealis.

Croup is an especial disease of little children, and it by no means spares young infants. Strictly speaking, it is an inflammatory affection of the mucous membrane, first of the larynx,—and subsequently of the trachea also. Under the general name of *croup* are popularly included two distinct forms of disease;—one the inflammatory, or the true croup; the other the spasmodic or spurious croup. The inflammatory, or *membranous croup* is gradual in its onset and insidious in its character; and unless arrested by the appropriate medication it is pretty certain to terminate fatally. The spasmodic, or false croup, is not attended with formation of false membrane; and though much more sudden and violent in its onset, it is far less dangerous in its nature. The true, membranous croup has an element of persistence

and the great hoarseness may remain for a long time unabated, as well as the other symptoms; and give the physician much anxiety about the ultimate result, even when improvement is actually taking place as rapidly and favorably as possible. And in no other disease is the triumph of Homœopathy over Allopathic practice more evident or more grateful than in this. Three-fourths of the cases of membranous croup confessedly perish under Allopathic treatment, and no small proportion of those of the spasmodic variety; while those who survive, especially an attack of true croup, have been so barbarously treated, with blisters, cups, leeches, purgatives, emetics, *et id omne genus*, that they remain for a long time enfeebled. In the Homœopathic practice on the contrary, a case of croup is very seldom lost,—even of the membranous variety,—and never, we think, save from want of attention and care on the part of the nurse, failure to call in the physician before the disease has too far advanced,—or failure on the part of the physician himself to administer the remedy required by the exigencies of the individual case.

Etiology.—Croup is developed in constitutions predisposed to this disorder, by a variety of causes which in other persons might have resulted in simple catarrh, or pneumonia. The most frequent cause, however, is exposure to cold and damp. We remember an exceedingly obstinate case of croup occurring in a little boy, in consequence of his sitting playing in the damp snow. It has been remarked by the physicians of Edinburgh, that the croup occurs, among the poorer classes, in that city, most commonly on a Sunday or Monday, and they account for it by the fact that the cottage floors are usually washed on Saturday afternoon, and remain very damp. We remember a remarkable case of croup which resulted from a leak in the roof, by means of which the moisture penetrated the ceiling of the child's sleeping chamber,—after a heavy rain in winter,—and rendered damp the papering of the walls in the corner where his bed was placed. Particular states of the atmosphere and wind sometimes seem to favor an epidemic development of croup; and this may be in dry cold air, as well as in the wet.

Symptoms.—The *membranous* croup may begin with simple *hoarseness*, followed by an occasional *hoarse cough*, which to uneducated ears has no particular significance; but which to the initiated announces the preliminary stage of this much-dreaded disease. In some cases related by Allopathic writers, the children thus affected were stated to be already past all hope of recovery, while yet able to play about the room! This hoarseness may continue and the hoarse cough

become more frequent, for two or three days before the illness of the child becomes so obvious as to seriously alarm the parent. But usually towards evening these cases become very much worse; but the next day the child seems so much better, the fond mother allows herself to think the danger is passed. But the second and the third night soon undeceive her; when, if unarrested by the Homœopathic remedy, the gradual but sure development of the false membrane threatens to destroy her child with slow suffocation.

In many cases of true membranous croup, however, the symptoms are much more severe from the first. "The child, after retiring to rest, suddenly awakes from his sleep, with difficult and wheezing respiration, and frequent paroxysms of loud, ringing cough; his skin is intensely hot, his face flushed, and his voice hoarse and indistinct. In general, these symptoms after a short period gradually abate; the respiration becomes more free, the patient falls asleep again, and on awaking in the morning, with the exception of some degree of hoarseness and a slight cough, presents no symptoms of any serious disease:—the pulse however will, in general, be found to be more frequent than natural, and the cough more hoarse and resonant.

On the ensuing evening the respiration becomes again suddenly difficult, loud and wheezing, and the cough convulsive and ringing; the patient experiences a sensation of impending suffocation, and carries his hand to his throat, as if to remove the cause of his suffering. His face becomes swollen and flushed, his pulse hard and frequent, and his voice hoarse and almost inaudible." These symptoms become more and more intense, unless the progress of the disease is arrested by appropriate medication; while the remissions become shorter and less distinct. The cough loses its acute ringing sound, while the loud wheezing respiration of the patient is heard beyond the apartment he occupies. The dyspnœa becomes excessive; the patient is in a constant state of agitation; his face is swollen and livid; his lips purple, and his forehead covered with large drops of perspiration. The skin becomes cool, the pulse small, feeble and extremely rapid; the thirst is often intense. By the cough, assisted sometimes by vomiting, a quantity of thick, ropy mucus, and even fragments of the false membrane are expelled. If a tubular portion of the false membrane is thrown off, great relief may result.

In the *spasmodic* or non-membranous form of croup, these symptoms from the first are much more violent still; and the onset of the disease is correspondingly sudden. The patient who retired to bed, apparently in perfect health, is suddenly awakened from sleep with a

violent fit of loud, ringing cough; his respiration is loud, wheezing and oppressed, and attended with a feeling of immediate suffocation. As in the former variety, the difficulty of breathing and cough occur in paroxysms, which as the disease advances become more and more frequent, until there is no longer any remission. While the attack, by its suddenness and violence, announces no small degree of danger, still it gives some reason to hope the case is rather one of the spasmodic than of the membranous form of croup. In the more advanced stages of croup the evidences of the formation of the false membrane become too positive to be denied. Still the same great symptoms of hoarseness, peculiar ringing cough, and loud wheezing or sibilant (hissing) inspiration, and dyspnœa, appear in both varieties of croup; in different degrees of intensity according to the severity and more or less advanced stage of the case.

A brief recapitulation of the *symptoms of croup*, that is of those common to both forms, will enable the physician the better to recognize the disease and to select the simile for each case.

The *hoarseness*, which comes on gradually in the membranous croup, and more suddenly in the inflammatory variety, in either form remains during the remission. The alteration of the voice gives what is recognized as the croupy tone; but this sounds very differently in different cases. Sometimes it resembles the crowing of a cock, or the barking of a dog; in some cases it is hollow and deep; in others screeching, lisping or wheezing; in others again the voice is entirely suppressed as the disease advances, and in some rare instances, from the very first.

The *cough* also has various sounds; it may be violent, short, shrill, hacking, afterwards crowing, hollow and harsh; it may be simply hoarse; or sound as if the child were coughing into an empty pot or metallic tube. In general the cough is dry; and it is followed by the peculiar sonorous, loud-sounding, or hissing inspiration. As the disease advances, the cough acquires a husky or even muffled sound, which would indicate the effusion of coagulable lymph.

The *respiration* becomes short and difficult, in paroxysms; with loud and wheezing, hissing and sawing inspirations. As the disease advances the paroxysms become more severe, the dyspnœa more terrible; "the little patients raise themselves up, want to leave their beds, grasp at the larynx; in order to remove the obstacle from the throat, they put out their tongues, throw their heads back, and breathe in this way with the windpipe pushed forward; there is an evident endeavor to elongate the neck, and to stretch it upwards

and backwards. According to Heim, this is a sign of membranous exudation having taken place."—*Hartman.* After these violent paroxysms of orthopnœa, the sufferers fall back exhausted and sometimes sleep.

The later stages of the disease are marked by the blue or livid color of the skin, the result of deficient oxygenation of the blood; swelling of the face and neck, from obstructed circulation; and drowsiness, &c. The fever, which from the first is strongly marked, becomes still more intense as the disease advances; there is great thirst, and little or no difficulty of swallowing; while the pulse becomes irregular and rapid in the paroxysms; and more and more faint with the rapidly increasing debility.

There are numerous other symptoms, either common to croup, or peculiar to individual cases, which it is impossible and indeed unnecessary to enumerate here or among the indications for the various remedies. But the most remarkable and characteristic have been mentioned, in either case; so that the practitioner, however inexperienced, need be at no loss to know on the one hand what he has to contend with or to determine the appropriate remedy, on the other. It should be remembered, that croup is one of the few diseases in which it may be necessary to awaken the patient in order to give the medicine regularly. For if allowed to sleep too long at a time, the disease makes very great progress. This is however principally to be observed by those who use the lower Homœopathic preparations. In badly-treated cases there may be noticed sometimes a strong disposition to the development of bronchitis or even of pneumonia, as the successor of croup; but this will very seldom occur under the Homœopathic *regime.*

Aconite. This remedy should always be given at the first; it will often prove to be the only one needed, if given right; unless some other remedy is strongly, in fact I might say, perfectly indicated. Aconite will be especially called for, if there is a high fever, skin dry, much restlessness and distress. "*Cough and loud breathing during expiration,* but not during inspiration. *Every expiration ends with a hoarse hacking cough.*"*

Belladonna. If the cough is hoarse, causing the face to flush, and the eyes to become red.

Bromine. *Spasm of the larynx; suffocative cough; hoarse, whistling, croupy sound with great effort; rattling wheezing; gasping, impeded*

* Dr. W. E. Payne, U. S. Journal of Homœopathy, Vol. II., p. 521.

respiration; heat of the face; formation of a false membrane in the larynx and trachea; much rattling in the larynx when coughing.

Chamomilla. With this unusual remedy, I once cured a very bad case of croup, when all other medicines had failed to afford relief;—and I despaired of the child's life;—from observing very strongly marked in this case that characteristic symptom of Chamomilla—the child must be carried up and down the room for relief—I was led to give this remedy, which, much to my delight, was followed by speedy recovery.

Hepar. If there is a rattling, choking cough, becoming worse particularly in the morning part of the night.

Iodine. Always indicated when there is pain in the chest and larynx. If the child is too young to express its feelings, it will grasp these parts with the hand. The child is pale. *Coldness of the face in very fleshy children.* The voice has a deep, hoarse, rough, sound.

Kali bi. Croup with expectoration of tough, stringy mucus.

Lachesis. This remedy has cured very far advanced and apparently hopeless cases of croup, indicated particularly by *very distressing aggravation after sleeping, as if the child were dying.*

Phosphorus. When a hoarseness remains after croup; and when there is a tendency to relapse.

Spongia. The cough is dry and sibilant; or it sounds like a saw driven through a pine board, each cough corresponding to a thrust of the saw.

Tartar e. When there is a sound as if a large quantity of mucus were in the bronchial tubes, while none is expectorated. And there is apparent danger of suffocation.

Hooping-cough—Pertussis.

Hooping-cough is an epidemic or contagious affection, which, at its first onset, appears as catarrhal; then becomes nervous and paroxysmal; and finally convulsive and again catarrhal. It particularly attacks little children; and seldom occurs twice in the same individual. Adults are not always exempt when exposed to its influence for the first time; and it constitutes one of the most dangerous forms of disease to which young infants are liable. At its first appearance, this affection is scarcely to be distinguished from a common cold; but when fully developed, it is characterized by a convulsive cough in which the attacks, occurring at longer or shorter intervals, are composed of sudden, jerking and noisy expirations, and followed by inspirations, anxious, protracted, and still more sonorous.

When left to itself and uncomplicated, hooping-cough runs a regular and progressive course, occupying about six weeks in each of its successive stages of development, persistence and decline. But the disorder, in each case, proves more or less severe in intensity and various in manifestation, according to the nature of the individual constitution in which it is implanted; in some instances it takes no very severe hold upon the system; in others it seems to develop organic, pulmonary, or bronchial disease. In others again it more powerfully affects the cerebro-spinal nervous system, and terminates in convulsions, which, arising in consequence of nervous exhaustion, soon destroy what little strength remains.

Like the asthma of adults, and the laryngismus stridulus of children, hooping-cough appears to be, primarily, a nervous affection, which consists in an irritation of certain of those motor filaments of the pneumogastric which supply the organs of voice and respiration. And the profuse, catarrhal secretion, which appears in its more advanced stage, forms a similar crisis in this disorder and in asthma. That this affection is an irritation of the motor filaments,—corresponding to neuralgia of the sensitive filaments,—and not an actual inflammation of the nerve, may be seen from the severe functional disorders of the parts supplied by this nerve, on the one hand; and, on the other, from the almost constant absence of organic lesion,—as proved by numerous *post-mortem* examinations. And, as will appear in the following description of the phenomena of hooping-cough, the nervous affection may at the same time produce, by spasmodic contraction, a temporary occlusion of the smaller bronchial ramifications;* and a still more severe contraction of the rima glottidis.

In spasmodic cough, spasm of the glottis forms a constituent part of the affection. At the onset of the attack, "there is a feeling of contraction and oppression of the chest, during which the patient generally seizes hold of some firm object; at times there is nausea, and then attacks of cough supervene, the expiration occurring in jerks, and in a more or less rapid succession, introduced or interrupted by a sudden inspiration with a lengthened sound. The respiratory muscles act tumultuously, the abdominal muscles are drawn in and rigid, the trunk is bent forward. At times there are convulsive movements of the extremities and starting of the whole body. Suffocating attacks are more violent and threatening the less the patient exhales. The impeded transmission of the air shows itself in the absence of the vesicular murmur, as well as in the phenomena

* Laennec, Diseases of the Chest, p. 101.

attending a disturbed state of the circulation viz., lividity of the tumid face, congestion of the eyes, and ecchymosis between the conjunctiva and the sclerotic, hemorrhage from the nose, the cavity of the mouth and the bronchia. The cough is dry, and a little viscid mucus is expectorated with difficulty. After a duration of from two to five minutes, the paroxysm, which often consists of two fits, divided by an interval, ceases; it generally terminates with vomiting of bronchial mucus and of the contents of the stomach, and at times with syncopic exhaustion. After this comes a period of great repose."—*Romberg.*

As the disease advances, the paroxysms become more protracted, severe and exhausting; the infant becomes black in the face; and seems to lose its breath entirely. And the characteristic whooping sound with which the attack commences,—which appears so frightful to strangers,—seems to call the attention of the mother or nurse, if the child is for the moment out of her arms. In the decline of the disease, the symptoms may become less violently spasmodic, and more prominently catarrhal,—the catarrh becoming in some cases so profuse as to threaten suffocation. In other cases, from hereditary disposition to such disease, the hooping-cough seems to become complicated with, or to run into pneumonia. In these cases, instead of intervals of perfect rest and natural respiration between the paroxysms, we find a permanent acceleration of breathing, shortness of breath and dyspnœa, —the characteristic symptoms presented by auscultation or percussion; a livid hue of the lips and cheeks; incapacity for exercise or exertion; and loss of strength.

In children who are naturally predisposed to cerebral disease, the tendency of the hooping-cough may be to assume a still more strongly-marked convulsive form. According to Watson,—"when the disease occurs within the first two years of life, it is usually attended by convulsions; and many more die within those periods than afterwards." And it is in this direction especially that the Homœopathic treatment will be found remarkably valuable. The remedies greatly moderate the violence of the disorder, even if they do not at once remove it; and by thus shortening its paroxysms and rendering them less frequent and severe, the little patient's strength is saved. And the remedies carefully selected to meet the particular indications of each individual case, at the same time that they preserve the strength as much as possible; and prevent the disease from assuming its most violent form in general, hinder also its particular development and complication in new forms of pulmonary or cerebral disorder. In

the treatment of this affection, therefore, the Homœopathic physician should not expect to find in any remedy, however highly lauded, a complete specific. Still less should he seek to *compel* the disorder to succumb to the massive doses of any such remedy. Let him be satisfied to *prescribe for his patient*, and adapt as accurately as possible the remedy to the existing conditions. A little extra pains taken in this direction, in the first visit, in ascertaining the totality of the symptoms, and in finding the true Homœopathic *similimum* for them, in each case, will save him a world of trouble in the end. In some epidemics of hooping-cough, the remedy which is thus found suited to the *genus epidemicus*, in one instance, may also apply in many other cases, but not absolutely in all; since always and in every instance, the medicine must be made to suit the individual patient, rather than the general form of the prevailing epidemic disorder.

Aconite. If a constant febrile condition seems to prevail, or if the patient grasps at its throat with every cough, as if it were in pain.

Arnica. Every coughing spell is announced with crying.

Arsenicum. When there is great prostration with waxy paleness and coldness of the skin.

Belladonna. The child gets very red in its face with every coughing spell; or the cough has produced such congestion as to cause the sclerotic to appear as one gore of blood.

Bryonia. Cough worse after eating or drinking, with vomiting of the ingesta.

Carbo veg. Great exhaustion after every coughing spell, with blueness of the skin, hot head and face.

Causticum. A dry cough remains a long time; it does not get entirely well.

Chamomilla. The cough is dry; the child is very fretful; must be carried in order to appease it; one red cheek.

Chelidonium. When a very loose, rattling cough remains a long time, and does not improve any more.

Cina. The child picks its nose much; or gets perfectly rigid in every coughing spell; ravenous hunger.

Coccus cacti. Every coughing spell is terminated by spitting of large quantities of ropy mucus.

Conium. When violent fits of coughing occur, mostly through the night.

Coralium rub. In some forms of violent spasmodic cough. "Firing

minute guns of short, barking cough, all day; and for half an hour or so toward evening increasing to a violent spasmodic paroxysm."*

Cuprum. With every paroxysm, the child coughs itself into a cataleptic fit; it appears as if it were really dead.

Drosera. When the child is worse particularly after twelve at night, with high fever; cough in violent spasmodic spells as if it would suffocate; sometimes bleeding at the nose and mouth.

Dulcamara. The child is made worse by the changes of the weather from warm to cold; or by exposure to cold damp air.

Ferrum. Vomiting of the ingesta after every cough.

Hepar. When the cough seems complicated with croup; worse towards morning; the cough sounds croupy, and it seems as if the patient would choke.

Hyoscyamus. The cough is always worse as soon as the child lies down; and is relieved by sitting up.

Ipecacuanha. Strangling with the cough, till blue in the face.

Kali c. Sacculated swelling over the eyes.

Kali bi. Choking cough and spitting out tough, stringy mucus, which sticks to the throat, mouth and lips.

Lachesis. The child always awakens in a coughing fit; it seems very faint and weak.

Mephitis p. In some forms of spasmodic cough, this remedy is a specific.

Mercurius. The child sweats very much at night; and bleeds at the nose and mouth with every coughing spell. Either by day only, or by night only, it has always *double coughing spells,* which are separated by an interval of perfect rest.

Nux v. Hard dry cough with constipation; worse after four o'clock P. M. The child becomes blue in the face, and bleeds at the nose and mouth.

Phosphorus. Much hoarseness; almost total loss of voice from the effects of the cough.

Pulsatilla. Cough very loose, with vomiting of mucus; diarrhœa; worse at night.

Sepia. The cough is always much worse in the morning, when it is loose and terminates in an effort to vomit.

Silicea. May be useful in vermiculous subjects, in whom Cina does not answer.

Sulphur. There are frequent relapses without any known cause, or where the cause consists in exposure to cold in scrofulous subjects.

* Dr. Richard Hughes, Brit. Jour. of Hom., No. CI., p. 501.

Sulphur is specific in a sort of suppressed cough,—dry, suppressed, and choking.

Squills. During the cough the child sneezes, waters at the eyes and nose; the child constantly rubs its eyes, nose and face with its fists during the cough.

Veratrum. After every fit of coughing, the child falls over exhausted, with cold sweat on its forehead.

Asthma of Millar.

Under the names of Asthma of Millar; Thymic Asthma of Kopp; Laryngismus Stridulus; Child-crowing; Spasm of the Glottis; Spasmodic Croup, and False Croup, different authors have described an affection peculiar to infants and very young children,—which is not indeed very common,—but which for this reason, from its apparent resemblance, is apt to be confounded with croup.

The difficulty consists essentially in spasm of the glottis, which impedes respiration and occasions *sonorous dyspnœa.* "Spasm of the glottis occurs in paroxysms of varying intensity, according as the glottis is partially or entirely closed. The milder attacks are characterized by a short attack of dyspnœa, difficult and often sonorous inspiration, as in apnœa, accompanied by restlessness and anxious expression of the face; such attacks are at first often unnoticed, as the health of the child does not appear affected in the intervals. A trifling mucous rattle in the larynx sometimes precedes. In the more violent paroxysms the apnœa approaches to suffocation, and the respiration is interrupted for seconds, and even for one or two minutes. The eyes are wide open and staring, the face becomes livid and cadaverous, the alæ nasi and the muscles of the neck act violently, the arms are stretched out and rigid, asphyxia appears unavoidable, when at last the air penetrates with jerks and with a sonorous tone, and the paroxysm closes with a fit of crying and sobbing."* These attacks may terminate with a loud sonorous inspiration; or by a long, deep-drawn inspiration, with a crowing noise. This particular mode of termination will be seen to be characteristic, and diagnostic of this affection from croup;—in which no such distinct remission of the dyspnœa can be recognized,—at least not in true membranous croup.

Dr. Ley, in his very able treatise on this disorder† gives the following still fuller résumé of its symptoms: "The essential symp-

* Romberg, Diseases of the Nervous System, I. p. 331.

† An Essay on Laryngismus Stridulus, by Hugh Ley, M. D., London, 1836.

toms then of the laryngismus stridulus are, sudden attacks of breathlessness from partial or total obstruction to the admission of air into the windpipe, varying according to the degree of closing of the glottis, and commonly succeeded, or at all events attended, by a sonorous inspiration. Where the closure of this chink is not perfect, the child struggles for its breath, the respiration is hurried, the countenance generally bluish or livid, the eyes staring; and each inspiration is attended with a crowing noise; where it is more complete,—and this state at the commencement of the paroxysm, according to my observation, is much more frequent,—the function of respiration is entirely suspended for a while, there is an effectual obstacle to the admission of air, the child makes vehement struggles, by some termed convulsive, to recover its breath; at varied intervals, from a few seconds up to a minute, or, upon some occasions, nearly two minutes, air is at length admitted through the glottis, now partially open, and this rush of air passing through a very narrow chink produces the peculiar sound. To these symptoms not unfrequently succeed a fit of coughing or crying, which terminates the scene; or, if the glottis be not even thus partially open, the child, at the end of from two to three minutes, at the utmost, will die of asphyxia; pallid and exhausted, it falls lifeless upon the nurse's arm, and it is then that the child is generally said to have died in a fit."

In the violent struggles for the recovery of the breath to which I have alluded, all the muscles supplied by the respiratory system of nerves are thrown into violent action; the eyes are often involuntarily rolled upwards by the agency of the trochlearis; the muscles of the face are expressive of agony; or occasionally convulsed; the head is thrown back by the muscles supplied by the spinal accessory nerve; the serratus magnus is in violent action; the diaphragm and abdominal muscles contract vehemently, and even the extremities are rigid. With all this, however, the face is commonly pallid, and has that lurid tinge denominated cadaverous; and the external veins, tinged with highly carbonized blood, form long streaks upon the forehead and temples, which continue long after the cessation of the paroxysms."

The cause of this terrible malady was long but imperfectly understood. Dr. Ley, whose description of "child-crowing" we have already quoted, published his very learned and able monograph in 1836,—in this he attributes the malady to pressure exerted by enlarged bronchial glands upon the pneumogastric and recurrent nerves. This opinion he founded upon actual *post-mortem* examina-

tions, and he illustrated it by five lithographic engravings from these morbid specimens,—which show the nerves thus flattened and compressed by such enlarged glands. Dr. F. Barrier, of France, writing in 1844, attributes the disorder to pressure exerted directly upon the air-passages.* Laennec, writing in 1808, says inflammation of the bronchial glands is very little known, and appears to be very rare. He speaks of tuberculous affection of these glands, particularly in scrofulous children. Louis, in 1843, says of the bronchial glands, "these bodies very frequently undergo tuberculous transformation,—not only in children in whom all accurate observers coincide in regarding the transformation of these organs as even more frequent than that of the lungs." And he states that the compression of the trachea and bronchi,—causing difficulty of breathing and of swallowing, impeded circulation, and even fatal hemorrhage,—is far from being a rare effect of their enlargement.†

From a careful study of the different descriptions of the disorder under consideration,—which has indeed a great variety of designations, but which is commonly called laryngismus stridulus, it will appear that on the one hand the symptoms are so various that they are almost capable of being distinguished into two or three different diseases. And on the other it will appear also that the causes are no less various in their seat and mode of action. Thus, again, we have on the one hand the *paralysis of the trunk of the vagus and its branches*, resulting from the swelling and induration of the parts exerting pressure upon them,—"its conducting power is frequently impaired by scrofulous affections of the cervical and thoracic glands, and especially of the bronchial glands." And on the other hand *spasm of the glottis*, which has very similar results although under somewhat different conditions. That is it is more apt to occur *in early infancy;* the attacks of spasm of the glottis more frequently appear at night, on awaking from sleep; or from any sudden movement or exertion; they may often be traced to hereditary predisposition. This form of disease is more frequent in the city than in the country; in those who are brought up by hand, or prematurely weaned, instead of being nursed; and in many cases it may be seen to result, in some

* "Bien que nous partagion l'opinion de M. Blache, qui attribute au spasme de la glotte la dyspnée decrite par des auteurs Anglois et Allemands sous le nom d'asthme thymique, nous dirons plustard qu'il nous repugnerait point de placer la cause de cet asthme dans la compression exercée par le thymus hypertrophié sur les voies aeriennes." *Traité Pratique des Maladies de L'Enfance*, par F. Barrier, D. M., Paris, 1845.

† Researches in Phthisis, Syd. ed., pp. 91 and 92.

way, from the influence of the first dentition. In a note to one of his Lectures, Dr. West thus speaks of this disorder: "There is a form of spasmodic affection of the larynx which, under the name of thymic asthma, has attracted considerable attention among continental writers. The spasm of the glottis, which is the most prominent symptom in this affection, is supposed to be due to the pressure of the hypertrophied thymus upon the larynx, and the consequent irritation of its nerves."

There can be no doubt that the several forms of dyspnœa, more or less variously described under the different names above given, are due to pressure exerted by the cervical glands, by the thymus gland, or by the bronchial glands, in a morbidly enlarged and indurated condition, either upon the nerves, upon the bronchia, or directly upon the larynx. But whether in any particular case they act by producing direct spasm of the glottis, through pressure upon the bronchus or larynx, irritating the peripheral extremities of their nerves; or whether they cause paralysis, by pressing directly upon the vagus or one of its branches, the physician must determine for himself, from the study of the symptoms present. Sufficient has been here stated to lead him to a careful study of his case; to realize that he may have to contend, not so much with a temporary or accidental affection, as with a disorder of a most important function; a disorder resulting from some deep-seated, even hereditary dyscrasia, which may have been developing itself in these obscure glandular structures, and which only reveals itself to his observation in its secondary consequences.

Hypertrophy of the thymus gland is no doubt the most frequent in earliest infancy,—and this morbid condition may have originated even before birth. The corresponding enlargement of the thyroid gland occurs later in life, and constitutes the disorder known as goitre, or bronchocele.

Arsenicum. If there is much thirst and restlessness.

Belladonna. The face and eyes are very red; the head is very hot.

Ipecacuanha. If much nausea prevails; or there is much strangling as if from mucus.

Laurocerasus. If the spells seem to be excited by some abnormal condition of the heart.

Moschus. In cases similar to the above but not so violent.

Phosphorus. This remedy may be called for in some cases of very tall, slim children.

Sambucus n. The child suddenly awakens, nearly suffocated, sits

up in bed and turns blue, gasps for breath, which it finally gets; the spell passes off; it lies down again in bed, but to be aroused sooner or later in the same manner.

Stramonium. If the child seems quite delirious, does not know where it is; as soon as it can speak it constantly calls for papa and mamma,—although they may be at the same time present and trying to console the child.

In chronic cases, such as may be supposed to arise from enlargement of the cervical or bronchial glands, study *Calcarea c.; Jodium; Iodide of Mercury,* and *Spongia.*

CHAPTER FORTY-FOURTH.

DISEASES OF CHILDREN—CONTINUED.

SCARLET FEVER—SCARLATINA.

SCARLET FEVER forms the most terrible and fatal scourge of infancy and childhood. Its highest mortality is said to occur during the third year of life; and under the old-school treatment entire families of children have been swept away. The Homœopathic treatment of this much-dreaded disease renders it far less fatal. In fact from all but the more malignant forms of scarlet fever, the danger of a fatal termination seems almost wholly removed. Still the cases of this latter variety, and even others of less original severity, require for their successful treatment the utmost patience and skill on the part of both physician and nurse. This is due in part to the unsteady and even treacherous nature of the disease itself in the severer cases, and to the serious complications which may arise during its progress; and in part to the sequelæ which may change an apparently favorable convalescence, even in milder cases, to a new and still more dangerous form of disease.

Scarlet fever has usually been divided into three varieties; *scarlatina simplex; scarlatina anginosa;* and *scarlatina maligna.* But this difference in degree of the severity of the disease, whether confined to particular cases, or extended to epidemics, is of little practical value. A more simple classification, and one which refers to the kind of disorder, consists in a two-fold division; *scarlatina Sydenhami;* and *scarlatina miliaris,* or *rubeola.*

The scarlet fever of Sydenham, the true Belladonna scarlet fever of Hahnemann, is now comparatively rare. But it is important to distinguish it when it does appear, from the more common scarlet rash,—if for no other reason than because the prophylactic use of Belladonna, so strongly recommended by Hahnemann and proved so wonderfully efficacious in the former variety, is of no avail in the latter form. The true scarlet fever of Sydenham,—the *scarlatina lævigata* or smooth scarlet fever of some authors,—runs a comparatively regular course; and is much less disposed to strike in, and occasion dangerous metastases, than is the scarlet rash. This latter and more common form of scarlet fever is at once more insidious, more treacherous and vastly more dangerous than the former. In its severer forms it is always impossible to tell how much more of the malignant element may yet remain behind and waiting for the favorable moment,—of convalescence even,—for development; and in the milder cases, we know not what an hour may bring forth; the eruption apparently well out, may suddenly recede, without apparent cause; and the most critical and alarming symptoms replace a condition which had been encouraging and satisfactory.

Scarlet fever is the popular name of a disease which is developed from an epidemic and infectious poison. Children who have not had the disorder will be certain to take it from visiting a house where it prevails, or even where it has recently prevailed; and children in houses miles away from any others, with no direct communication, are stricken down with the disease, the infection being conveyed by the winds, for long distances across the country. This disease consists then in the development of a peculiar poisonous miasm, principally upon the skin; where the eruption forms a salutary crisis of the fever. With this development upon the *skin* there may also be a development upon the *mucous membranes*,—which become more or less deeply and extensively involved, in proportion to the malignancy of the morbid influence by which it is caused. And finally, failing this sufficient development upon the skin, in the fauces, nostrils, &c., or deserting the skin, the disease may attack the meninges of the brain,—producing convulsions necessarily fatal, unless relieved with the utmost promptitude. As a consequence of the ravages made by this disorder in the system,—ravages which are dreadful just in proportion to the amount of pre-existing psoric dyscrasia which the scarlatina poison finds and with which it unites itself,—all the latent psoric miasm in the system is developed; and there results a post-scarlatina dropsy, or some form of "scrofulous" disease.

Symptoms.— *Vomiting* is usually the first symptom which indicates the onset of either variety of scarlet fever; and we think a malignant form of the disease, and especially of the scarlet rash,—may be apprehended when the vomiting is very severe and persistent. In other respects, the more generally the eruption is developed over the entire surface of the skin the less apt is the throat to become seriously affected; for in all but the worst cases the disease thus seems in a measure to expend itself upon the exterior surface. While the mucous surface, the throat and nostrils are apt to become the seat of the development of the disease in proportion as it fails to be sufficiently developed upon the skin. And yet in the malignant forms of the disease the eruption involves the entire surface,—and in the worst cases assume a livid hue,—while the fauces and nostrils are affected to the extent of ulceration, putrid exudations, gangrene, and sloughing of the swollen and compressed portions of the tonsils, &c. This is the old *scarlet fever and canker-rash,*—or *cynanche maligna.*

The *fever* which forms the continued crisis of the eruption is characterized by being steady and almost uninterrupted in its course; gradually increasing till the eruption is well out; continuing with little or no abatement during its continuance, and in favorable cases gradually subsiding as the eruption itself gradually fades away. The pulse also maintains a corresponding uniform height, showing scarcely any of the decline and aggravation, day and night, which is common to true synochal fever. Many of the other symptoms, as the nervous restlessness, may be relieved by the accession of the eruption; but the fever itself holds on its steady course of intensity until at the full term, the appearance and continuance of the efflorescence gives place to its decline. And even then, in badly managed cases, instead of sensibly abating, the fever may take a fresh start under the typhoid form.

The *eruption* in the true Sydenham scarlet fever, or smooth variety, —*scarlatina lævigata,*—is a mere blush or efflorescence, a redness of the skin which beginning about the face and neck gradually spreads over the whole surface of the body, and of the extremities. This full development of the eruption is only arrived at by the third day; and a similar redness may be seen in the mouth and fauces and even in the nostrils. The eruption in the scarlet rash,—*scarlatina rubeola,* —the more common form of the disease, gives a perceptible roughness of the skin, and a sensation as if its surface were covered with minute granules. This is caused by an enlargement of the cutaneous

papillæ; and is more evident on the extremities and front of the body.

On the fourth day the eruption is at its height; and even after the rash has extended pretty generally over the surface of the skin;—it will come out much more fully and assume more and more the boiled lobster appearance, both in color and in the sensation of roughness which it imparts to the applied hand. On the fifth, sixth and seventh days the eruption declines. First remaining stationary a day or so, or commencing very gradually to fade away. And in favorable cases the decline corresponds to its original mode of appearance,—but in the reverse order,—gradually disappearing, in a uniform manner,—and from the extremities first. Next succeeds desquamation of the cuticle,—a process which often occupies many days before it is completed. Compared to the old form of scarlet fever proper, *scarlet rash* is a very uncertain and treacherous disorder. All may be going on well, when at once some untoward change, some unlooked for and dangerous symptoms may arise. Sudden fading away of the eruption in different parts of the body, its partial recession, its premature decline, or increasing lividity,—symptoms which may occur in apparently favorable cases, but which are more apt to appear in the malignant forms of the disease,—will necessarily awaken the greatest anxiety; and the remedy should be at once most carefully selected to meet the imminent danger.

The *tongue* affords some very characteristic indications in scarlet fever, in either variety; since, as will subsequently appear also in the fauces, the mucous membrane developes an appearance corresponding to that of the external skin. We give Dr. Watson's concise description of what, in different degrees of intensity, may be always seen in this disorder. "The appearances of the tongue in scarlet fever are also peculiar and characteristic. In the scarlatina *simplex*, and *anginosa*, it is often covered at the outset with a thick white, cream-like fur, through which are seen projecting the red and exaggerated papillæ; the edges of the tongue being likewise of a bright-red color. The red points gradually multiply, and the white fur clears away, and at length the whole surface of the tongue becomes preternaturally red, and clean and raw-looking; and after becoming thus clean as well as red and rough, and like a strawberry, it will sometimes, when the disease goes on unpromisingly, get dry and hard and brown, as you know it is apt to be in certain species and stages of continued fever." In the milder, as well as in the severer

cases of the disease, the tongue and fauces should always be inspected at each visit.

The *fauces* present a still more striking resemblance to the eruption on the external surface. If able to speak, the patient will complain of soreness of the throat, and upon examination will be found a greater or less amount of swelling, with redness of the tonsils uvula and palate; either smooth and bright red, corresponding to a similar eruption on the skin; or rough and granular, of a darker color or dusky hue, corresponding to the accompanying external scarlet rash. After the first day or two, the tonsils and uvula may be seen to be covered with a whitish exudation, or gray, aphthous formations, like false membranes, which, being removed, leave an ulcerated or sloughy surface. The tonsils, uvula and palate are very much inflamed and swollen; but the aphthous or false membrane-like formation which covers them, although it may extend to the nares and even in some measure involve the œsophagus, does not affect the larynx; in this important respect differing from the more firmly organized exudations of croup and diphtheria.

The *skin* becomes dry and hot, in proportion to the intensity of the fever; the pulse is quick and hard, varying from one hundred to one hundred and fifty per minute, according to the severity of the case and the age of the patient. The thirst is not remarkable; the appetite is of course lost; and the bowels are usually bound up, or if they are opened, the stools are observed to be of a much darker color than is natural.

The preceding account of the natural history and principal and most characteristic symptoms of *simple scarlet fever* has reference rather to those cases of the ordinary severity. In those which run a regular course and terminate favorably, the eruption consumes three or four days in reaching its height; remains apparently stationary a day or two, and then in the course of three or four days more gradually fades away; so that by the eighth or ninth day the period of desquamation will have been reached; and this may consume an equal or still greater amount of time, in proportion to the severity of the case. And until this process is entirely completed, and the old cuticle, destroyed by the intense cutaneous inflammation, is replaced by new skin, it will be absolutely essential to have the patient very carefully watched over, to guard him from any exposure, which even in comparatively mild cases might be rapidly followed by a new and still more dangerous disease in the form of some one of the various sequelæ of scarlet fever.

In the *scarlatina anginosa*, the principal force of the disease seems to be expended in the throat; hence all the throat symptoms are rendered much more intense and painfully severe than in the simpler and more common form of scarlet fever. The general fever, and especially the eruption upon the skin, are much less strongly marked. "Almost from the commencement of the attack, soreness of the throat is experienced, attended with difficulty of deglutition, and often with considerable stiffness of the neck, and pain and difficulty in moving the lower jaw, due in part to the swelling of the submaxillary glands. On examining the throat, it is seen to be intensely red, and the tonsils are red and swollen. The swelling of the tonsils increases rapidly, until they almost block up the entrance of the pharynx, and thereby render the attempt to swallow so difficult, that fluids are often returned by the nose. An adhesive mucus collects about the back of the throat, and often seems to cause great annoyance to the patient, and specks or patches of lymph form upon the tonsils, and look like sloughs covering ulcers. In some of the severest cases, a very troublesome coryza comes on, and an adhesive yellowish matter is secreted in abundance by the mucous membrane of the nares, whence it runs down upon the upper lip, excoriating the skin over which it passes, and causing still more serious suffering by the obstacle that it presents to free respiration."—*West.*

In addition to these symptoms, the *ears* also become affected, from the extension of the severe inflammation along the course of the Eustachian tubes; there is very great deafness,—followed by copious and acrid discharge from the external meatus. Even the mastoid process of the temporal bone becomes carious.

When the *throat* thus becomes the principal seat of the disease, the eruption does not appear so regularly or so seasonably upon the external surface. It is often delayed till the third or fourth day, and generally comes out in scattered patches on the chest and arms. In some cases it is wholly confined to the back of the hands and wrists, and sometimes entirely vanishes the day after its appearance and reappears partially and at uncertain times. About the fifth or sixth day it begins to decline, following the same order in its decline which it had previously observed in its appearance; subsiding first on those parts which it had primarily occupied. Desquamation of the cuticle follows the disappearance of the rash; unless the latter has been very slight. And the fever and inflammation of the throat begin to abate with the fading of the eruption,—though sometimes the sore throat and some degree of fever continue for a week or ten

days after the rash has entirely disappeared. All these symptoms, in their severity and persistence, are capable of being very much modified by the use of the appropriate Homœopathic remedy; our object here is simply to portray the natural order and the progress of the disease, when not interfered with;—and yet it must be remembered that they naturally present a very great variety, in different persons, as regards their severity and their mode of combination.

In *scarlatina maligna,* all the symptoms may be said, in general terms, to be simply much more severe than in the milder forms of the disease. The principal distinction being rather of degree than of kind. Still a brief account of such cases may be useful. The rash is extremely irregular, both in the time of its appearance and in its duration; and also in its extent. It often comes out at a later period of the disease, disappears after a few hours, or suddenly vanishes to be again and again renewed in the course of the disorder. Its color may be paler, than in milder cases,—or in irregular patches it may assume a livid hue; in the course of the disease in its worst varieties, petechiæ may also appear on the skin. Soon after its first onset "the fever assumes a typhoid form, the heat of the skin is less intense, and there is great disorder of the functions of the sensorium, with small, frequent and often irregular pulse. There is at the same time a dull redness of the eyes, with a dark-red flush on the cheeks; the patient is restless, fretful, and at times delirious; the delirium is sometimes violent, but more generally it is of a low, muttering kind. The tongue quickly becomes dry and brown, or red, dry and glazed, and often so tender and chapped that a slight touch causes it to bleed; the teeth and lips are covered with sordes, and the odor of the breath is extremely fetid. The throat has a dusky-red appearance; there is not much swelling, but dark incrustations form on the velum, uvula and tonsils,—which are not, as has been generally supposed, sloughs, but merely exudations of lymph, or false membranes. In some cases however, there is a gangrenous inflammation of these parts, which are destroyed by the sloughing which succeeds. There is at the same time acrid, excoriating discharge from the nostrils, and a viscid secretion from the fauces, impeding respiration and producing a rattling noise. In severe cases the inflammation extends to the posterior pharynx, which, though not much swollen, is so irritable, that on attempting to swallow fluids, they are rejected through the nostrils. The inside of the lips and cheeks is frequently covered with aphthæ; and the cervical and submaxillary glands become inflamed, abscesses occasionally forming in them and in the surrounding

cellular tissue." In many cases of this malignant form, a fatal termination comes on the third or fourth day; the little sufferers appearing to sink under the general malignant influence. Scarlet fever *without the eruption*,—in which the entire force of the disorder is expended upon the mouth and fauces, is of no uncommon occurrence; some instances have been known in which those who have thus had the throat affection without the eruption have subsequently had the scarlet fever eruption, without the throat affection,—the same poisonous influence appearing capable of developing either the one or the other affection exclusively,—or both together,—according to the state of the patient's system. But in this as in the other forms or varieties of this disorder, the true physician will seek to adapt the individual remedy to the particular condition of each individual patient.

Treatment.—Select the remedy to meet the condition of each individual patient, according to the indications given below; and compare also the medicines subsequently indicated under the various sequelæ.

Aconite. When there is much distress, restlessness, heat, thirst and sleeplessness, the rash is not smooth. Aconite relieves the excitement of the system, both nervous and sanguineous, and at the same time promotes the development of the eruption.

Ammonium carb. When the rash continues out longer than the ordinary period; and *there is tendency to gangrenous ulceration.*

Arnica. In typhoid states, with epistaxis; or hæmoptysis, aggravated by coughing; or when ecchymoses of various colors appear on different parts of the body; or even small boils.

Arsenicum. The eruption has disappeared too quickly, and there is rapid prostration and sinking;—or the throat becomes putrid, with the same circumstances as under Aconite.

Arum tri. The lips, corners of the mouth and perhaps the nostrils are raw and bloody; and there is an apparent tendency for this state of things to increase in depth and circumference. There may also be a profuse (acrid) discharge from the nose. The throat becomes extremely sore, and excessively putrid, and the fever very persistent. In such cases (of *scarlatina maligna*) *the Arum is the only remedy.*

Aurum. Fetid discharge of mucus from the nose; or for otorrhœa of a similar nature,—especially if bones come from the ear.

Baryta c. Where the sore throat is pale instead of having the bright redness of Belladonna; the submaxillary and parotid glands are swollen and tender; the breath is putrid; the child scrofulous and dwarfish.

Belladonna. In the true Sydenham scarlet fever, where the eruption is perfectly smooth and truly scarlet. Eyeballs red and injected; the skin is so hot that it imparts a burning sensation to the hand.

Bryonia. The rash does not come out fully, it seems pale; there are frequent attacks of dyspnœa; nausea on sitting up; constipation;—parched lips.

Calcarea c. In those chronic forms or protracted cases of scarlatina, where the temperament is leucophlegmatic, the nose sore and obstructed; the glands of the neck are swollen; slow fever, especially worse in the evening; the child appears pale and languid,—does not seem to convalesce after the regular recession of the eruption.

Camphor. Extremities cold and blue; rattling in the throat; hot breath; hot sweat on the forehead, and the child refuses to be covered.

Carbo veget. This remedy should be considered when the soreness of the throat continues after the disappearance of the eruption. Putrid sore throat; *sloughing away of some of the swollen parts in the fauces.*

Chamomilla. The child is exceedingly troublesome and must be carried up and down in order to be relieved.

China. In cases threatening to become anæmic,—with diarrhœa or lienteria.

Cina. The child bores with its fingers in its nose; is very fretful so that nothing pleases him; the urine turns milky on standing; colicky pains, &c.

Coffea. In some cases of extreme wakefulness it may aid in bringing out the eruption, where from the predominance of the symptoms of nervous excitement over those of sanguineous excitement, it may appear indicated, rather than Aconite.

Conium. In cases where the parotid and submaxillary glands are swollen and *hard as a stone;* the lips and teeth are covered with black crusts; the skin is hot; and the patient delirious or senseless.

Cuprum acet. When repercussion of the eruption, or metastasis of the disorder to the brain, has occurred; and there are convulsions, vomiting or gagging; face pale and twitching. N. B. Under such circumstances but little hope of benefit from any medicine can be entertained; but this remedy has been known to restore the eruption, even though it did not save the life of the patient;—may it not prove useful, *in advance,* where the suspicious, transitory nature of the eruption gives reason to apprehend that it will recede and thus cause convulsions?

Dulcamara. This remedy may be called for when suppression of

the eruption has been caused by exposure to cold and damp air,—unless some particular symptoms should require another medicine.

Ipecacuanha. Constant nausea and occasional vomiting.

Lachesis. Scarlatina maligna, with external swelling of the neck, and glands,—and great sensitiveness of those swollen parts.

Nitric acid. This remedy resembles Nux, only there is more dryness of the mouth.

Nux v. The mouth and fauces are full of small, fetid ulcers; the mouth is very sore, with flow of bloody saliva, and difficult deglutition.

Opium. When the brain seems oppressed; there are extreme drowsiness, stertorous breathing, vomiting, &c.

Phosphorus. Indicated when the eruption suddenly disappears without apparent cause.

Rhus t. When the rash itches violently, and there is much restlessness at night; or when there is an ichorous or yellow thick discharge from the nose, with swelling of the glands in the throat.

Silicea. Suppuration of the glands. See Scrofula.

Sulphur. In psoric constitutions, liable to eruptions. The rash is intensely hot and itching.

Dropsy after Scarlet Fever.

The most common of the sequelæ of scarlet fever, is the dropsy,—thence called *post-scarlatina dropsy*. While this affection is remarked to succeed as often to the mild as to the severer forms of scarlatina, it has never been observed to supervene in cases of scarlatina maligna. It is in these milder cases of scarlet fever that this sequela forms a disorder more dangerous than the original affection.

The dropsy appears first in the face, eyelids, hands and lower extremities; but gradually becomes a complete anasarca; and if not arrested in its progress involves the different serous cavities. In these latter it may cause copious effusion,—a condition more or less imminently dangerous according to the particular cavity which is thus affected.

The *post-scarlatina dropsy* generally comes on in ten or twelve days from the disappearance of the rash; but its approach is sometimes earlier and sometimes later. The appearance of this disorder, in some cases, may be announced by a certain paleness of the countenance, increasing languor, loss of appetite, furred tongue, costive bowels, scanty and turbid urine, and considerable gastric disturbance. But in the majority of cases the dropsical appearance in the face attracts attention before any complaint is made of the other symptoms. The swelling beginning on the face and hands, may be

confined to these parts; but in most instances it gradually extends till the whole body becomes œdematous. A puffy, or swollen appearance in the lumbar region, over the kidneys, should be regarded as indicating a very serious form of the disease. So long as the dropsical effusion is confined to the subcutaneous cellular tissue there is little immediate danger; but when the effusion has taken place into the cavity of the abdomen (*ascites*); into the cavity of the chest (*hydrothorax*); or into the ventricles of the brain (*hydrocephalus internus*), the danger will be very great;—and successively greater in a constantly increasing ratio, in these successive states. In the last mentioned stage of the dropsy, that in which the head has become involved, we find drowsiness, coma or convulsions. These fatal symptoms may result from the simple pressure of the effused fluid in the ventricles upon the cerebral substance; from uræmic poisoning, the result of a suspension of the function of the kidneys; or from the combined influence of both these causes.

The condition and appearances of the *urine* are very strongly marked and important in this disorder. In the milder cases, the urine will usually be found albuminous; this condition may be detected by boiling,—or by the addition of a little nitric acid. "If the attack be more severe, the urine, which is very scanty, is of a brown or smoke color, deep red, or coffee-colored, and throws down a deposit chiefly of a reddish-brown color; which however does not entirely disappear when heated, while albumen is present in it in extreme abundance. It is to the presence of the coloring matter of the blood that this dark hue of the urine is to be attributed; but in some instances blood is present in great abundance, and for a season the case is strictly one of hæmaturia. Usually, though not invariably, the presence at any time of a large quantity of blood in the urine indicates a very serious disturbance of the functions of the kidney, and forebodes a slow and imperfect convalescence. On the other hand, an extreme degree of anasarca and hæmaturia are by no means generally associated; nor does the complete disappearance of the blood from the urine constantly imply a corresponding improvement in the patient's general condition."—*West.* Urine copious and *red as madder dye* may be a critical symptom of convalescence, under the severe and aggravating action of large doses of Homœopathic medicines.*

* See Am. Hom. Review, 1860, vol. ii., pp. 337 and 433, for detailed cases of this disease.

The *causes* of scarlatina dropsy are usually supposed to be found in some undue exposure to the air, or in some similar influence of a change of the weather upon the tender skin. The desquamation of the cuticle itself, by interfering very considerably with the excretory action of the skin,—if not for the time totally suppressing it,—no doubt throws upon the kidneys a double burden; a burden greater than they can bear;—hence the serous accumulations in the cellular tissue and subsequently in the great (serous) cavities of the body. With this the constitution, as psoric or otherwise, of the individual patient, has doubtless much to do. And since this sequela make its appearance only after the milder, and not after the malignant cases of scarlet fever,—it is supposed by some that it constitutes an ultimate and necessary development of the poison which had not been sufficiently eliminated by the eruption upon the skin and by the accompanying affection of the mucous membranes. But however this may be, there can be no doubt that in most cases the careful treatment of the original disorder with the appropriate Homœopathic remedies,—*especially the antipsoric*,—will almost entirely remove the disposition to the subsequent dropsy. Yet it should not be forgotten in this connection,—and it may be offered in support of the above-mentioned opinion that the post-scarlatina dropsy is but an after-part of the original fever in some cases,—that some epidemics of scarlet fever are remarkably characterized by a disposition to be followed by dropsical effusion.

Treatment.—This affection,—except in the very last stage when not only has the worst form of effusion taken place, but when even the kidneys themselves have already become disorganized,—yields to the Homœopathic remedy in the most grateful and admirable manner. This assertion will be seen to be amply sustained by examining the cases reported in the Homœopathic Review, referred to above. The medicine should be carefully selected in accordance with all the symptoms,—and if the true simile be not found among those indicated below, compare also those given in a subsequent chapter under Hydrocephalus; or administer, without hesitation, any remedy called for by the characteristic symptoms of the case,—for these latter belonging exclusively to the idiosyncrasy of the patient may be different from any before observed in other cases.

Arsenicum. General anasarca of a waxy paleness. Thirst for water in small quantities but very frequent. Great restlessness, particularly after twelve at night.

Apis m. Very scanty urine. Waxy paleness of the feet and legs, which are much swollen.

Baryta c. Swelling of the cellular tissue of the neck, also of the submaxillary and parotid glands.

Belladonna. Great paleness of the face, much moaning and grinding of the teeth. Stupidity, half sleeping and waking.

Hellebore. The urine is scanty and deposits a dark, coffee-ground-like sediment.

Kali c. The dropsy commences with a sacculated swelling of the eyelids.

Lycopodium. The urine deposits red sand.

Phosphorus. Urine deposits a gray sandy sediment.

Pulsatilla. There is much pain in one ear or the other and some deafness.

Rhus tox. The eyelids present a bladder-like appearance and the child is very restless at night, particularly the last part.

Squilla. In some cases.

Veratrum. Vomiting and purging with much prostration.

See also the treatment of other dropsical affections.

Among the most important, although perhaps not the most common of the sequelæ of scarlet fever, should be recorded the *intense painfulness with swelling of the back of the hands, wrists,* and even of the feet, which sometimes appears as the eruption is going off. The back of the hands and wrists seems to have some especial relation to scarlet fever, for in some cases the original eruption, and in others, even the subsequent dropsical affection, is entirely confined to them. This is a very dangerous sequela, unless arrested by the proper remedies, to which however it yields with great promptitude, and is thus described by a recent observer: "This (sequela) is seen in the inflammation, shining swelling and intense pains in the (wrist and ankle) joints, which sometimes appear as the eruption subsides and desquamation commences. By Allopathic writers this is termed scarlatinal rheumatism,—and it may be said to resemble simple arthritic inflammation also in its disposition, so much greater in children than in adults, to metastasis to the heart. But it differs from all ordinary arthritic inflammation by an almost equally marked tendency to purulent effusion into the affected joints. This form of disease, though fortunately rather rare, is sometimes epidemic. Sometimes also it is complicated with great swelling in the neck, enlargement of the sub-maxillary glands, and other indications of acute scrofulosis."*

* Am. Hom. Review, II., p. 438.

"We meet now and then with secondary inflammation of the joints, which may even go on to the formation of pus.—I saw the hand thus affected in a child who died on the sixth day of the disease.—The wrist and the back of the hands are the parts usually affected. The symptom is always a very ill-omened one, even though it should be but evanescent, &c."—*West.* "I have several times, when the rash of scarlet fever was disappearing, known pain and swelling of the larger joints to supervene, simulating very closely the local phenomena of sub-acute rheumatism."—*Watson.*

The remedies for this painful affection, especially where it appears by itself as the principal symptom, may be found in *Belladonna, Bryonia, Lachesis;* or others, where other complications present.

Neuralgic pains in extremities and other parts,—study *Lach., Colchicum, Merc. sol., Arsenicum, Digitalis,* and *Cannabis.*

Scrofula, in the form of enlarged and even suppurating cervical and submaxillary glands, in many cases, forms an important sequela of scarlet fever. This affection may begin in the course of the original disorder, especially of the anginose variety, or it may be subsequently and more gradually developed. Dr. Condie's description of this affection as it appears in the course of the scarlet fever itself, with slight modification, will apply equally well to its subsequent development in other cases. "One of the most common and remarkable accompaniments of scarlatina anginosa is an inflammatory intumescence of the submaxillary ganglions, which in general presents itself the day subsequent to that in which the swelling occurs in the pharyx. There then takes place a swelling painful to the touch, and sometimes tense and red. The inflammation is at first confined to the glands, but in many cases soon extends to the surrounding cellular tissue, often producing an enormous tumefaction, reaching around the front of the throat from ear to ear, and preventing the jaw from being opened wider than just to permit the tip of the patient's tongue to be protruded. Ordinarily the swelling is produced by an œdematous condition of the cellular tissue of the throat, and quickly disappears as the inflammation of the glands diminishes. Occasionally however, a suppuration takes place, commencing either in the glands or in the cellular membranes, and an abscess results." Sometimes two, or even three or four abscesses may be seen running at the same time, in the slow convalescence after a severe attack of scarlatina in scrofulous children.

The remedies needed in such cases may be found indicated under *Scrofula* in a succeeding chapter, to which reference may be made.

Silicea, Hepar, Baryta c., Calcarea c., and *Merc. iod.,* may be particularly mentioned, as worthy of especial study in this connection.

Measles—Morbilli.

In frequency and importance the measles constitutes the second of the eruptive fevers of childhood. Like scarlet fever, this disorder arises from a specific epidemic and infectious miasm, and usually occurs but once. The nature of the miasm itself, as in the case of other endemic, epidemic, infectious and contagious diseases, is by no means satisfactorily settled. A certain mould, or *fungous growth* on damp straw or other decaying vegetable matter, has been observed to give rise to the measles in newly-enlisted soldiers lodged in barracks. In a similar manner, decaying animal matter,—putrescent fish,—has been known to cause the severest epidemics of this disorder. In both these classes of cases,—in which many lives were lost,—the development of the measles, as a malignant disorder, seems to have been favored by the impurity of the air and low and damp temperature of the climate.* Unlike scarlet fever, this disease is apt to be much more severe when it occurs later in life, than when it appears in early childhood. The epidemic character of measles seems also rather more strongly marked than that of scarlet fever,—and its contagiousness possibly a little less so,—for its epidemic influence is much more universal in the districts where it breaks out, than is the scarlet fever; and the disease itself is at once much more universal and far less dangerous.

Diagnosis.—From scarlet fever,—with which the measles is most apt to be confounded, it cannot always be certainly distinguished, in sporadic cases, before the appearance of the eruption. But the absence of vomiting, (although even this symptom may sometimes precede the appearance of measles,) the presence of catarrhal symptoms, or an apparent influenza, will usually be sufficient to prevent even the inexperienced practitioner from giving a wrong diagnosis. While the prevalence of one epidemic or the other will, in most cases, greatly assist him in his determination of their nature. At any rate where there is room for doubt, it is far better to give a guarded diagnosis; and thus avoid the imputation of ignorance or inexperience, which would arise in case of a mistake.

Symptoms.—After a period of incubation of thirteen or fourteen days, the eruption of measles makes its appearance. But about the

* Compare Carpenter's Human Physiology, Chapter III.; and Pereira's "Treatise on Food and Diet." New York, 1843, p. 43.

tenth day after the exposure to the infection, the *introductory fever* arises. This fever is often severe, attended with lassitude, shivering, thirst, dry cough. "The eyes become vascular and watery, the eyelids heavy, turgid and red. The membrane which lines the nasal cavities, the fauces, the larynx, trachea, and bronchial tubes, is affected. Hence we have, generally, as symptoms, much sneezing as well as lachrymation, a copious defluxion from the nostrils, soreness of the throat, and an obvious redness of the fauces, and most commonly a dry, hoarse, peculiar cough, so that the symptoms which usher in an attack of measles, are the symptoms of coryza and catarrh. In some instances there is diarrhœa also, indicating a simultaneous affection of the mucous membrane of the intestines; and not unfrequently vomiting: but the vomiting, as in small-pox, ceases on the coming out of the eruption."—*Watson.*

The eruption usually makes it appearance on the fourth day,—sometimes much later. It comes out first upon the face, whence in the course of a couple of days it extends over the body and extremities. The eruption of measles consists of a rash made up at first of minute papillæ, slightly elevated, which, as they multiply, coalesce into blotches that have more or less a horse-shoe or crescentic shape and leave the intermediate portions of the skin of their natural color. "On the third or fourth day of the disease, the skin begins to be covered with an eruption of small distinct red spots,—these first becoming visible about the throat and face. The blotches of eruptions are of an irregular circular or semicircular figure, and continue for the most part distinct from one another. The several spots or points in them rise slightly above the general level and are felt to be rough and uneven under the fingers."* After about forty-eight hours from its appearance, and by the time it is at its height on the trunk, the eruption begins to disappear from the face, and by the ninth or tenth day it will have disappeared entirely;—thus making its whole duration about six days. The desquamation of measles, less constant and noticeable than that of scarlet fever, takes place in minute branny scales, instead of the larger portions of cuticle which are sometimes thrown off after the latter disease. In severe cases of measles however, as in scarlet fever, the desquamation is more extensive; and in some instances even the *nails of the fingers* are similarly thrown off, and replaced by new growths.

The *cough* often becomes most distressing, violent and incessant, and the fever itself more severe, after the appearance of the eruption;

* Robt. Willis' "Illustrations of Cutaneous Disease," Folio, London, 1841.

but this aggravation is but temporary and will readily yield in a short time to the properly indicated remedy. And in favorable cases convalescence may be pretty well established in twelve or fourteen days from the commencement of the illness. The Homœopathic treatment, while it may not very materially abridge the natural duration of this or of other eruptive disorders, will very greatly moderate the severity of their symptoms, prevent in a good measure the accession of troublesome and even dangerous complications, and in almost all cases, either entirely preclude the appearance of the usual sequelæ, or render them the occasions of effecting a more radical and permanent improvement of the subsequent condition.

Complications.—Diarrhœa sometimes makes its appearance upon the decline of the eruption, if it has not existed at an earlier period. This has been regarded as exerting no unfavorable influence upon the convalescence. The mucous membrane of the bronchia affords a seat for the development of measles, corresponding to that of the fauces and nasal fossæ in scarlet fever. Hence the cough,—at first dry, but at the last loose,—which in greater or less degree accompanies the measles, and whose aggravation, above referred to, forms a most distressing complication. Under the old forms of treatment this irritation of the bronchial mucous membrane was apt to be developed into a true bronchitis. But under Homœopathic treatment this tendency may almost always be entirely averted. Pneumonia forms the severest and most dangerous complication of measles, and also the most important sequela to be guarded against. The revulsion of the eruption from exposure to cold is always liable to be followed by this result, at any stage of the original disorder. And in children of delicate constitutions and scrofulous habit, may be observed a strong disposition to pneumonia, no less decided than the disposition to external scrofulous disease which is developed by scarlet fever in the same class of patients. And it may be remarked here, that in attending young people, and by this we mean also those partially, and quite grown up, who are attacked with measles, the most sedulous care should be taken lest through its imperfect treatment and unfavorable convalescence this disease should lay the foundation for confirmed ill-health, or even of actual pulmonary consumption. And perhaps this remark may be more applicable to girls and young women, than to those of the other sex,—although these latter are by no means exempt from the danger. We believe that more cases of this serious "poor health," may be traceable to badly treated and badly managed measles than to all the other exanthemata combined.

In the diarrhœa which attends or follows the measles, consult *Bryonia, Pulsatilla, Mercurius,* and *Sulphur.*

In the bronchitis, study *Bryonia, Ipecacuanha, Phosphorus, Pulsatilla,* &c.

In pneumonia, compare *Belladonna, Phosphorus, Sulphur,* &c.

In the congestive and malignant variety, which although very rare may appear, and in the so-called *black measles*, compare *Arsenicum, Pulsatilla, Rhus,* &c.

In those cases in which the itching is excessively annoying, study *Rhus t., Sulphur*, and *Dolichos pruriens.*

And in all cases, let the room be kept at a comfortable temperature, without excluding fresh air; keep the patient as quiet and undisturbed as possible; and carefully select the remedy to meet all the symptoms and conditions; and you may confidently expect a speedy and complete recovery from even the severest attacks of measles.

Aconite. Dry, hot skin; heat in the head with restlessness.

Arsenicum. When there is much prostration; thirst for water, wishes to drink often but little at a time; great heat of the skin. (*Black measles.*)

Belladonna. Difficulty in swallowing; severe coughing spells, causing much redness of the face, moaning and drowsiness.

Bryonia. The eruption does not fully develop itself, it appears pale, and there is much dyspnœa.

Camphor. When there is much coldness and blueness of the skin; the face is pale, the child does not wish to be covered; the eruption does not appear; in these circumstances Camphor[200] will bring out the eruption and relieve the patient.

Coffea. When there is excessive sensitiveness of the skin, and of the senses to every impression; weeping, irritability; great wakefulness, and much excitement.

Dulcamara. Retrocession of the eruption from exposure to damp, cold air.

Euphrasia. There is much lachrymation, and coryza.

Ipecacuanha. Much nausea; short hurried breathing. *Incessant and most violent cough with every breath;* this symptom, sometimes frightfully severe in delicate children, suffering with measles, Ipecac. relieves like a charm.

Mercurius. The glands of the throat are much swollen, and there is difficulty in swallowing; slimy stools streaked with blood.

Phosphorus. Symptoms indicating inflammation of the bronchia, violent and very exhausting cough. (Compare Ipecac.)

Pulsatilla. More frequently called for by the symptoms, in measles, than any other remedy. It is indicated by the catarrhal symptoms; and by the slow and tardy appearance of the eruption.

Sulphur. The eruption fails to make its appearance and the catarrhal symptoms become continually worse and worse.

Miliaria—Miliary Fever.

This eruption consists of clusters of minute red and white pimples, like the smallest millet-seeds, which from being elevated, give a rough feeling to the hand. The neck, chest and back are the principal seats of this eruption, which appears in successive crops; and is usually the result of excessive heating of the body. This overheating may be caused by the too great abundance of clothing; or it may be the natural result of the summer temperature.

A slight fever often precedes the eruption, which however, like the eruption itself, is sometimes quite violent. From measles, which the miliary fever and eruption somewhat resemble, it may be readily distinguished by the absence of catarrhal symptoms; and also by the temporary nature of the affection itself. The symptoms even in the severer cases, yield very readily to the appropriate Homœopathic remedy; especially to:

Aconite. Which affords prompt relief, when indicated by the restlessness, heat, and peculiar nature of the eruption.

Bryonia. May be required in very warm weather; the child is better when kept perfectly quiet.

Chamomilla. The child is very fretful, and is relieved by being carried.

Sulphur. In the more inveterate cases; the skin is rough and scaly.

Pemphigus.

This eruption appears in the form of large *bullæ*,—vesicles like blisters,—in which a watery fluid separates the cuticle from the skin. It is usually believed to indicate an unhealthy condition of the system; sometimes it shows a disposition to assume a typhoid character; and in the worst cases it seems to have many features in common with the gangrenous form of infantile erysipelas.

The approach of the disorder is sometimes thoroughly denoted by a livid suffusion, like that of erysipelas, slightly elevated. More

frequently however the complaint comes on in apparently perfect health. The bullæ or blisters are oval, filled with a yellowish serum which soon becomes turbid, of a dark brownish-red color; and the bulla either dries up and is transformed into a dark thin scurf, surrounded by a narrow border; or else it breaks, leaving a flat excoriation, which is likewise soon covered with a thin scurf. This eruption often appears soon after birth; sometimes however it is congenital. It does not seem to be confined to any particular part of the body; but breaks out behind the ears, on the neck, chest, back, inner surface of the thighs, on the groins, on the extremities, and on the palms of the hands and soles of the feet.

Arsenicum. May be required in the more malignant cases, especially where Rhus seems indicated, but fails to arrest the disease, or cure the cachexia by which it is supported.

Rhus t. Where each bulla is surrounded by a red, inflamed base.

Thuya. Cures most all cases, particularly if painful.

Variola. Varioloid.

Variola is the natural small-pox,—as it appears in those whose systems have not been modified by vaccination. *Varioloid*, or modified small-pox, is the corresponding disease as it appears in those who are more or less protected by vaccination. Variola runs through a regular course of three distinct stages: 1. that of incubation; 2. that of development and maturation; and 3. that of decline. Varioloid differs little from variola in the first stage; a severe attack of the former may be a much more dangerous illness than a mild attack of the latter. The principal difference is found in the fact that in modified small-pox the eruption is usually much less copious, and that it sooner begins to decline. In other respects the two forms of disease may for all practical purposes be considered as identical. Since the infection from the mildest case of modified small-pox is capable of causing the severest form of confluent variola in those unprotected; under suitable circumstances either disease may develop the other. In distinct small-pox,—*variola discreta*,—the pustules admit of being counted,—being placed at such distances from each other as not to coalesce or run into one another even when fully matured. In confluent small-pox,—*variola confluens*,—the pimples are set so close as to run into each other on the third or fourth day of the inflammation. In general, the latter variety is by far the more severe, and in this consists the only real difference.

Symptoms.—I. *Stage of Incubation.* The usual duration of the

period which intervenes between the reception of the infection of variola and its initiatory development is from twelve to fourteen days. This has been called by nurses the period in which the disease is *breeding*. In some instances, children, and older persons as well, are sensibly affected, and experience a very considerable degree of languor and lassitude during this period; in others no particular inconvenience is perceived.

II. *The Stage of Development and Maturation.* The first part of this period is occupied by the initiatory or eruptive fever. And as it is important to determine, if possible, the onset of this disorder, even before the eruption makes its appearance, we will endeavor to portray this fever in such a manner that it may be recognized, even in cases of children too young to speak of the intense, unusual and long-continued pain in the back, which in older persons at once excites suspicion of this disease. There are three strongly-marked symptoms which precede and accompany the eruptive fever of small-pox in children,—and by means of which we think the disease may always be strongly suspected and if not absolutely determined in advance of the eruption. And these are the vomiting, the coma, and the convulsions. The sickness with which the eruptive fever of small-pox sets in is in general very severe, and the disorder of the stomach often continues for forty-eight hours,—during which time vomiting frequently recurs. The cerebral condition is often one rather of stupor than of delirium; although in milder cases this latter symptom prevails. In the severer cases convulsions sometimes take place and continue, alternating with coma, for as long a period as twenty-four or thirty-six hours. The persistence of the vomiting will readily distinguish the case from scarlet fever. Nor is the skin so hot and dry as in scarlet fever. The stupor or coma, in connection with the vomiting on the one side and the convulsions on the other, will serve to enable the practitioner to distinguish the case from one of incipient cerebral affection;—in which indeed there may be even prolonged vomiting, but in which neither the coma nor the convulsions are so rapidly developed.

The second part of the period of development of variola is occupied by the appearance of the *papular eruption.* This never occurs in less than forty-eight hours from the commencement of the actual illness; and it may be delayed somewhat longer. These papulæ are at first slightly red, somewhat acuminated elevations, quite minute, and capable of being overlooked in a hasty examination; and yet conveying a distinct sense of irregularity to the finger as it passes over

them. "They increase in size, and in the course of forty-eight hours assume a vesicular character, and contain a whey-like fluid; while instead of a conical form they now present a central depression. During another period of forty-eight hours, or thereabouts, these vesicles go on enlarging, their central depression grows more and more apparent, and their contents become white and opaque; they are no longer vesicles, but have become converted into pustules, each of which, if they be distinct, has an areola of a red hue around its base. As the size of the pustules increases they lose that central depression which they had presented while vesicles, they assume a spheroidal form, and even become slightly conical. The next change observable in them is an alteration of their color from a white to a dirty-yellow tint, which they continue to retain until the desiccation of the eruption commences. The *maturation* of the pustules usually occupies from the commencement of the fifth to the commencement of the eighth day of the eruption,—or from the eighth to the eleventh day of the disease, when the process of *desiccation* begins. When the scab falls off,—which it does in from three to five or six days, the skin appears stained of a reddish-brown color, which often does not disappear for several weeks; but it is only in cases where the pustule has gone so deep as to destroy a portion of the true skin, that permanent disfiguration, the so-called pitting of the small-pox, is produced." *West.*

Treatment.—Homœopathy robs this disease of much of its danger. Keep the patient in a comfortable temperature, with plenty of fresh air. Among the many methods proposed for treating small-pox with medicines, I will state my own, with which, after very considerable experience, I have found no reason to be dissatisfied. In the first stages of the disorder I administer *Aconite, Bryonia, Stramonium, Rhus,* or *Phosphorus,* as the symptoms indicate in each particular case, till the eruption is out and the fever gone. Then I give a single dose of *Thuya*^{1000},—and by the time the pustules would ordinarily be filled, they will, under the influence of this remedy, be all dry and scaling off.

Varicella—Chicken-Pox.

Varicella, or *chicken-pox,* is a mild, febrile, vesicular eruption. This affection seems to bear a similar relation, though in a far less degree, to varioloid, that this latter eruption does to variola itself. If varioloid be taken for a bastard or spurious form of variola,—then varicella may be considered a bastard or spurious form of varioloid;

but with this difference, (and this is the very thing which proves its hybrid nature,) varicella is alike incapable of producing either variola or varioloid, or of propagating itself.

Varicella occurs much more frequently in those who have been vaccinated, than in others; but its symptoms differ materially in different cases; in some the vesicles desiccate early, the scabs leaving no cicatrices; while in other cases the vesicles are more or less fully maturated, the scabs adhere for a longer time, and leave indelible pits in the skin when they finally fall of. Still while this disease has been the occasion of much dispute among medical men, as to its relation to natural and to modified small-pox, its treatment with Homœopathic medicines is at once simple and very successful. Study the following remedies.

Aconite. When much fever prevails.

Belladonna. If there be very red face and eyes; headache, &c.

Coffea. Very much restlessness and sleeplessness.

Mercurius. Salivation; some thirst. The water blotches turn yellow and maturate.

Rhus. The eruption assumes the form of spreading blisters.

Sulphur. The pocks do not heal, they are inclined to itch and to ulcerate. Hartman recommends this medicine, with reference to the local symptoms.

Tartar e. The eruption fails to appear, and convulsions complicate the case.

Belladonna, Sepia, Dulcamara, and *Clematis,* should be carefully studied.

Mercurius, Sulphur, Hepar, Graphites, Calcarea, and *Sepia,* should be carefully compared, in cases that degenerate and where the bullæ change to ulcers.

Vaccination.

The following is the method we find most convenient to employ. Scarify the cuticle very carefully with a lancet, till the skin shows a little bloody exudation. Then apply a drop of the (solution of) virus, and promote its coming in contact with the raw surface. On the third or fourth day, when a small rose-colored spot may be seen, a minute kernel may be felt by carefully applying the finger. Now is the best time to administer the *Sulphur,* and await the result. Should the virus develop latent psora, *Silicea* will usually set all right. *Psoricum* may be needed, or even some other remedy, according to the symptoms present.

The first vaccination should be performed as early as the fourth week after birth. In general, it is safer to vaccinate again in the seventh year,—and twice afterwards.

This is a true prophylactic. As soon as it is evident that the system responds to the action of the virus, by producing a small red point, it is best to give Sulphur[200].

In bad effects which may arise from vaccination,—these will occur in some constitutions even after the use of sound virus,—we resort usually to *Sulphur, Silicea*, or *Psoricum*.

CHAPTER FORTY-FIFTH.

DISEASES OF CHILDREN—CONTINUED.

ERYSIPELAS.

Infantile Erysipelas is said to be of very unfrequent occurrence in this country; its appearance when it does occur is usually only a few days after birth, in which case it may take its rise in umbilical phlebitis. Sometimes also it is congenital, of intra-uterine origin. In either case this disorder must be regarded as very dangerous; and by the old school it is set down as almost invariably fatal, even when arising so late as the fourth month. *Symptoms.*—The erysipelas may be preceded by fever and other symptoms of constitutional disturbance; but in most cases the first evidence of the peculiar disorder appears in a certain suspicious redness, which commencing upon the pubis, or about the umbilicus, gradually spreads over the abdomen and thighs; the parts occupied by the inflammation being swollen, hard, and extremely tender to the touch, as indicated by the movements and cries of the child, who can scarcely bear to be touched; (*Lachesis.*) After twenty-four hours a few scattered vesicles make their appearance upon the inflamed surface, with inflamed livid bases, which rapidly terminate in gangrenous ulcerations. "When the redness extends to the hands and feet, these parts acquire a degree of redness and swelling far greater than that of any other part. The genital organs in some cases sphacelate, in consequence of the local inflammation, and in many acquire an emphysematous appearance. In place of appearing upon the pubes first, the erysipelas has been known to extend from the areola of the vaccine vesicle; less frequently

from an accidental laceration of the skin or from the excoriations so common in the cutaneous folds of the groin and other parts." Sometimes the disease begins in the form of a dark-red, shining spot, which quickly extends in size and becomes of a purplish color; there is little swelling, but the skin becomes tense and hard; (see Induration of Cellular Tissue in the following chapter.) When the erysipelas commences in the abdomen, vesications, destruction of the cellular tissue and gangrene of the skin quickly follow; the genital parts are not unfrequently destroyed altogether. In such cases the fever is of a typhoid kind and the whole disorder exceedingly malignant and capable of carrying off the child in a very short time. In this disease, even under its milder forms, it is easy to see that the vital forces are so greatly depressed, and the blood in such a depraved condition, that there is little power or hope of recuperation. Still much may be done even in malignant disorders, if we can remove the constantly sustaining cause. Where there is reason to think that the bad state of health of the mother or her general enfeebled condition, is the cause of the difficulty, the child should be provided with nourishment from other sources. Study the following remedies; and others which may be indicated.

Aconite. When a high state of febrile excitement prevails,—a real synochal fever,—this remedy alone, will prove sufficient.

Apis. When the child screams out suddenly, as if from stinging pains; *sleepless nights;* the eruption inclines to spread all over the child, or to become gangrenous.

Arnica. When the disorder seems to result from bruises; or from rough handling of the umbilical cord.

Belladonna. The eruption is very red, and extends in radii from a centre; jerking, twitching and moaning; the skin seems to be very hot.

Bryonia. The inflamed parts seem indurated, pale and tender. Lips dry and parched.

Graphites. The eruption assumes a vesicular appearance, or it exudes a transparent, glutinous fluid. Or the disease may assume a chronic form; and the child be very costive, with stools large and almost impossible to evacuate.

Mercurius. In cases of syphilitic origin.

Pulsatilla. This remedy is often required when the disease appears about the buttocks, and inclines to spread.

Sulphur. Useful in cases of strongly-marked herpetic constitution.

Study also *Lachesis*, and *Rhus toxicodendron.*

URTICARIA—NETTLE-RASH—HIVES.

The characteristics of this eruption upon the skin are found in the elevation of the patches, and in the burning-stinging nature of the pains, in their dependence upon some recent disorder of the stomach or heat of the weather, in their usual sudden appearance and frequent, equally sudden retrocession. By Dr. Condie, urticaria is described as "an eruption of red inflamed patches, (they may however be like white wheals,) irregularly distributed upon different, and often distant parts of the body; sometimes small in extent and number, at other times occupying a considerable portion of the skin." This eruption both in external appearance and in the sensations which it occasions remarkably resembles that produced by the application of the stinging nettle, *Urtica urens*, to the skin. In such cases this medicine will be found capable of affording immediate and very sensible relief to the distress of the little patient. When the eruption seems to be principally brought out by the heat of summer, the warm bath will be found very useful in relieving the intense burning-itching.

In some instances the eruption disappears from one part of the body to reappear almost immediately in another and quite distant part. Most cases of urticaria are comparatively trifling and evanescent; but with some appear concomitant symptoms of more gravity, such as burning fever, diarrhœa, &c. These symptoms may be found enumerated under the various medicines.

Aconite. Much fever, restlessness and anxiety.

Apis. Red, inflamed, raised patches, with burning-stinging pains; valuable and curative in many of the severest cases.

Arsenicum. Eruption worse at night, with much tossing, May be particularly suitable when the disorder is caused by unsuitable food.

Belladonna. Red face and eyes; the eruption is also very red; moaning and starting in sleep; head hot.

Bryonia. The eruption has been partially suppressed, so that it looks very pale, and there is oppression of the chest and difficult and rapid breathing.

Calcarea c. The eruption is white and elevated quite above the skin; it is hard and seems to itch very much, causing the infant great uneasiness.

Dulcamara. The eruption appears every time the babe is exposed to the damp cold air.

Hepar. Catarrh of the chest, head, &c., accompanies the eruption.

Nux v. Urticaria accompanied by gastric derangements, constipation, &c.

Pulsatilla. Urticaria with diarrhœa, worse at night.

Rhus t. When rubbing the parts affected seems to increase the eruption.

Sulphur. The child appears to suffer from a suppression of the eruption.

Urtica urens. When the eruption looks pale, like the stings of nettles, and requires to be rubbed all the time.

Crusta Lactea—Porrigo Larvalis—Scald-head.

This eruption has been variously named by different authors,—being termed *Porrigo larvalis*, by Willan; *Impetigo larvalis*, by Bateman; *Eczema impetiginodes*, by Rayer; and *Tinea muciflua*, or *granulata*, by others.

Description and Symptoms.—This eruption is called *larvalis*, because it covers the face like a mask. It usually occurs during teething, and appears to be much connected with that process; it commonly commences on the forehead and cheeks by the breaking out of a number of small yellowish pustules, confluent and crowded together upon a red surface. These pustules excite great itching, and are quickly broken, discharging a viscid fluid, that subsequently concretes into thin, greenish-yellow scabs. The scabs are frequently rubbed off, but form again; fresh crops of pustules appear around the scabs, which quickly extend to the scalp and even the face. When the scalp becomes engaged, the lymphatic glands at the back and sides of the neck enlarge, and sometimes suppurate. The eruption appears upon or behind the ears; and patches will sometimes appear also upon the neck or breast. The discharge from the pustules is caught by the hair upon the head, and concretes into small irregular, friable masses, which may resemble the bruised yolk of a hard-boiled egg.* The pustules, or *achores*,—as the small superficial ulcerations which they form upon the skin are sometimes called,—have an acuminated form; contain a straw-colored fluid; rest upon an inflamed base and are succeeded by a thin, brown or yellowish scab. There is much irritation; heat of the scalp and itching; the discharge is very profuse, and with so much itching that it is rubbed off, leaving the surface raw and excoriated. Wherever this discharge is brought in contact with the skin,—in the face where it trickles

* Evanson.

down, upon the breast where it falls, and upon the backs of the hands violently used by the child to rub with,—it proves so acrid as to produce there a fresh eruption. The same is true even of the arms of the nurse upon which the child rests its head at night.

The itching and burning acridity of the eruption and discharge are much worse at night. All external applications should be sedulously avoided, with the exception of tepid water; or cold cream, which has sometimes proved very grateful. The recession of the eruption should thus be carefully guarded against, since it would most certainly be followed by a dangerous attack of hydrocephalus.

Study the following remedies; and any others which may more accurately cover the symptoms and conditions present.

Indications will also be found among these medicines for various other forms of chronic cutaneous disease, which have not been particularly described.

Aconite. Where we find much fever, restlessness, anguish, the parts much inflamed, Aconite may remove every vestige of the complaint, if we wait patiently upon its action, as long as the improvement continues.

Arsenicum. Eruption very dry and scaly; it even seems, sometimes, to cause the destruction of the hair in such places as are affected.

Baryta c. Particularly when the cervical, submaxillary and parotid glands become swollen and hard.

Bryonia. In cases complicated with some other affection which is always made worse by motion. The scalp is very tender to the touch; the child cannot bear even a soft brush upon it.

Calcarea c. In children of leucophlegmatic temperament, eruption with thick scales and yellow pus underneath. Stools having a chalky appearance. Sometimes the eruption appears in the form of a ring. worm.

Chamomilla. When the child has been kept too warm; it is very fretful; must be carried more than usual.

Cicuta vi. Thick, whitish scurfs appear on the chin and upper lip; they secrete a dampness; sometimes scurfs from the nose.

Clematis e. There appears a dark, burning, miliary eruption with violent itching; a dampness constantly exudes from this which dries into scurfs as the disease spreads onwards.

Dulcamara. Indicated in thick brown herpetic crusts on the face, forehead, temples and chin, with reddish borders,—bleeding when scratched.

Graphites. The eruption exudes a transparent, glutinous fluid, which causes the crusts to fall off,—when more form to fall again in turn;—meanwhile the eruption extends over a still larger surface. It appears more particularly on the chin, and behind the ears,—although no portion of the surface is entirely exempt.

Hepar. The eruption spreads by means of new pimples appearing just beyond the main disease,—which finally become incorporated with those which came first.

Jacea. Violently itching eruption, worse every night, and urine smelling like cat's urine.

Lycopodium. When the eruption has a bad smell and bleeds very easily.

Mercurius sol. Much salivation and scorbutic gums.

Psorine. This remedy should be studied in seemingly intractable cases.

Rhus t. A bright edge of inflammation surrounds every portion of the eruption; and there is much itching, particularly at night.

Sarsaparilla. The entire base of the eruption is much inflamed; the child cries much and is very uneasy; also the crusts become detached in the open air, and the skin adjoining becomes chapped.

Sepia. Eruption very moist, almost constantly discharging pus-like matter; the child often jerks its head to and fro.

Staphysagria. When the scales are yellow, moist, *offensive,* and itch violently.

Sulphur. Where the eruption extends more or less over the whole body, with much itching,—although the main affection appears upon the head.

Viola tri. Thick incrustations, pouring out a large quantity of thick yellow fluid, which agglutinates the hair.

Dandruff—Pityriasis.

This is a superficial, scurfy, bran-like eruption, which appears,—sometimes on the forehead,—but principally upon the hairy scalp of infants. The minute scales,—exfoliation of the external cuticle,—fall off, leaving temporarily a white surface, to be replaced presently by a similar scurfy formation;—this process occurs again and again.

More severe forms of furfuraceous (bran-like) eruption are known by the name of *Porrigo; Herpes furfuraceus, Tinea.* The *pityriasis versicolor* is said by Watson to be "a sample of the *vegetable parasites* with which the human integuments are liable to be defaced. Viewed through a microscope, these bran-like scales, present the spora and

filaments of a minute cryptogamous plant or fungus, the microsporum furfurans." Although the knowledge of this or any other eruption being of such parasitic nature is of less use in Homœopathic than in Allopathic prescribing: still it will be interesting to examine any such scales with a microscope, to determine if they are *fungi;* and then to see them entirely disappear,—not under the too often ineffectual application of external means, or the use of any other remedies directed principally to the skin; but under the influence of the proper antipsoric, which removes the disorder from the skin by first curing the internal dyscrasia from which it was developed, and by which it is still supported. Study the following medicines,—as well as those previously mentioned under *Crusta Lactea.* Be careful in cleansing the child's head, not to try to wash or rub off the dandruff. Cure the child; and that will disappear of itself!

Arsenicum. Eruption dry and scaly; scurf or scales constantly falling off; often destroying the hair.

Bryonia. When the scalp is extremely sensitive and the dandruff rough and uneven.

Calcarea c. The dandruff accumulates evenly all over the scalp,—which is smooth and seems to become thickened. This remedy alone cures the most of such cases.

Dulcamara. Marked aggravations in the child's general symptoms occur with every cool change in the weather.

Graphites. Occasionally there is seen a transparent, glutinous exudation upon the scalp.

Lycopodium. The head smells very badly.

Mercurius. When there are the general mercurial symptoms in connection with the dandruff.

Psorine. This remedy will sometimes be required, where Sulphur or Calcarea fails to cure.

Sepia. The dandruff seems to come in circles like ring-worm, (annular herpes.)

Silicea. This remedy is indicated in cases similar to those cured by Calcarea, but the child has less of the leucophlegmatic temperament.

Sulphur. General Sulphur symptoms with the dandruff.

Nævi Materni—Mother's Marks—Moles.

These spots are congenital, as their name indicates; and they are not only hardly ever amenable to surgical treatment, but have in many cases been rendered much worse by such injudicious interference. Some remarkable nævi reproduce upon the skin of the

child while yet unborn the vivid impression made upon the mind of the mother. Another and more profound influence of the same kind, or one exerted in an earlier stage of pregnancy, results in actual deformities and monstrosities. *Nævi materni* may be arranged in three distinct classes, in the order of their gravity.

I. *Moles;* the most common of all; whose character and harmlessness is well known; and which are generally attributed to some alteration in the structure of the rete mucosum.

II. *Venous Aneurisms,—Anastomosis of Venous Capillaries.* These form a dark-red circumscribed stain, which generally appears on one side of the face, and is sometimes of considerable extent. These "marks," which appear to be simple dilatations of the sub-cuticular capillary vessels, may increase in extent till puberty, and then remain stationary.

III. *Aneurisms and Dilatations of the Arterial Capillaries.* These form the most important of the nævi; they are apt to enlarge in after-life, especially when stimulated by external irritation; and they may give rise to dangerous hemorrhage if improperly meddled with. They form slightly elevated spots, with well-defined margin and a granular surface,—which consist of an erectile vascular tissue. These granulated tumors, raised above the skin, may in fact be constituted of venous, or of arterial vessels. In the former case, they may be of a dark blue or livid color; in the latter of a brighter red.

The following remedies should be carefully studied, in order to find the *simile* in each case: this being found, it should be given sufficiently high, and at long intervals, in order to remove as rapidly as possible from the system the morbid condition which sustains these irregularities of the circulation; and to enable nature to remedy the deficiency in structural organization from which perhaps they originally sprung.

If the *arterial capillaries* appear involved:

Belladonna. Will be indicated by red radii extending from the centre.

Calcarea c. In leucophlegmatic temperaments.

Lycopodium. In hypertrophied capillary tumors,—both venous and arterial.

If the *venous capillaries* are involved:

Carbo veget. Particularly when the slightest irritation causes free hemorrhage.

Phosphorus. "Small wounds bleed much"—this may be either venous or arterial. Study also: *Nux v.*, *Sulphur.*

In cases of *encysted tumors,* (*Lupia, or Nævi lipomatodes,*)—study in connection with all the constitutional and concomitant symptoms and conditions: *Baryta c., Calcarea c., Hepar, Graphites, Phosphorus, Silicea, Sulphur.*

Nævus verrucosus—Wens, Warts: Calcarea c., Causticum, Dulcamara, Lycopodium, Nitric acid, Psoricum, Rhus t., Sepia, Thuya,—should be similarly studied; or any other remedies to which attention may be turned by peculiarities of the individual case.

Cephalæmatoma—Sanguineous Tumor of the Head.

Of the sanguineous tumors sometimes developed upon the pericranium and bones of the head of new-born children, the writer has met with quite a number. And he has always been successful in curing them in a few days with a single dose of *Calcarea c.,* high. Hartman recommends Arnica, or Rhus[30].

If there should result an ichorous discharge and caries of the bone, and prostration, the same author prescribes *China,* and afterwards *Silicea.* But in my opinion, *Calcarea c.,* given at the first, will save any further trouble.

Ecchymoses on the surface of the scalp of young infants are the result of contusion of the cranium in parturition; they disappear by absorption; but their removal may be hastened by the application of *Arnica* lotion.

Ranula.—This swelling under the tongue consists in an enlargement of the sublingual bursæ mucosæ. The cyst contains usually a limpid or thick albuminous fluid; although there have been instances in which the contents were more solid concretions. The puncture of the tumor, although evacuating the contents, does no good; and should in no case be resorted to. The disease takes its rise in some scrofulous (or possibly syphilitic) dyscrasia; and can only be radically cured by remedies capable of removing such taint from the system.

Ambra g. Is recommended by Jahr.

Calcarea c. Should always be studied in connection with cases of this kind occurring in leucophlegmatic temperaments.

Mercurius. Much salivation. Suspicion of a syphilitic taint.

Natrum mur. In the opinion of Hartman deserves the preference over Ambra.

Rhus t. Has cured several cases under my care; a greater number than any other remedy.

Sulphur. May also be studied when it appears to correspond to the disposition of the patient, and to the cause of the disease.

Thuya. When the tumor is decidedly of a blue color; or complicated with syphilis.

Intertrigo or Chafing.

Excoriation, soreness or chafing, frequently occurs in those parts of the skin of infants which are either rubbed together in the natural movements of the limbs, or liable to be fretted by friction of the diaper or other articles of clothing. Thus the groins, the surfaces between the genitals and the thighs, between the nates, behind the ears, the axillæ, and even the folds of the neck in fleshy children, may become the seat of these excoriations.

Such tenderness of the skin is due in the first instance, in great part at least, to a psoric dyscrasia in the constitution; and for its complete removal it will require therefore a suitable antipsoric remedy. But this original disposition to such excoriation will be greatly increased by want of proper attention to the state of the skin, and by neglecting to remove as soon as possible all those excretions from the bladder and bowels and from the skin itself which, alone are capable of originating such irritations and of causing them to proceed to ulceration. Very fat children are particularly liable to be troubled in this manner.

Directly contrary to the general custom, no powder, or other external application, should ever be used to keep the skin from chafing. It will be far better to pay strict attention to cleanliness, to wash clean and dry the skin carefully and as perfectly as possible with soft towels—never using the first particle of powder. If the parts become very sore, omit washing entirely; use no external application of any sort whatever, not even dry linen; but with the greatest care select the most appropriate medicine.

Calcarea c. Will be suitable in leucophlegmatic constitutions; in very fat and fleshy infants.

Carbo v. If there is much rawness of the parts opposed; and a general disposition to excoriation, particularly in very warm weather.

Chamomilla. If the child is very irritable, cries much, and requires to be carried continually up and down the room.

Graphites. The affected parts discharge a quantity of transparent glutinous fluid; especially behind the ears, and between the thighs.

Hepar. The intertrigo seems to extend by means of pimples which

arise just beyond the raw surface; these become involved in the excoriation, and new pimples appear a little further beyond.

Lycopodium. The excoriation becomes offensive and bleeds much; worse after four P. M., and better after eight in the evening.

Mercurius sol. The excoriation is much worse at night, it is very raw and bloody; the child does not sleep much.

Pulsatilla, or **Ignatia,** may be indicated, and are recommended where much chamomile tea has been taken by the nurse.

Sepia. The skin is very delicate; the least injury tends to ulceration.

Sulphur. There is much itching of the skin in general, and of the parts affected.

INDURATION OF THE CELLULAR TISSUE.—This affection is more common in foundling hospitals than in private practice; it chiefly attacks the children of persons suffering from impoverished nutrition; and usually appears in the first five or ten days after birth. The infants in whom the induration of the cellular tissue is developed are weakly and often premature; and the difficulty is thought to result from imperfect expansion,—*atelectasis pulmonum*,—or from subsequent collapse, of the lungs. In many instances a livid redness of the whole surface is obvious from birth; but the appearance of a circumscribed hard spot on one or the other extremity, or on some prominent part of the face, as the end of the chin, or the cheek-bone, is the first sign of the commencement of this affection. Other spots of a similar kind are soon discovered on different parts of the surface; and the body generally and the hardened spots in particular are found to present a temperature much below the natural warmth of the body. "The skin which covers the diseased part is slightly rose-colored, or purple, violet, or livid. If the disease runs a rapid course, the temperature of the body decreases rapidly, the pulse is scarcely perceptible, the breathing becomes more and more labored, the child's cries diminish and gradually cease altogether; the face becomes livid, and the little ones die as of suffocation, generally on the third day. Sometimes the disease is more chronic, and passes off again from the fourth to the eighth day; but these cases are exceedingly rare, and under the old treatment most children die in a few days."—*Jahr.*

In this country, as in Great Britain, this disease is comparatively rare; its occurrence in the ill-ventilated wards of foundling hospitals in large cities on the continent, especially in Paris, is more common.

Jahr, who seems to have had better opportunities for observing this disease than any other writer of our school, affirms that it is readily cured under Homœopathic treatment; and he recommends *Aconite*, *Bryonia*, and *Sulphur*, to which may be added *Conium*, *Calcarea c.*, and *Dulcamara*.

Induration and Swelling of the Breasts.

These little organs, in female infants, are liable to swelling, inflammation, and induration, or suppuration, in consequence of the absurd practice in vogue with some nurses of squeezing them, on pretence that unless the milk is squeezed out of them they will subsequently prove useless for lactation. Such notions, remnants of old wives' fables, and the fruits of erroneous views in physiology, cannot be too strongly discountenanced. But unless the physician is on the watch such things may be done; just as the nurse will incontinently pour a little "catnip tea" down the helpless infant's throat, right before his face,—and pretend to be surprised that he disapproves! Such a course of procedure as squeezing the child's breast, should it result in suppuration,—as is not unlikely,—may, by causing structural disorganization of the gland, produce the very mischief it was intended to prevent. In these cases *Hepar* or *Silicea*, or even *Phosphorus*, may be needed. In the milder cases, where only the inflammation and swelling appear, the disorder must be treated with reference to its cause, and to the totality of the symptoms present.

Aconite. If there is much fever at the outset, this remedy may dispel the whole difficulty.

Arnica. If the breasts are merely hard, with no apparent inflammation, or if the redness has not yet appeared.

Belladonna. The inflammation is of an erysipelatous kind; it runs in radii as it extends to the adjacent parts.

Bryonia. The breasts are quite hard, and of a pale red color.

Calcarea c. This remedy will be found indicated in some cases of leucophlegmatic temperament;—with very large fontanelles, light, fair complexion, breasts hard but not red.

Chamomilla. The child is very fretful; it must be carried in order to be appeased; the breasts are very tender to the touch.

Hepar. Will be useful if matter or pus has already formed.

Silicea. This remedy will be needed sometimes, after Hepar, particularly to heal the ulceration.

Cyanosis.

The patency of the foramen ovale, or imperfect closure at birth of the opening through which the blood in the fœtal circulation had passed directly from the right heart to the left, was formerly supposed to occasion a partial mixture of the venous blood with the arterial. Hence the Cyanosis or *Blue-skin disease*.

In cases of cyanosis there is a general bluish or blue color of the integuments; but it is principally marked in situations where the skin is delicate and highly vascular and in the extremities. The blue tint, when limited to certain spots, is a result of local congestion. A transient blueness of the skin has also been noticed in a few cases, in various parts of the surface, but its internal cause is unknown.*

The term chronic cyanosis is used, by Virchow, to express the general venous congestion which is consequent upon chronic affections of the heart and lungs. Acute cyanosis he states occurs in acute affections of the lungs, as for example, in pertussis. This eminent pathologist affirms, contrary to the opinion formerly entertained, as stated above, that cyanosis, even when produced by congenital malformation of the heart, does not arise from a commingling of arterial and venous blood, but from obstruction to the venous circulation.†

This affection generally destroys life at an early period; but sometimes the adult age may be reached, according to Leadam, with some distress and impaired health. The following remedies may be administered, according to the concomitant indications, in single doses, at long intervals, or oftener repeated, according to the acute or chronic nature of the case.

Aconite. If at any time there should be much vascular excitement heat, or restlessness, this remedy may be needed; if so, let it act as long as the improvement continues, it may entirely cure.

Arnica. In cases where there is hemorrhage from the nose and mouth, and great strangling and suffocation. The case seems almost hopeless. In such cases a few doses of Arnica will do much good.

Arsenicum. The symptoms are much aggravated by the least exercise. Much emaciation; cold sweat; great debility.

Calcarea c. This remedy may be indicated in leucophlegmatic children, with large, open fontanelles; the head perspires very much.

Carbo v. The veins stand out very full, and are remarkably blue.

China. In some collapsed stages, with waxy paleness and coldness of the skin.

* Rokitansky, III., p. 71. † Cellular Pathology, p. 372.

Digitalis. The child can hardly be turned, or its position changed without causing fainting, or nearly so, and almost always causing vomiting. The eyelids, lips, tongue and nails become *very blue;* pulse unequal, or very slow.

Lachesis. When the suffocating spells and the increased blueness become worse after sleeping. Great tenderness of all the flesh; it is exceedingly difficult to handle the child at all; the least touch seems to hurt it, and to leave a deeper blueness, like a bruise.

Laurocerasus. This remedy has cured, for me, permanently some very bad cases of this disorder; with the following indications: A little exercise produces a gasping for breath and increased blueness. The ends of the fingers and toes are nobby, larger than any portion of these extremities. The child is better when lying still.

Phosphorus. In very tall and slim children, with much oppression of the respiration, and swelling of the feet.

Secale c. In very thin, scrawny children, with shriveled skin; especially when there are spasmodic twitchings, sudden cries, feverishness, &c.

Sulphur. This remedy will be found useful in many cases characterized by the real sulphurous constitution.

Icterus.

The Icterus of new-born babes is scarcely to be considered an actual and distinct disease. It may indeed be caused by undue and prolonged exposure to cold of the tender and unprotected body of the infant immediately after birth. Often, however, it is the result of a more interior, physiological shock, which the system receives in changing from intra-uterine life to independent existence. From the second to the fourth day after birth, the entire surface of the skin, and also of the conjunctiva, may assume the yellow hue peculiar to this affection; this, continuing two or three days, gradually fades away, until by the eighth or tenth day, the natural, rosy-white color returns. The absence of other morbid phenomena, and the frequency of icterus among new-born babes, prove that this is not really a state of disease. Such at least is the opinion generally adopted; confirmed by the transitory nature of the affection itself. Seemingly it results from a slight interruption in the physiological action of the liver; or from the temporary hesitation which this organ experiences in adapting itself to the new order of things in the independent state of existence. Or it may result from a temporary disturbance in the hepatic portion of the fœtal circulation, from the same cause;

and this condition will of course be particularly aggravated, as already stated, by exposure of the surface of the body to the cold air. The small amount of exercise that pregnant women take, and the costiveness that so frequently attends their condition, may have some influence in causing *icterus gravidarum*, and in consequence in predisposing to the same condition in the new-born infants. Watson accounts for some supposed cases of this disorder, in the following manner: "The *icterus neonatorum* occurs, they say, a few days after birth; is not attended with any suffering or obvious disturbance of the bodily functions; and soon disappears. Now there seems reason to believe that this is not icterus at all; and has no relation to the biliary organs. The surface of the infant at its birth, is frequently of a deep red, from hyperæmia, or congestion of blood; presenting a condition which falls little short of a mild but universal bruise. By degrees the redness fades, as bruises fade, through shades of yellow into the genuine flesh color. Such, I am assured by those who are more conversant with these matters than myself, is the pathology of the icterus infantum."

Treatment.—If any thing should be required, which is not always the case, a single dose of *Aconite* will in the majority of cases set all right. Should the case prove a true jaundice, and be complicated with constipation or other morbid symptoms, the remedies appended to this section should be attentively studied. Cases sometimes occur in which, from the unhealthy nature of the mother's milk, it proves so poisonous as to derange the liver of the babe, as well as its stomach and bowels. When the mother is seriously ill, and always when her milk is so plainly seen to disagree, the child should immediately be taken from the breast, and either committed to another nurse, or brought up by hand upon such diet as has previously been recommended in this work. Fatal consequences to the child may result from even a single day's delay in following this advice. But these directions are often disregarded, when the mother is very feverish and either threatened with puerperal fever, or actually attacked by it; and the nurse persistently applies the babe to the breasts, "to prevent inflammation in them." The child is thus sacrificed, without benefiting the mother.

Aconite. The infant is hot, restless, sleepless, and in distress.

Arsenicum. Undigested, light-colored, offensive stools; dry scald-head; yellow skin.

Bryonia. Vomiting of food soon after taking it; the child wishes to keep perfectly still. Skin yellow.

Calcarea c. Yellowness of the skin; the other symptoms similar to those put down for this medicine under Dentition, which see.

Chamomilla. A cold seems to have been the cause of the difficulty; light-colored and offensive stools; the child is very fretful; wishes to be carried.

China. There is tenderness in the region of the liver; distention of the abdomen. Undigested and painless stools in large quantity.

Colocynth. Much colic, with writhing, twisting and doubling up.

Digitalis. The stools are almost white; scanty brown urine; frequent and empty retching; much debility.

Dulcamara. The child gets worse at every cool change of the weather.

Hepar. In children with dry, pimply eruptions.

Ignatia. The child is quite spasmodic, as a prominent symptom; frequent sighing.

Ipecacuanha. Almost constant nausea.

Mercurius sol. General mercurial symptoms, such as salivation, swelling of the glands, slimy stools, abundant and strong-smelling urine.

Nitric acid. Urine scanty and strong-smelling; very restless after twelve o'clock at night.

Nux v. Constipation; sleeping towards morning; colic; the nurse is a high-liver, or takes much coffee.

Pulsatilla. Entire loss of appetite; vomiting of mucus; no thirst; very changeable in its appearance; worse towards evening.

Sulphur. The child wakens often; it inclines to intertrigo; and to papular eruptions more or less over the face and skin generally.

Various Cutaneous Diseases.

Acne punctata, Comedones, (Maggot pimples.) These appear in consequence of obstruction and enlargement of sebaceous follicles on the nose, chin or forehead. The following remedies may be studied in such cases.

Eugenia jambos; Bryonia; Calcarea c.; Natrum m.; Graphites; Sabina; Sulphur; and *Thuya.*

Syphilis of New-born Infants.

Aurum. If the nasal or palate bones are affected. Ozæna s.

China or **Phosph. acid.** When the child appears very weak; and has great coldness of the skin.

Hepar. This remedy will be found useful when the mother has been allopathically treated with poisonous doses of Mercury.

Mercurius. When chancrous ulcers appear about the child.

Nitric acid. When the child has aphthæ, or ptyalism.

Syphilitic Ophthalmia. In this affection may be indicated, *Mercurius; Thuya; Nitric acid;* and *Carbo veget.* Study also the remedies under Inflammation of the Eyes.

Syphilitic Cutaneous Affections. These various forms of eruptive disease require, according to their accompanying symptoms and conditions, *Nitric acid; Hepar; Thuya; Sulphur; Phosph. acid;* and *Dulcamara.*

Condylomata—Figworts. In their severer form these sycotic excrescences present a red surface, and hard base; and discharge an acrid, purulent, contagious matter.

Mercurius sol. When there are general mercurial symptoms.

Nitric acid. This remedy may be indicated in some cases, where there is evidence of mercurial influence in the constitution.

Thuya. Indicated in a majority of the cases.

CHAPTER FORTY-SIXTH.

DISEASES OF CHILDREN—CONTINUED.

SCROFULA.

SCROFULA is a general name for various forms of disease arising in children of a psoric constitution. In the previous chapters we have seen how persons of a strumous, or scrofulous, or psoric constitution are peculiarly liable to suffer severely from the different disorders incident in infancy and childhood; how children of this class suffer far more than others in dentition and in all the accompanying disorders of the gastro-intestinal system, in those which affect in various ways the respiratory mucous membrane and adjacent organs, and finally in the eruptive fevers of all kinds. Many of the forms of cutaneous disease, to which we have referred, are but manifestations of the same psoric element in the system; and as such are properly as well as popularly termed "Scrofulous humors."

In different families this psoric or "scrofulous" diathesis tends to develop itself in different ways; and the same is true of the different ages of life. Thus, not to repeat what has already been said of other external developments of scrofula, the same element in early childhood affects the glandular system, which in other families, or in other

individuals of the same families, and even in the same individuals at different periods of life, results in tuberculization.

The term *scrofula* as used in this section refers principally to disorders of the glandular system. The cervical glands are those most frequently affected,—enlarged and ulcerated. Sometimes these produce deformity similar to goitre; but show no disposition to suppurate. The corresponding disorder of the mesenteric glands constitutes *tabes mesenterica*,—and their ulceration, "consumption of the bowels."

The *causes* of scrofula, that is of this especial development of the inherited, psoric diathesis, are to be found in scanty, unsuitable, and too uniform food; in defective ventilation; in deprivation of light; in over exertion, and in exposure to cold and dampness. Young infants imbibe the disease from their nurses' milk; or have it developed in them by other and unsuitable substitutes for it. Scrofula is, however, a very general term; and among what may be properly termed scrofulous diseases, may be mentioned a large part of those to which the infantile life is heir to. Some of these, such as Rachitis, and Hydrocephalus, Spasms, &c., will be more particularly described.

Arsenicum. Great emaciation; waxy paleness; great fatigue on the least exertion; nocturnal restlessness. Can hardly go up stairs. Scrofulous atrophy.

Baryta c. Painful glandular swellings and indurations, in the neck, or near the articulations of the lower jaw. The mesenteric glands become affected, and atrophy commences to show itself.

Belladonna. Bleeding of the nose; distended abdomen; the throat frequently becomes sore; the eyes are often inflamed; bloated face; no good sleep; hears all that is going on at night.

Calcarea c. Head large; fontanelles open; or are unusually slow in closing; much perspiration about the head. Sympathetic swelling in the neck, and in other places; enlargement of the abdomen.

Cina. I deem it not a little remarkable, and a fact that disproves many theories of old-school origin, that Cina[1000] so often cures scrofulosis in children who are continually boring with the finger in the nose, who are cross and exceedingly unamiable, whose urine turns milky on standing; whom nothing pleases; who are constantly turning and twisting at night, with frequent calls for water, and who are often ravenous for food.

Hepar. Is also suitable in many cases; as indeed are many other remedies, according to their characteristics. Compare *Rachitis*.

Iodine. This remedy is very frequently indicated when there are

glandular swellings. Compare all the symptoms. Bromine is closely allied to Iodine.

Mercurius sol. Cold and clammy sweats upon the lower extremities at night. Night sweats; swollen and inflamed glands, with a tendency to ulceration. Salivation. Scorbutic gums. All the symptoms are always worse in cold, damp weather.

Mezereum. May be indicated when there is constant excoriation of the nose, and often of the throat also.

Psorinum. In many respects this remedy is similar to Sulphur.

Silicea. Useful in children with large bellies, weak ankles; much perspiration about the head; inclination to uncover.

Sulphur. In children who are exceedingly sensitive to the open air, or wind; they do not like to be bathed, to touch water, to have their hair combed or brushed or made to look nice. Skin rough and scaly. Burning heat in the soles of the feet; short naps of sleep at night; papular eruptions.

Rachitis—Rickets.

Scrofulous disease affecting the bones,—called rickets, curvature ot the bones,—is an affection of early childhood, being noticed usually towards the end of the first dentition,—if not before. The disorder seems to consist in an excessive preparation for the process of ossification, which, from deficiency of assimilative force, fails to be completed. The bones of the skull seem to be the first affected, and with this is invariably associated some enlargement of the ends of the long bones. With this species of deformity of particular bones, may also be found, in some cases, a general deformity of shape, as seen in those who are pigeon breasted, or affected with curvature of the spine; and in fact some of these latter deformities of general structure naturally grow out of the first mentioned deviations in particular osseous formation. Besides these direct deformities, there are others, such as bending or curving of particular bones, which arise indeed from mechanical pressure, from gravity, or from muscular contraction; but which are in reality due to softness, or incomplete osseous development in the bones themselves. The one general and sufficient cause for the innumerable variety of deformities which may be described under the head of rachitis, including very slow development of the teeth, inability to walk, easy fracture, and spontaneous luxation of the bones,—is to be found in imperfect nutrition, and unhealthy food, developing in these forms some dyscrasia inherent in the system. See Lesions of Nutrition.

Treatment.—These various deformities often improve in the most wonderful manner under the action of the appropriate remedy. Study and compare the following.

Baryta c. Will be found suitable to many cases in dwarfish children; *i. e.*, in those of imperfect development.

Bryonia. Lips dry and parched; vomiting immediately after eating. Constipation, with stools, dry and hard, as if burnt. Wishes to keep very quiet.

Calcarea c. In those children whose temperament, figure and symptoms correspond to this remedy, it may be repeated once a week, or month,—according as the condition of the patient may require.

Ipecacuanha. Indicated by constant nausea.

Nux v. Sleepless, particularly towards morning; constipation of large, difficult stools.

Phosphorous acid. When there is a pale, sickly look; great debility; painless diarrhœa; tottering gait.

Ruta graveolens. Tottering gait, as if the thighs were weak; and there is much pain in them on walking.

Silicea. Much like Calcarea, only the temperament is less strongly marked and leucophlegmatic, and the osseous system is better developed.

Staphysagria. When the teeth turn black, and crumble, with the progress of the disease, into little fragments.

Sulphur. Indicated when the child is subject to intertrigo, pimples; short sleeps at night, &c.

Veratrum. In cases complicated with diarrhœa or constipation, with cold sweat on the forehead.

MUMPS,—PAROTITIS—CYNANCHE PAROTIDEA.—This acute inflammation of the parotid gland differs from an ordinary glandular swelling in being epidemic and contagious, and in not tending to suppuration. The disease appears in the form of an external tumor, which occupies the gland of one side; and as the inflammation declines in the one first affected, it commences to develop itself in the other, in many cases, but not in all. The tumor, which was at first remarkable and circumscribed, soon becomes extensive and diffused, often involving the maxillary glands in the inflammation, and continuing to increase till the fourth day. The pain is very considerable,—a steady and severe aching, as stated by those old enough to express their feelings; but the general fever is comparatively unimportant. The duration of the swelling is variable, from five or six days, in

some cases, to a fortnight in others. The metastasis of the disease from the parotid to the mamma, testicle or brain,—rare in proportion to the tender age of the patient,—would seem scarcely possible under judicious Homœopathic treatment.

Baryta c. If the swelling becomes very hard.

Belladonna. In cases characterized by red eyes and face; fever in the afternoon; tendency to *erysipelatous* inflammation; *lethargy* and *delirium*, and *pain in head*, on the *disappearance of the tumor.*

Carbo veget., and also **Conium**, are very useful in these cases.

Mercurius. This is the remedy in the majority of cases; particularly if they are apparently caused by a cold; and in cases where there are chills and fever and thirst at night; sweat at night; no appetite; cannot open the jaws; difficulty of deglutition; some salivation.

Rhus. Where there is much restlessness at night; and in cases complicated with erysipelatous inflammation.

Inflammation of the Brain—Hydrocephalus.

There are a variety of disorders of the encephalon,—disorders of the enveloping membranes of the brain, and of the brain itself,—which may be included under the general head of inflammation of the brain. And since all these disorders,—the acute as well as the chronic, those of the membranes as well as those of the brain itself,—tend to result in dropsical effusion, they are all indifferently classed under the general head of Hydrocephalus. With this preliminary explanation, we proceed to give the briefest possible statement of the principal symptoms of these various disorders, and subjoin a concise summary of the chief characteristic indications of the remedies most Homœopathic to them.

Acute Inflammation of the Brain—Phrenitis.—The simple, acute inflammation of the substance of the brain, a disease not very frequent, either begins with convulsions, or they soon occur, which, unless arrested, continue with little intermission till death takes place. Or the disorder may set in with violent vomiting and intense febrile excitement. This form of the disease occurs principally in children apparently healthy, and of highly developed nervous (encephalic) organization; runs a very rapid course; and causes effusion into the ventricles—*hydrocephalus internus.*

Acute Inflammation of the Membranes of the Brain—Meningitis.—The acute inflammation of the membranes of the brain most frequently occurs in consequence of a blow or bruise, of some kind, upon the

cranium,—*traumatic* meningitis,—which develops the disorder after the lapse of ten or fourteen days, when the original injury may even have been forgotten. The child complains of her head; there are convulsive motions in the eyes and eyelids; *sudden and long-continued paroxysms of general convulsions;* frequent attacks of vomiting; the headache is very violent; and there may be alternation of violent headache and violent sickness of the stomach. But perhaps the most remarkable characteristic indications of meningitis are found in the *sharp, quick cries, which the pain occasions on its paroxysmal recurrence; aggravation from movement:* these two latter symptoms are common to acute inflammations of the serous membranes,—as in the pleura and peritoneum. Aggravation from light and from noise is rather characteristic of phrenitis. The dropsical effusion, *hydrocephalus externus*, which soon results in severe cases of meningitis, produces symptoms indicative of pressure upon the brain, which are so similar to those following the effusion of phrenitis, that it is only in the early stages of the two affections that they can be distinguished; and they may even exist together. Inflammation of the *dura mater*, in particular, may result from *otitis;* or even in cases of otorrhœa,—these latter cases are usually marked by distinct rigors or shivering fits; and they may be followed by phlebitis, from the veins of the diploë and even the sinuses of the brain itself becoming involved.

Hydrocephalus is said to be the form in which cerebral disease usually appears in scrofulous subjects; and this is a disorder in the first instance rather of the membranes of the brain than of the brain itself. According to the results of examinations after death,—which however afford little aid in determining either the form of the disease during life, or the remedy suitable to it,—there are two classes of hydrocephalus;—the one resulting from simple inflammation, the other arising from deposit of tubercle in the membranes,—*tubercular* meningitis.

But we do not attempt to distinguish between the two; our present purpose will be answered by detailing the most remarkable of the *precursory* symptoms. The disposition of the child changes, it becomes variable, gloomy, listless and inactive, peevish, fretful and restless, with a vacant look and abstracted air; he is usually wakeful, or falls into a doze from which he starts with cries. If old enough to speak, he complains of pain in his head; or if younger the head is frequently rolled from side to side, or buried in the pillow; there is evening fever; *vomiting, especially on rising from a recumbent position;* con-

stipation; delirium; sleep with the eyeballs turned upwards and inwards so as to hide the cornea under the edge of the upper eyelid; and as the disease advances constantly increasing drowsiness; there may be paralysis of one of the extremities, or of one side of the body; constant movement of the hands, or fidgety motion of the feet; soporose condition, with half-closed lids; the pupils of one or both eyes permanently dilated and insensible to light;—or the pupils may be very much contracted, almost closed;—constant strabismus, and irregular pulse. To these various symptoms, which in different degrees and in various combinations with others, present themselves at first, are joined in the last stages of the disorder those convulsive and paralytic symptoms which indicate pressure on the brain from copious effusion. In the acute forms of the disease, called *water-stroke* by some, the disorder attains in a few hours as great a progress as it does in as many days in the chronic form.

Aconite. Indicated where there is very active inflammation, with much heat, restlessness, and distress.

Apis. The child screams out very sharply in its sleep.

Arnica. When the disorder results from a concussion.

Arsenicum. Great depression of the vital powers; emaciation, and a very waxy, pale look. Thirst for water; only a little taken at a time, and that often.

Belladonna. Almost constant moaning; the child remains in a drowsy, sleepy state. Starting and jumping.

Bryonia. There is a motion, more or less constant, of the jaws, as if chewing something. Lips dry and parched. Constipation, &c.

Calcarea c. Leucophlegmatic temperament; large open fontanelles; there is now, or formerly has been much perspiration about the head.

Camphor. Great coldness of the skin; and yet the child cannot bear to be covered.

Cina. The child picks its nose much as if from worms; has milky-white urine, and is cross and peevish.

Digitalis. Pulse very slow, or irregular; white evacuations, and bilious vomiting.

Helleborus. Scanty dark urine, with sediment like coffee-grounds.

Hyoscyamus. Delirium, with jerking of the limbs; watery diarrhœa; red face; wild staring look, and throbbing of the carotids.

Ignatia. Frequent sighing and sobbing. Compare Bryonia.

Ipecacuanha. The case is characterized by an almost constant

nausea, from which the patient has hardly a moment's relief. Ipecac.^{200} or ^{1000}, is capable of entirely curing such cases.

Mercurius sol. Scorbutic gums; salivation; swelling of the glands; slimy or clay-colored evacuations.

Opium. This remedy is of great value when cholera infantum threatens to terminate in this disease. Great drowsiness is the key-note symptom of this remedy.

Pulsatilla. Much slimy vomiting, and diarrhœa, worse at night. Stools ever varying in color.

Staphysagria. This remedy is indicated in some chronic cases, and may be of especial use if indicated in persons who have been mercurialized.

Stramonium. Called for when the child exhibits fear at the first sight of objects on awakening; strabismus, &c.

Sulphur. In cases where suppression of an eruption has preceded the disease; or the child does not get well on account of some constitutional dyscrasia, which may be evident from a careful examination of the case.

Zinc. The child cannot keep its feet still. This remedy may be particularly indicated in dropsies following scarlet fever. May be studied in connection with *Belladonna.*

HYDROCEPHALOID.—This is a form of cerebral disease which was first described by Dr. Marshall Hall,—and by him named hydrocephaloid,—which is a secondary brain affection; and results from exhaustion of nervous vitality, and anæmia, of the brain;—as from debilitating diarrhœas, and loss of blood.*

The first stage, of irritation, is marked by restlessness, feverishness, sudden starting from noise, or being touched; bloated abdomen; *diarrhœa* of mucous or greenish, offensive masses.

The second stage is one of torpor; the face is pale, *the cheeks cool,* the eyelids half closed, the eyes unsteady, and unmoved by the approach of light; the respiration thick, irregular, sighing, the voice is husky, and sometimes cough. The whole state is one of evident prostration,—a sort of typhus condition of the brain; *the head, face, hands and feet are cool,* the pulse very small and rapid.

The remedies used successfully by Schweikert, were principally *Phosphorus; Zinc;* and *Calcarea. Suitable nourishment* to remove the exhaustion (starvation, loss of blood) should be carefully given. Compare *West.* Diseases of Children, p. 130.

* Dr. Schweikert, in Quarterly Hom. Journal. New Series, Vol. I., p. 114. Boston, 1853.

Inflamed Eyes—Ophthalmia.

New-born infants are very often subject to ophthalmia, or purulent inflammation of the eyes. The disorder is always serious; for, unless speedily cured,—which it is not always easy to effect,—the inflammation will result in opacity of the cornea, impaired vision, or even total blindness. And in neglected cases, especially those in which the necessary attention to cleanliness has not been enforced, ulceration of the cornea may take place; and the contents of the eyeball be discharged, causing permanent deformity as well as hopeless blindness.

"The first indication of the disease is generally, the eyelids becoming glued together during the night, with swelling and redness externally. When the lid is raised, there occurs a gush of tears, and its conjunctiva is found to be uniformly red, and slightly thickened and covered often with a purulent, tenacious, transparent coating. As the disease proceeds, the lids become more constantly agglutinated; and an increased secretion from the surface of the inflamed conjunctiva takes place, of a thick, purulent matter, a portion of which exudes from between the lids, but the greater part is retained, causing a considerable bulging of the palpebræ—the integuments of which assume a dark red hue."—*Condie.*

With the continuance of the disease, the discharge becomes still more copious; and must be constantly wiped away from the exterior surface of the lids. The *gonorrhœal* variety is the most rapidly destructive; and its treatment will require all the skill, caution, and discretion of the physician,—who must, however, avoid wounding the mother's feelings by suspicions, the statement of which, whether they are justly founded or not, can afford little help in prescribing.

So many cases of purulent ophthalmia occur in babes whose mothers are affected with leucorrhœa, that we must conclude a discharge from the genitals of the mother is a very frequent cause of purulent ophthalmia in new-born infants. The matters discharged are very apt to be highly contagious; and it is but a dictate of prudence, always to consider them so.

Treatment.—The most scrupulous attention should be paid to cleanliness of the affected organs, and of the whole body; let the temperature of the room be made perfectly comfortable; avoid fatiguing the inflamed eyes with too much light; carefully look after the health of the mother or nurse; and no less carefully select the remedy best suited to all the symptoms, circumstances, and conditions.

Aconite. Where from exposure to cold air there arises a high state of inflammation; general fever, with restlessness, distress, and sleeplessness.

Belladonna. The eye looks very red; *cannot bear the light;* opening only when in a dark place. Bleeding from the lids.

Calcarea c. In leucophlegmatic temperaments; excessive secretion of mucus in the eyes.

Chamomilla. Discharge of blood from the eyes; the lids are closed in the morning. If the inflammation be caused by exposure to cold, damp atmosphere; or if aggravated by every cold change in the weather.

Euphrasia. *Great lachrymation.*

Hepar. Little pimples surround the inflamed eye.

Ignatia. Inflammation of the eyes something like that of Belladonna, but not so intense;—with much sighing.

Lachesis. The eyes are always worse for a while after sleeping.

Mercurius. The eyelids are much swollen, and contain, underneath them, much purulent matter,—which pours out in quantities on opening the eyes. Compare Nitric Acid.

Nux v. The eyes are always worse in the morning.

Pulsatilla. The eyes are always worse towards evening.

Rhus t. The lids are principally affected; they look red and fiery; like erysipelas; and seem to itch much.

Sulphur. There are pimples more or less diffused over the body; short sleeps; the eyes seem to itch very much,—and to contain much mucus; the canthi appear raw.

Thuya. Hard inflammation of the eyelids.

Hernia.

Infantile hernia may be congenital, or developed subsequent to birth; and a predisposition to this affection may sometimes be observed in children whose parents are similarly affected. The hernial tumor may occur on either side, inguinal hernia;—this developed to its fullest extent becomes scrotal hernia in the male; while in female children the corresponding tumor appears in the labia pudendi. Exomphalos, umbilical hernia, is also a common form of infantile rupture; in such cases the tumor appears at the navel, as indicated by the name. Besides there may be femoral hernia, which appears more frequently in female than in male children.

It is very important for the physician to detect an infantile hernia at as early a period as possible; especially, before it occasions serious

mischief by becoming strangulated. This latter accident indeed but seldom occurs in very young children,—except in consequence of severe fits of crying in those already ruptured; or in cases of hooping-cough, in which the violent paroxysms may have induced the rupture in the first place. Thus when either from his own observation, or from that of the mother or nurse, any tumor or unusual formation is detected, the child should be as carefully examined as an adult would be in case of suspected hernia. The most difficult to detect, and at the same time one of the most common forms of hernia, is that which may be developed in the scrotum of the male infant not long after its birth. In these cases of congenital hernia, "the intestine or omentum passes out of the abdomen, accompanies the testicle in its descent, and becomes lodged in the pouch of the peritoneum which accompanies the tunica vaginalis testis, before its communication with the general peritoneal cavity has become obliterated. In the encysted variety of congenital hernia, the communication between the cavity of the tunica vaginalis and that of the abdomen is closed at its upper part, but the former is unusually large, and continues high on the cord, containing more or less serous fluid; behind this the hernia descends invested by the ordinary peritoneal sac."* In the femoral variety, the hernia appears in the groin, where it may readily be distinguished from tumors resulting from other causes, by accompanying symptoms, and by the condition and history of the case. Besides these varieties, the intestine may effect its passage through the parietes of the abdomen at other points,—constituting ventral hernia.

The strangulation of the protruded intestine will give rise to similar symptoms of pain, colic, vomiting, and obstinate constipation, or obstruction of the bowels, in young infants as in adults. And while such strangulation is far less apt to occur, it can always be traced to some definite cause,—such as violent straining in crying, or in severe paroxysms of coughing. And both the hereditary predisposition to rupture, and the congenital or subsequently developed hernia, may be entirely remedied by the administration of the appropriate medicine, in single doses, and not too often repeated. And even in severe cases of strangulation, the physician will have the satisfaction of witnessing the happiest effects from the Homœopathic treatment. By extensive observation, I am persuaded, that it is never useful to apply bandages or trusses in these cases; whether the hernia be congenital or otherwise. The properly selected Homœopathic remedy is always sufficient to cure the case.† Study the following remedies.

* Helmuth's Surgery, p. 571. † Vide Hahnemannian Monthly, Vol. II., p. 8.

Aconite. There is a constant fever; uneasiness and distress by spells; and the parts are *very tender to the touch.*

Antimonium c. A great deal of crying; white tongue; vomiting; diarrhœa; and some cough.

Borax v. The child cannot bear a downward motion; it is very nervous; cries much day and night. Even when it is sound asleep, the downward motion of putting it into the bed or cradle will surely awaken it.

Calcarea c. In children of leucophlegmatic temperament, with large open fontanelles; much perspiration about the head; the child cries much. It may have two or three hernias,—yet in such cases Calcarea alone will effect a perfect cure in a few weeks or months.

Chamomilla. The child is very fretful, and finds quiet and comfort only in being carried about up and down the room. Constant diarrhœa.

Cina. Very restless even during sleep. It will not lie awake five minutes without crying. It must be rocked, carried, or dandled upon the knee constantly, day and night; the mother and nurses are worn out taking care of the child till it gets Cina^{200} or ^{1000}, then it becomes quiet and the hernia gets well.

Lycopodium. Much croaking, rattling, and commotion in the abdomen, day and night; colic and crying. Red sand in the urine; screaming when passing water. Always worse soon after 4 P. M.

Nux v. The child has much colic; it draws up its feet and then thrusts them down again. Constipation; the stools being large and difficult. Poor appetite; crying much at night. The hernial tumor looks blue.

Opium. Redness of the face; abdomen hard and distended; the child is soporous.

Silicea. Frequent colic relieved by the discharge of offensive flatus. Tenderness about the hernial tumor; vomits much milk after nursing.

Stannum. The child is relieved by pressure of the knee, shoulder, or hand upon the abdomen.

Sulphur. Scurfy skin, which is easily abraded; sleeps only in short naps; with other Sulphur symptoms generally.

Sulphuric acid. When some general, deep-seated dyscrasia prevails, and the child is weak and exhausted, and no other more particular symptoms.

Hiccough.

Singultus, or hiccough, belongs to the class of inspiratory convulsions; and has usually been deemed an affection of the diaphragm alone. But Romberg* affirms that its cause not unfrequently resides in the central nervous organs; this, however, is most probably true rather of adults than of new-born infants. Hiccough consists of attacks of sudden, jerking inspiration, with a peculiar sound, followed by a short expiration. And in each of these respects it is exactly opposite to hooping-cough,—in which the expirations are quick, noisy, and jerking,—while the inspirations are anxious, protracted and still more noisy.

This affection may be very readily relieved sometimes, by giving the child the breast; or by a few teaspoonfuls of warm water. The following remedies have been recommended; and that one which is most indicated will certainly relieve the little ones suffering from this form of nervousness;—except in those cases in which it results from exhaustion of the vital powers, and is thus evidently symptomatic of approaching dissolution.

Belladonna. Flushed face; red eyes; crying on account of pain from the hiccough.

Hyoscyamus. Twitching and jerking of the limbs as an accompanying symptom.

Ignatia. Frequent sighing, as an attendant symptom.

Ipecacuanha. Much and constant nausea with the hiccough.

Nux v. Constipation attends, or causes the hiccough.

Pulsatilla. Hiccough occurring mostly at night.

Hepatitis.—Chronic Disease of the Liver.

The liver may become the seat of both acute and chronic disease in infancy and early childhood. Under the head of Icterus, page 715, mention has already been made of the temporary derangement of the function of this organ, to which new-born babes are often subject. *Hepatitis*, or acute inflammation of the liver, may be developed, especially in those constitutionally predisposed thereto, in connection with derangement in other portions of the digestive apparatus; or it may arise and assume the intermittent form in consequence of the miasm which develops chills and fever. Fever, restlessness, loss of appetite, constant nausea, constipation, and a yellowness of the sclerotic and skin, constitute some of the principal symptoms of this condition.

* Diseases of the Nervous System, I., 343.

Chronic disease of the liver may be the result of the long-continued influence which causes the acute form. Or the liver may become enlarged, by fatty deposit in its substance,—fatty enlargement or degeneration; or it may become the subject of albuminoid enlargement. Such chronic diseases of the liver will always be found associated with and measurably dependent upon corresponding disorder in the stomach and intestines,—and especially the glandular and tubercular diseases of the latter organs.

Chills and Fever, Intermittent Fever, whose principal seat appears to be in the liver, may occur in young children, particularly after undue exposure to the night air in miasmatic regions. Under favorable circumstances, these affections will be speedily removed by a single dose of the remedy (not too low) which is suited to all the symptoms of the chill, of the fever; to the concomitant symptoms,—such as thirst, pains in limbs, perspiration, &c.; and to the attendant conditions,—such as the aggravations or ameliorations of time, place, circumstance, &c.

Aconite. Much fever; dry heat; restlessness and anguish.

Belladonna. Much moaning. Can't bear to be moved. Short breath; flushed face; red eyes; if able to explain its sufferings, there will be much pain in the right shoulder.

Bryonia. *Very short breath;* cannot bear the least motion; dry lips and mouth; stools dark, dry, and hard as if burnt.

Calcarea c. Leucophlegmatic temperament; perspiration about the head; stools like chalk.

China. The region of the liver is swollen and hard; much flatulency; undigested stool.

Digitalis. Stools very light, almost white; much debility; *nausea;* slow or irregular pulse.

Lachesis. Always worse after sleeping, awakens in distress.

Lycopodium. Much flatulency and rattling in the abdomen,—this is a very characteristic symptom of this remedy in this, as also in other forms of disease.

Mercurius. Tenderness of the abdomen; it is hard and tense. Mucous stools; or stools too light and very offensive. Salivation. Strong-smelling urine.

Nux v. Constipation of large difficult stools; no appetite; sleeplessness, particularly after three A. M.

Pulsatilla. In children of mild, gentle dispositions; pale face; blond

hair and blue eyes; no appetite. Or the case may be clearly traced to some gastric disturbance from rich or fat food.

Sulphur. The patient partially recovers, and then relapses; or there is a tendency to relapse without previous improvement.

Infantile Remittent Fever.

Infantile Remittent Fever, Worm Fever, and Mesenteric Fever, are the names by which are designated the common continued fevers of infancy and childhood. This affection may take its origin in such irritation of the alimentary canal as frequently results from difficult dentition; and it may be complicated with more or less inflammation of the stomach and larger and smaller intestines. Compare diarrhœa, dysentery; and the other *specially mentioned disorders* of the digestive tract.

Infantile remittent fever occurs more frequently in autumn; is characterized by distinct remissions by day and exacerbations at night; and may remain for three or four or five weeks, and finally assume a true typhoid type, or terminate in a fatal disorder of the mesenteric glands, (*phthisis intestinalis.*) Sometimes it may run into a still more chronic form of scrofulosis, (*tabes mesenterica.*) The principal exciting causes are teething and worms; but the constitutional predisposition which is developed in these cases must always be considered.

The exhibition of the appropriate remedy will, in most cases, remove the predisposing cause, diminish the force of the exciting cause, and thus cure the patient in the shortest time and simplest manner.

Aconite. Hot, dry skin; thirst, sleeplessness; restlessness and distress during the febrile stage.

Antimonium c. White tongue; frequent vomiting, and watery diarrhœa.

Apis. Red points scattered over the body here and there. (Absence of thirst.)

Arsenicum. Much restlessness and tossing after twelve at night; putrid, undigested stools.

Belladonna. Much moaning, starting and jumping; very flushed face; red eyes.

Bryonia. Parched lips; dry mouth; dry and burnt-looking stools, which are passed but seldom. Wants to be kept very still; cries if moved.

Calcarea c. Leucophlegmatic constitution; open fontanelles; swelling at the pit of the stomach like a saucer turned bottom up.

Chamomilla. Wants to be carried all the time; one cheek red, the other pale. Cross and irritable. Stools smell like rotten eggs. Bilious vomiting

China. Worse every other day.

Cina. Picks its nose; desires many things, which it refuses when they are offered to him; nothing pleases or satisfies the child. After standing awhile the urine turns like milk.

Colocynth. Spells of colic pain,—in which the child curls up double, and writhes and cries very hard.

Ipecacuanha. One constant nausea, not relieved by the vomiting.

Magnesia c. Constant, sour, rather whitish, watery diarrhœa.

Mercurius. Tenderness of the pit of the stomach and abdomen; slimy stools with tenesmus; is not much relieved by perspiration.

Nux v. Always worse towards morning, and in the morning; no appetite at any time; constipation of large, difficult stools.

Pulsatilla. Vomiting of mucus; stools variable in color; worse towards evening; no thirst; the child refuses the breast.

Phosphorus. When there is much cough and rather a typhoid type seems to threaten.

Rhus t. The tongue appears dry and brown, and the child seems very weak, and very restless through the night.

Sulphur. The fever seems to exacerbate in alternate flushes and paleness; the child has weak spells; the skin is scaly; intertrigo is easily provoked.

Tartar e. Much nausea and vomiting, day and night; with drowsiness; red, itching rash over the body developed by the fever.

Diphtheria.

Diphtheria is an epidemic, and to some extent, infectious disease, which runs a very rapid course; is characterized by remarkable prostration, and the formation of a false membrane on the tonsils, uvula, palate, and even in the nares. In some epidemics of this disorder there is an equally characteristic external eruption, "which appears in the form of a rash and is sometimes of a dark or purplish color; bearing a close resemblance to that of measles; at others, bright and scarlet, as in scarlet fever."* There may be considerable swelling in the external throat and sides of the neck; such cases are usually severe, if not malignant. Diphtheria is a disorder which may be very mild, or exceedingly malignant, and almost universally fatal. It par-

* Ludlam on Diphtheria.

takes of the nature of scarlet fever, has with it, in fact, certain not perfectly determined relations; it may also be modified by a prevailing epidemic of measles; and may become complicated with croup. *Diphtheritic croup*, and *diphtheria and scarlatina* constitute the two most formidable diseases with which the physician is now called to contend. There may be very much, or very little fever; stupor, or excessive nervous restlessness; and as the disease extends into the larynx, loss of voice, hoarseness or huskiness; bronchial croup, with expectoration of tough, stringy mucus, (*Kali bi.;*) and in some cases the diphtheritic exudation may be observed in connection with the urinary mucous membrane, (*Cantharis.*)

Treatment.—Gargles are worse than useless; where food can be taken, sustain the strength with beef-tea, and other suitable nourishment; avoid fatiguing the patient; and selecting the remedy in accordance with all the symptoms, you may expect to save all except the most malignant cases.

(I do not propose to furnish a complete repertory on this disorder; but to give a few well-observed and prominent indications, viz.:)

Belladonna. The cough is spasmodic, rough, hollow, hacking, caused by a sensation of constriction of the larynx; worse from motion and talking, *or when the child cries;* when awaking from sleep. Concomitant symptoms; congestion to the head, aversion to the light, rattling in the chest, skin dry;—generally irritable in the beginning of the case.

Bromine. When the disease commences in the larynx and comes up into the fauces; and in some cases in which it runs down into the larynx and produces a croupy cough with much rattling of mucus.

Capsicum. When, if a description can be given, the throat smarts, as if from Cayenne pepper; the diphtheritic deposit covers a considerable portion of the fauces. There is a sensation of constriction on swallowing.

Kali bi. The disease extends into the throat, (and bronchia,) producing a croupy cough,—in paroxysms,—with expectoration of viscid, tough mucus, which may be drawn out into long strings.

Lachesis. When the disease first makes its appearance in the left side of the throat, and there remains, or extends from thence to the right side.

Lachnantes. If the child *has a very stiff and painful neck, drawn to one side,* with diphtheria.

Lycopodium. When it appears first on the right side, and from

thence inclines to spread to the left. Or where it begins in the nose and extends down into the throat.

Mercurius. Much saliva; much perspiration; offensive breath; swelling of the submaxillary glands.

Phosphorus; Merc. jod., Apis, Croton tigl., and Cubebs have also been curative in some epidemics or single cases.

Spasms—Convulsions.

Even in very young infants *spasms*, or general convulsions, are of frequent occurrence. They are present at the commencement of many diseases of children; and they attend the fatal termination of nearly all. Convulsions may be occasioned by morbid conditions of the nervous system,—*idiopathic convulsions;* or they may be merely sympathetic,—symptomatic of disorders in other organs, especially in those of the alimentary canal. Among the former may be enumerated those which arise from primary disease of the brain, or other large nervous centres; and those which result from general exhaustion of the vital forces, as in cases of difficult dentition, and in the advanced stages of hooping-cough. Among the latter class, or *sympathetic convulsions*, may be enumerated those cases which arise from the irritation of intestinal worms; from the presence of unwholesome food,—such as curdled milk; and from the influences which are about to develop eruptive disorders, or typhoid fevers. The convulsions, or rather local spasms of the glottis, which constitute laryngismus stridulus, seem to result either from direct pressure upon the trunk of some nerve, or from irritation of its peripheral extremities.

Convulsions or spasms, may be *tonic*, where the muscles are permanently, involuntarily contracted; or *clonic*, when the contraction more or less rapidly alternates with the relaxation. Tonic spasms are called *tetanus;* and if confined to the muscles which raise the lower jaw, they are called *trismus*. Spasms of separate muscles are called *subsultus tendinum;* these are clonic, and may be seen in severe nervous fevers. Clonic spasms are more frequently observed and less dangerous than the tonic. Convulsions which appear immediately after nursing, and especially if there is vomiting of curdled milk, may be attributed to the unsuitable character of the milk. Such cases occur in the children even of mothers perfectly healthy, if they give suck while in a state of high physical excitement, or moral distress. In cases which come on suddenly, and without apparent cause, especially if the convulsions are associated with fever, stupefaction, and vomiting, there may be reason to apprehend the accession of some

eruptive disorder, such as scarlatina, variola, &c.; and this opinion will be strengthened by the prevalence of one or the other of these epidemics at the time. Many cases of encephalic disease commence with vomiting and convulsions; in such instances upon minute inquiry it will always be found that some indications of cerebral disorder have been present for several days; and there is usually severe pain in the head immediately before the attack.

In general, clonic convulsions may be considered dangerous when the paroxysms become more and more prolonged; when they return after shorter intervals; and when, from the gradual development of opisthotonos or of emprosthotonos, the irritation is seen to extend itself along the entire course of the spinal cord. In most cases it will not be difficult to find out the exciting cause of the spasms; which may be suppression of some cutaneous eruption, or its too tardy appearance in the first instance; direct injury of the head, or some portion of the nervous substance; fright of the child, or even of the nurse; a feverish condition of the mother's milk; the influence of some epidemic miasm; the onset of some form of cerebral disease, &c., &c.

Treatment.—Remove as far as possible the exciting cause, whether it exists in the nurse or in the child itself; do not place the child in a warm bath; avoid every excitement, and keep the child perfectly quiet and free from every disturbing influence of noise, light, &c.; and very carefully administer the remedy which appears to be indicated by the nature of the case and by the attendant conditions.

Aconite. The febrile excitement is very great; hot, dry skin; anxiety and anguish.

Arnica. Where the spasms arise in consequence of a fall, or other injury.

Arsenicum. The child lies as if dead; pale but warm; is breathless for some time; finally it twists its mouth first to one side then to the other; a violent jerk appears to pass through the whole body; and its respiration and consciousness gradually return. These spasms return at longer or shorter intervals, unless relieved by this remedy, —until death closes the scene.

Belladonna. Starting from sleep with a wild look, dilated pupils, heat of the head and hands, red eyes and flushed face; soporous after the spasm.

Bryonia. When the spasms recur from the repercussion of measles.

Camphor. When the spasms result from suppressed catarrh, either of the head or chest.

Causticum. Convulsive motions of the upper part of the body

with feverish heat and coldness of the hands and feet. Convulsive motions of the extremities in the evening when the child is sleeping, with disturbed eyes and icy coldness of the body.

Chamomilla. One cheek red, the other pale; very cross and fretful; jerking and twitching in its sleep;—or the nurse may have had a fit of anger which causes the convulsions in the child.

Cicuta vi. Violent shocks through the head, arms and legs, which cause them to jerk suddenly. Spasmodic rigidity of the body,—either opisthotonos, or emprosthotonos. The child seems well and in great spirits, when suddenly it becomes rigid,—then relaxation sets in, with much prostration.

Cina. The child exhibits vermiculous symptoms; discharges worms; picks its nose or anus; has a hacking cough,—continually making attempts at deglutition, as if to swallow something down; is very difficult to be pleased with any thing.

Coffea. The attack has been brought on by excessive laughing and playing. The child is very excitable, and weakly,—and in consequence frequently suffers with spasms.

Cuprum. The spasm is often preceded by violent vomiting of phlegm. After the convulsion, the child screams and turns and twists in all directions till another spasm occurs.

Cuprum aceticum. When the spasms result from retrocession of the eruption in scarlet fever.

Helleborus. The urine is very dark and a sediment like coffee grounds.

Hydrocyanic acid. When the muscles of the back, face and jaws are principally affected; and the body assumes a bluish tint.

Hyoscyamus. Every muscle in the body is convulsed,—the eyes, the eyelids, the muscles of the face, and all,—and there is frothing at the mouth.

Ignatia. The spasms return at the same hour every day. Screaming and violent trembling all over. Single parts seem to be convulsed; the muscles or single limbs.

Ipecacuanha. Much nausea and vomiting, either before, during or after the spasm; the child is spasmodically drawn in some direction.

Kreosote. When the convulsion occurs from the swelling of a gum over a tooth which is not quite through.

Lachesis. The spasms come on during sleep.

Laurocerasus. There is much gasping for breath, either before,

during or after the spasm; and there may also be a bluish tint of the skin.

Mercurius sol. Much salivation; swelling of the gums; hard, distended abdomen. May generally be relied upon, when spasms occur from suppressed salivation.

Nux v. The spasm appears to result from indigestion; there is constipation;—or the nurse lives high, making use of coffee, wines, and rich food.

Opium. If the spasms occur from fright; or if in new-born babes there is screaming before or during the spasm.

Secale c. Twitching of single muscles; twisting of the head to and fro; contortion of the hands and feet; labored and anxious respiration.

Silicea. *Spasms which return at the change of the moon.*

Stannum. In some forms of vermicular affections (see also *Spigelia*) when neither Cina nor Silicea seem indicated. There is more excitability; more disturbance of the brain, and more fear.

Stramonium. Suppression of an eruption is the cause; or the eruption does not come out sufficiently. The child seems afraid, and shrinks back from objects on first seeing them.

Tart. e. Spasms caused by repelled eruptions, with paleness of the skin, and much difficulty of breathing.

Veratrum a. When a cold sweat appears on the forehead after or during the spasm.

Zinc. The child cries out during sleep, and if awakened, expresses fear, and rolls its head anxiously from side to side. The child has been cross and irritable for days previous, with hurried motions, distended abdomen and more frequent passages of urine than usual.

Urinary Difficulties.

There are not uncommon, in babes and young children, a variety of urinary difficulties; such as *dysury* or painful or obstructed urination; *suppression* of urine; *incontinence* of urine; and *proper urination*. These various disorders are so obvious as to need no particular description; and their most prominent symptoms will be found stated in their proper place under the indicated remedies. In some cases, the babe passes no water during the first few days after birth.

Dysuria.—Some times young infants and little children suffer with difficulty of urinating. This is very easily recognized; and

will be greatly relieved by the timely administration of the most suitable remedy.

Retention, or Suppression of Urine.—This difficulty will be less easily observed, in very young children. The bladder may be unusually distended; and there may be evident distress; and even convulsions. The mother or nurse should of course be able promptly to inform the attending physician, if there is any difficulty of this kind, *i. e.*, if the child's urine is scanty or suppressed. If there is no malformation, the proper remedy will afford prompt relief.

Aconite. This medicine may be given if the babe passes no water in the first days after its birth.

Arnica. If the difficulty,—ischuria, or retention,—appear to have been caused by an injury, such as a fall or a bruise.

Belladonna. If there is much moaning; distress; a sudden crying out,—in retention of urine.

Cantharis. If a few drops only flow, with much screaming.

Colocynth. Dysuria, *straining ineffectual; worse before, during and after urination,* which is scanty.

Dulcamara. The retention is caused by damp, cold air.

Ipecacuanha. Ischury with convulsions.

Lycopodium. Dysury with much rolling and rumbling of flatus.

Nux v. When there are retention and constipation.

Opium. The child is very drowsy and sleepy—face bloated.

Pulsatilla. If Aconite or Nux fail to relieve.

Sulphur. In scrofulous children in whom the retention occurs every time the child takes cold.

Compare the patient's symptoms,—in case they do not seem to be met by either of the above,—with *Stramonium; Hyoscyamus; Cannabis s.; Arsenicum; Apium; Petroselinum; Mercurius s.; Rhus t.; Sepia; Plumbum; Nitric acid; Causticum,* &c.

Profuse Urination.

Muriatic acid. Passes larger quantities of urine,—accompanied each time with a small stool.

Phosphoric acid. When the trouble is worse at night,—and the urine rather offensive.

Rhus t. Very restless at night.

Silicea. In large-bellied children, who perspire much about the head.

Study also *Argentum; Spigelia; Squills;* and *Verbascum.*

Incontinence of Urine.

Calcarea c. In leucophlegmatic temperaments, with open fontanelles; much perspiration about the head.

Causticum. In weakly, feeble constitutions.

Cina. In those affected with vermiculous symptoms, picking at the nose, &c.

Kreosote. In children who are very hard to awaken.

Lycopodium. Red sand is found on the sheets, or in the diaper.

Phosphoric acid. Very large quantities of urine are passed at night; the bed is literally flooded.

Sepia. The bed is wet almost as soon as the child goes to sleep,—always during its first sleep.

Silicea. In children with enlarged abdomens (pot-bellied),—other symptoms similar to Calcarea.

Thuya. The child has figworts—or condylomata.

Study also *Arsenicum; Belladonna; China; Conium; Carbo veget.; Pulsatilla; Sulphur; Graphites; Hepar; Rhatany; Sarsaparilla; Phosphorus; Cantharis;* &c. Hardly a remedy in the Materia Medica but may be useful in this complaint if the other symptoms correspond; *all the symptoms must be collated*, and the prescription made very accurately.

Gravel, or Calculi.

Sometimes children appear to be attacked with a severe colic, in paroxysms, or in continued distress which may last for hours. This may be from an actual wind colic, from indigestion; from the passage of gall stones through the hepatic duct, or from the passage of gravel or calculi, through the ureters or urethra. When the difficulty arises from the last-mentioned causes, the fact will usually be evident from the attendant symptoms; and great relief will be derived from the exhibition of the appropriate remedy; the following have most frequently been indicated in such cases:

Lycopodium. Much pain, even to screaming, before passing water. Red sand, or gravel upon the diaper, or in the urine.

Phosphorus. Much gray sand in the urine.

Sarsaparilla. Much pain at the conclusion of passing water.

Silicea; *Calcarea c.; Phosphoric acid;* and *Alumina* should also be studied in these cases.

Tongue-tied.

Raise the tongue with the finger, and place the point of a lance at a suitable distance from the tongue, and cut *outwards*, towards the gums. Thus there need be no wounding of the arteries under the tongue. If the edges of the tongue adhere, as is sometimes the case, operate in a similar manner.

Worms—Vermicular Affections.

"Worms," in popular language, constitutes one of the most common disorders of children. And people imagine that, if the worms are expelled their children will be cured. But this is a great mistake; for children are not ill so much because they have worms, as they have worms because they are ill. Consequently the violent medicines, drugs, and even mechanical means,—such as dolichos and tin filings,—used to destroy and expel the worms,—either entirely fail of their object or, in effecting it, inflict still greater injury upon the health.

The indications afforded by the symptoms enable the Homœopathic physician to prescribe the remedy for the entire disordered condition which leads to the development of the worms themselves. Besides, in many cases of supposed "worms," they in reality do not produce the sufferings,—they may even be entirely absent. Hence is seen the importance of prescribing for the patient, to restore him to health, not to attempt to destroy worms, by means which, in many instances, but add to the existing disorder.

There are two kinds of worms to which children are liable; the *lumbricoides*, or long round worms, and the *ascarides*, or pin-worms. The latter principally infest the rectum. Besides these there are occasionally cases of tapeworm, *tænia;* but these seldom occur in small children.

Picking the nose; boring in the ears; enlargement of the abdomen; capricious or voracious appetite; great fretfulness and nocturnal restlessness; constant dry, hacking cough, &c., may give rise to suspicion of the presence of lumbricoides. The pin-worms occasion intolerable itching and distress within the anus, especially when the children go to bed; cold water injections have been resorted to in many instances, in order to afford temporary relief from such distress; but these will not be needed under Homœopathic treatment.

Study carefully the following remedies; and give, at sufficiently long intervals in chronic cases, the one which is indicated by *all* the symptoms and conditions of the patient.

Aconite. When a real synochal fever prevails; or there is much itching of the anus, worse at night, and much fear manifested, the child is even afraid to go to bed.

Argentum nit. In many cases of tænia and ascarides, the latter particularly when there is much and violent itching of the anus.

Asarum. The child passes shaggy masses of mucus full of ascarides.

Belladonna. Involuntary discharge of feces and urine; violent startings; flushed face; red eyes; moaning; delirium.

Calcarea c. In leucophlegmatic children; the itching at the anus becomes very great towards and in the evening. Also causes tapeworm to disappear, when indicated by the symptoms.

Carbo veget. When a peevish wrathfulness becomes developed; the child wishes to vent itself in rage; it strikes, kicks, bites, &c.; nightly fear of ghosts; the weakness of the veins becomes more and more developed.

China. Painless diarrhœa. Abdomen much distended, particularly after every meal; tremor and debility.

Cicuta virosa. Fever, colic, and convulsions,—with the other symptoms of worms.

Cina. Boring at the nose; exceedingly unamiable, nothing pleases the child. Short, hacking cough; frequent swallowing, as if to swallow down something. The urine turns milky. Tossing during sleep. Is often sullen and unwilling to play during the day.

Digitalis. Stool in the *evening*, passing great quantities of ascarides.

Ferrum aceticum. Much itching about the anus, and slimy stools with ascarides. Vomiting of food and flow of water from the mouth.

Ignatia. In many cases where there is itching of the anus at night; the child is nervous and spasmodic.

Ipecacuanha. Itching of the anus; nausea and retching.

Lachesis. Itching of the anus in the morning, or always after sleeping.

Lycopodium. Ascarides with much rumbling in the bowels, or red sand in the urine. Itching about the anus.

Marum verum. The sufferings from ascarides come on at regular periods every day and are followed by nocturnal restlessness.

Mercurius sol. Ascarides creep out of the anus, and can be seen on the perineum and buttocks, even at night in bed. Lumbricoides escape easily and freely; the abdomen is hard and distended.

Nux v. Picking at the nose; loss of appetite; constipation; sleeplessness in the latter part of the night; pain in the abdomen.

Phosphorus. Itching in the anus and at times sharp-shooting pains, causing the child to scream out. These troubles come on worse towards evening.

Pulsatilla. The child has vomiting of mucus; bad smell from the mouth; slimy passages from the anus; eructates a watery fluid.

Sabadilla. Itching of the anus, nose and ears; much pain in the abdomen. Worse every fourth day.

Silicea. When worm fevers assume a slow, chronic form in scrofulous children with large bellies, and much perspiration about the head. Worse with the change of the moon.

Spigelia. When the child refers to the navel as the most painful part. The action of its heart seems unusually violent. Very pale face, and a yellow margin around the eyes.

Stannum. The child has spells of abdominal pain, during which it wishes to lean over on something hard for relief; there are many other symptoms, but this condition forms a reliable key-note for Stannum.

Stramonium. Abdominal spasms and frequent desire for stool. On awaking, the child shrinks from the sight of objects,—even from those with which it is perfectly familiar.

Sulphur. When there is redness and rawness about the anus much of the time; papular pustules on the skin; the skin has a rough or scaly look.

Urtica urens. Loss of appetite; itching of the anus; itching of the nose; nocturnal restlessness. *Stinging, burning sensations,* in any part.

Valerian. Nightly itching; muscular spasms; sleeplessness.

Veratrum album. Attacks of vomiting and purging with cold sweat on the forehead, and symptoms of worms. Selected from these symptoms, this remedy has exposed and cured tape-worm.

Viola odorata. May be given in cases calling for Cina, when this remedy fails to relieve.

APPENDIX TO CHAPTER THIRTY-FIRST.

Illustrations of the Mechanism of Labor.

I. Vertex Presentations.

Fig. 66.

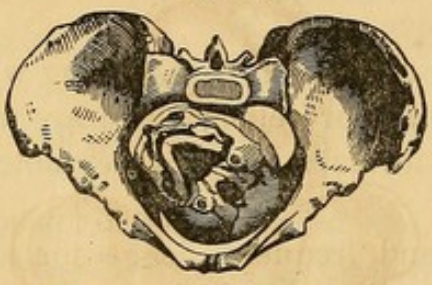


Fig. 67.

Figure 66 represents the head in the left anterior occipito-iliac position.

Figure 67 represents the head in the same position, though more flexed—(Stage of Flexion.)

These two figures should be studied in connection with the text pages 476–77.

Vertex Presentations.

Fig. 68.

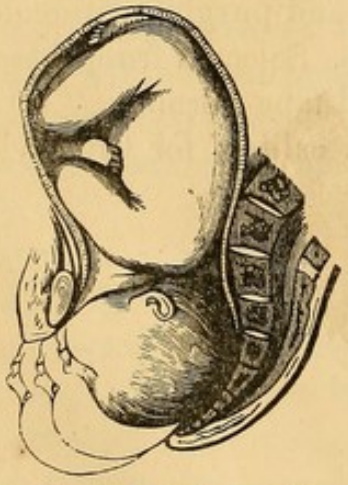


Fig. 69.

In Figure 68, the relative position of the child is seen in the various degrees of extension ; the nape of the neck resting first behind, then under the symphysis pubis.

In Figure 69 is portrayed the disengagement of the head in the occipito-posterior position, having failed to rotate to the front or anterior as usual, to come under the symphysis pubis.

It may be remarked here, in addition to what is said of Presentations on page 475, that the five Presentations referred to are:

I. *Vertex Presentation;* II. *Presentation of the Face;* III. *Presentation of the Pelvic Extremity;* IV. *Presentation of the Right Lateral Plane of the Trunk; and,* V. *Presentation of the Left Lateral Plane of the Trunk.*

II. Presentations of the Face.

Fig. 70.

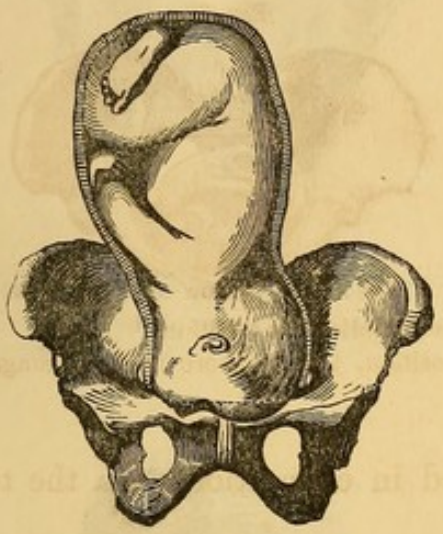


Fig. 71.

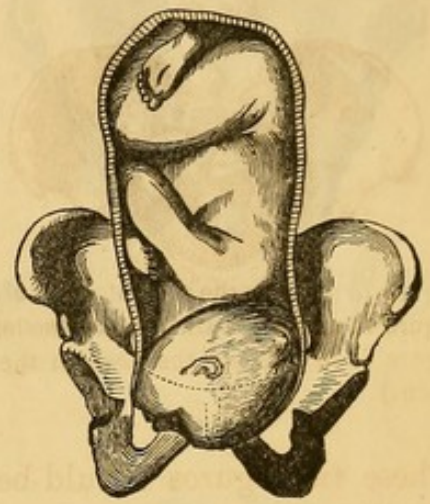


Fig. 72.

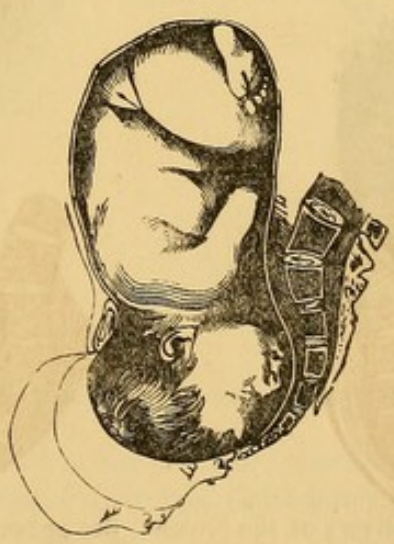


Figure 70 exhibits the face, in the right transverse mento-iliac position, after the forced extension.

Figure 71 shows the face in the same position, although more fully exposed. See pages 478–79.

Figure 72 exhibits the further extension.

III. Presentations of the Pelvic Extremity.

Fig. 73.

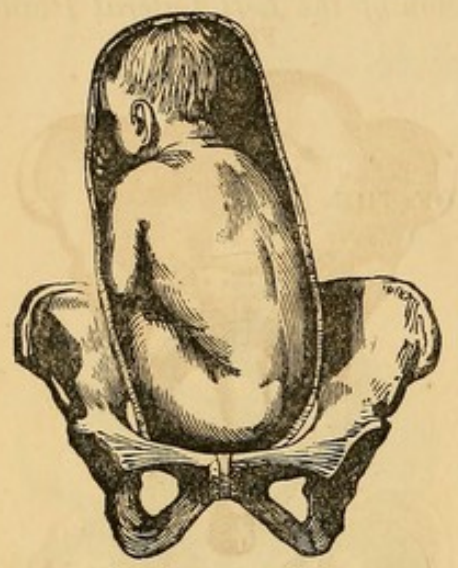


Fig. 74.

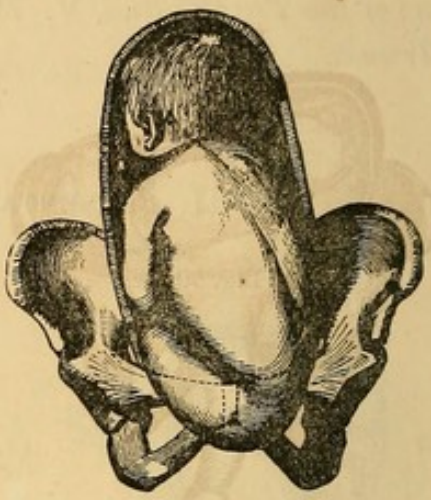


Figure 73 exhibits the presentations of the breech in the left anterior sacro-iliac position. Figure 74 exhibits the same position after internal rotation is accomplished.

Fig. 75.

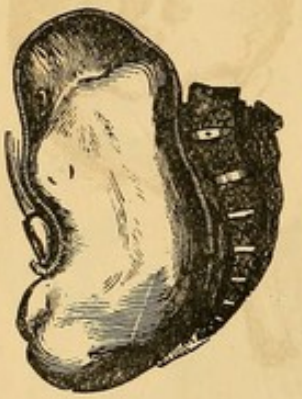


Fig. 76.

Figure 75 illustrates the delivery of the breech. See pages 480–81.

Figure 76 exhibits the delivery of the head in the sacro-posterior position. The faint outlines show the successive stages of the flexure of the chin upon the already delivered breast,—which may be greatly assisted, if need be, by the pressure of the operator's finger introduced into the child's mouth. See pages 480–81.

Presentations of the Trunk, viz.:

IV. Presentations of the Right or Left Lateral Plane.

Fig. 77.

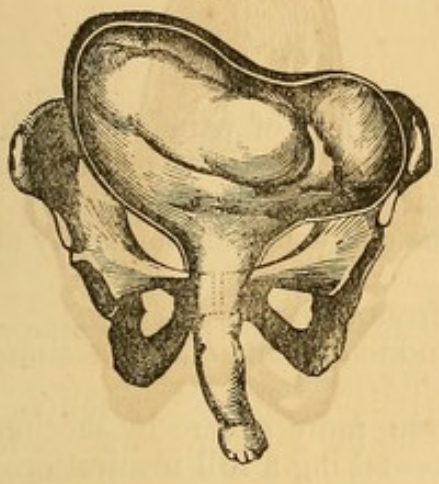


Fig. 78.

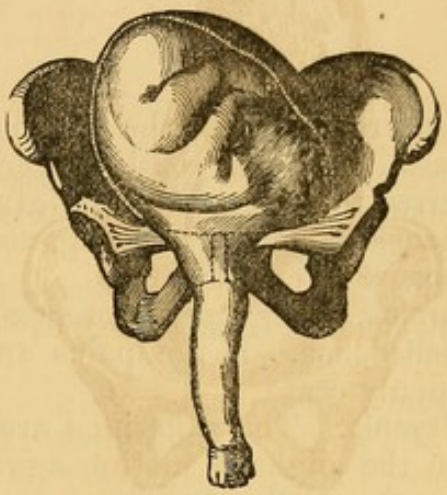


Figure 77 exhibits the first position of the right shoulder (right lateral plane) with the arm hanging down.

Figure 78 illustrates the same position during the descent.

Fig. 79.

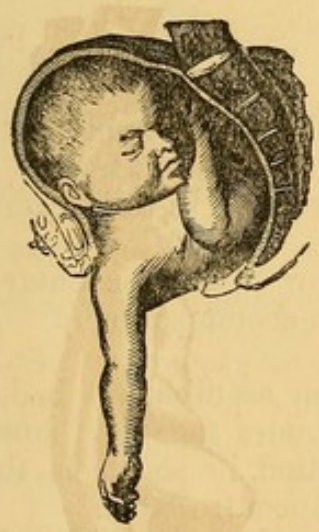


Fig. 80.

Figure 79 exhibits the position of the child after rotation, and just at the moment when the process of disengagement begins.

Figure 80 shows the same position with the delivery more advanced.

The movement in presentations of the left lateral plane will, of course, exactly correspond to those of the right.

APPENDIX TO CHAPTER TWENTY-EIGHTH.

THE remedies for the treatment of a variety of pains in the chest, breasts, abdomen, back, lower extremities, &c., during pregnancy, referred to on page 434, are given below.

Aconite. If the sufferings seem to be developed immediately after exposure to cold air.

Arnica. Very great soreness, as if from a bruise.

Belladonna. If the pains appear suddenly, and, after a time, as suddenly cease.

Bryonia. The sufferings are rendered more severe by motion,—even the slightest motion aggravates,—taking a full inspiration, for instance; stitching pains.

Calcarea c. Cramps in the toes or soles of the feet.

Camphor. Cramps, with inability to remain covered.

Chamomilla. Abdominal pains, with frequent emission of pale, colorless urine in large quantities.

Coffea. Often indicated when there is much excitement and sleeplessness.

Colocynth. Frequent attacks of colic, which draw the patient nearly double.

Cuprum. When there are cramps in the fingers and toes; or in the pit of the stomach; *violent cramps.*

Lycopodium. Cutting pains running from right to left across the abdomen.

Nux v. Sufferings from high living, or from a sedentary life; constipation of large, difficult stools, as an accompaniment. Aggravation in the morning at four o'clock.

Plumbum. A sensation in the abdomen at night, in bed, which causes the patient to stretch violently for hours together; sometimes she must stretch in every possible direction, or she feels that she must do so, and this inclination is almost uncontrollable.

Pulsatilla. She cannot sit long at a time; she must walk about to relieve her pain.

Rhus t. Cramps in the legs, causing her to rise and walk.

Secale c. Frequent and prolonged forcing pain in the abdomen, particularly in thin and ill-conditioned women.

Sepia. Frequent bearing-down pain in the back and abdomen. Sense of weight in the anus as an accompaniment.

Sulphur. Cramps in the lower extremities, with hot flushes and weak, faint spells.

Veratrum a. Cramps in the extremities, with cold perspiration.

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