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H I N T S
TO
M O T H E R S,
ETC.

BY THOMAS BULL, M.D.

PHYSICIAN-ACCOUCHEUR TO THE FINSBURY MIDWIFERY
INSTITUTION;
AND LECTURER ON MIDWIFERY, AND ON THE
DISEASES OF WOMEN AND CHILDREN.

Second Edition,
GREATLY ENLARGED.

LONDON:

PRINTED FOR
LONGMAN, ORME, BROWN, GREEN, & LONGMANS,
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1839.



LONDON :
Printed by A. SPOTTISWOODE,
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ADVERTISEMENT
TO
THE SECOND EDITION.

THE approbation bestowed upon this little volume by the several Journals, both professional and literary, in which it was noticed, as well as by individuals previously unknown to the Author, has afforded the most gratifying evidence that he has not been deceived with respect to the real importance of the information it contains, or been altogether unsuccessful in the method of conveying it.

These circumstances, together with the rapid sale of the work, have induced him, in a second edition, to make various and extensive additions, the importance of which he trusts will render his volume more useful and acceptable than it

has already been found. They include, principally, ADDITIONS TO THE CHAPTER ON THE DISEASES OF PREGNANCY, and four new chapters, entitled, 'HINTS FOR THE LYING-IN ROOM,' REFERRING TO THE INFANT, — THE BREAST, — NURSING, — and DIRECTIONS FOR THE GENERAL MANAGEMENT OF HEALTH DURING INFANCY; the sixth chapter of the former edition, entitled 'Suckling,' being included in the seventh and eighth of the present.

The Author begs in this place to acknowledge his obligations to those works he has consulted in preparing this edition for the press. A very copious Index has been added, which it is hoped will increase its usefulness as a book of reference.

Finsbury Place,
Jan. 1839.

P R E F A C E

TO

THE FIRST EDITION.

IN the minds of married women, and especially in young females, those feelings of delicacy naturally and commendably exist which prevent a full disclosure of their circumstances, when they find it necessary to consult their medical advisers. To meet this difficulty, and also to counteract the ill-advised suggestions of ignorant persons during the period of confinement, is the chief object of the following pages.

While it is believed that much of the information contained in this volume is highly important to the comfort, and even to the well doing of the married female, much of it is, at the same time, of a character upon which

she cannot easily obtain satisfaction. She will find no difficulty in *reading* information, for which she would find it insuperably difficult *to ask*.

There are many little circumstances, too, in which it does not occur to her to seek for advice, of the nature and result of which she ought not to be ignorant. Young married women are especially liable to many needless, yet harassing fears, which it has been the anxious object of the Author to remove, by showing that they have no foundation in truth. It has often been necessary to be minute, but *that*, it is imagined, will not be regarded as an imperfection.

The Author's connection for some years past with a large and important Midwifery Institution, has led him to direct especial attention to the important subject upon which he has ventured to appear before the public, and he must leave his work with them, in the hope that he has not written altogether in vain.

Finsbury Place,
Oct. 1837.

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HINTS TO MOTHERS.

CHAPTER I.

OF POPULAR ERRORS ON THE SUBJECT OF PREGNANCY.

DURING the period of pregnancy the happiness of a nervous and anxious woman is often completely destroyed by the influence of many popular errors, which still prevail upon this subject. And, what will be thought still worse, the effect of these prejudices on the constitution of the mother, will be found more or less to impair the health and future vigour of her offspring.

It may be said, the day is past when prejudices of this kind can operate; that the tales and fears of former times exist no longer; and, that the well-educated woman regards even the direct counsels of the ignorant as little as she heeds the gloomy forebodings and prophecies of popular

credulity. To this I cannot give my assent : it may be admitted, indeed, that when truth is properly presented to such minds, it will be at once received; yet, as a subject like this has never been plainly discussed with a view to popular perusal, I find even now the sensible, and otherwise strong-minded woman, more or less under the influence of notions as absurd in themselves, as they are mischievous in their tendency.

Every medical man much engaged in the lying-in-room can attest the truth of this statement; and, were it necessary, it were easy to adduce the most ample evidence upon the subject. Believing, however, that this point will be undisputed, I would rather at once proceed, impartially, to specify a few of these still popular absurdities.

In this inquiry I shall be as brief as possible, examining those errors only which are most prevalent; and if successful in pointing out their folly, shall attain my end. In treating this part of our subject, my principal aim is to convince the nervous and timid woman, that pregnancy is not to be looked upon as necessarily a period of deprivation and suffering; but, as it truly is,

a state demanding only a little more than ordinary care and prudence, and compatible with the enjoyment of health and comfort.

SECT. I. — OF THE SUPPOSED INFLUENCE OF THE
IMAGINATION OF THE MOTHER UPON THE
CHILD IN HER WOMB.

THE supposed influence of the imagination on the mother upon the child in her womb is an error still popularly current; and, though reason, experience, and anatomical knowledge, concur to refute this notion, it is received by many as an established truth, and tends more than any other delusion of the mind, during pregnancy, to render the female truly wretched. Should a woman have an ungratified longing for some particular article of food; should she have been suddenly and seriously frightened,—or occasionally the witness of some miserably deformed object, —she at once becomes possessed with the belief, that her unborn babe will receive a mark, blemish, or deformity, similar to the thing

longed for, or to that which caused her alarm, or excited her aversion. From the time of this occurrence, the idea haunts her imagination night and day; a victim to the influence of an evil called into existence by her own fancy, she is wretched and miserable. Ashamed of her weakness, she imparts her secret to none; she will hardly confess it to herself; yet does its impression deepen upon her mind, and she looks forward to the period of her confinement with the greatest dread and apprehension. Thus the whole period of pregnancy is made a season of needless trial and suffering; and nothing pacifies her mind, or can remove her long-cherished fears, but the birth of an unblemished and healthy child.

The *origin* of this belief in the power of the imagination during pregnancy is coeval with our earliest records; and the multitude of instances handed down to us, in which its influence was supposed to be exerted, would fill a goodly volume: but neither the antiquity of its source, or the abundance of the evidence of its supposed truth, can entitle it to the least weight, if it can be proved that it is inconsistent with anatomical science, experience, and reason.

The first point which we should naturally consider in this inquiry would be, the nature of the connection between the parent and her offspring; and anatomy proves two most important facts: First, that there is no communication whatever between the nerves of the mother and the child; and, secondly, that the infant has its own distinct circulation, carried on by the action of its own heart and blood-vessels, forming a circle within itself, and having no direct communication with the vessels of the mother.

How then is it possible, when no nervous connection exists, that the sensations, fears, and desires of the mother, should in any way be communicated to the child; or that any impression on the imagination of the former, should produce any changes in the structure or appearance of the latter? Did it ever happen to any woman, by any series of fancies or desires, that the figure of the objects of them was traced upon her own skin? Does she then suppose it more probable, or indeed possible, that such changes or appearances should be impressed upon the infant, thus insulated from any nervous influence of the parent? Anatomy, then,

proves nothing in favour of this doctrine, but presents an unanswerable difficulty opposed to it, demonstrating most clearly that the infant is not one body with the mother, any more than a plant is one substance with the earth which nourishes it.

Let us next examine the various deformities said to be produced in the body of the little one by this powerful agent. i. It is said to impose upon its skin certain resemblances to things on which the fancy has been busily occupied, or dwelt upon; such as fruit, wine, insects, or animals. ii. To produce additional parts; as an increased number of limbs, toes, or fingers. iii. To destroy certain parts of the child's body; as a leg, or arm, or both; and to effect the want of a lip or portion of it, a hand, or foot, &c. These *three* effects, tending either to the *increase, decrease, or alteration of parts*, include almost every variety of case supposed to be produced by the power of the imagination.

The most common of these deformities are the first: the marks and moles on the skin. The former, generally of a red or purplish colour, are said to resemble different sorts of

fruit, — such as raspberries, strawberries, mulberries, and cherries; and if a child is born with such a discolouration or mark on the surface of its body, it is frequently ascribed to the disappointed longings of the female, during her pregnancy, for the particular fruit which the mark is declared to resemble. The latter, the moles, being covered with a downy hair, are compared to the skin of a mouse, mole, or some other animal; and their presence is referred to some agitation of mind occasioned by one of these objects running in sight of, or against, the individual while pregnant.

It would be easy to cite very many cases that are on record of these “discolourings of the skin, — such as redness from women’s longing for claret, or having the same suddenly spilt upon them :” of marks “of foods desired, but not obtained;” of “excrescences, which, like the fruits they resemble, have their times of bloom, ripening, and languishing, though never quite dying or falling off themselves,” etc., etc. Here, too, might be adduced a variety of the most extraordinary cases of deformity which have been very gravely related by our forefathers;

and commented upon, believed in, and added to, by a few authors even of our own day. Books abound with such statements, but their detail would only be a waste of time; for amidst the whole mass, there is not one case so fully and sufficiently authenticated as to enable me to bring it forward “for conviction,” if I were an advocate, instead of being an opponent to the “imaginationists.” Take, as an example, the following fable, which is extracted from a work published in London, 1723, by Dr. Turner, entitled *De Morbis Cutaneis*:—

“Philippus Meurs, apostolical prothonotary and canon of St. Peter’s in Lovain, a reverend ancient man, affirmed unto me, saith our author*, with sundry others, that he had a sister complete in the rest of her body, but without her head: instead of which was joined to her neck the likeness of a shell-fish, having two valves, which shut and opened; and by which, from a spoon, she took her nourishment: and this, he said, was occasioned, for that his mother with child of her had a strong desire

* Fienus de Virib. Imaginationis. 1608.

after some muscles she beheld in the market, but could not procure at that instant. This sister of his lived in this monstrous condition to be eleven years old, and dy'd then by accident, happening angrily and very strongly to bite the spoon they fed her with, and breaking those testaceous valves, dy'd quickly after : He kept diverse of her pictures in his chamber, which, saith Fienus, the whole world hath seen, being more particularly famous and well known to all the city of Lovain."

This marvel is immediately followed by this observation of the learned doctor : "The case of Sebastian Munster, of the two children born growing together by the foreheads occasioned by a person coming behind the mother and another woman, at unawares, and wantonly striking their heads together, seemeth the less rare to us, who have seen here in London, within these few years, two girls brought out of Germany miserably complicate, or conjoined, etc."

Let us, however, for a moment take one of the doctor's own cases ;—a case of deformity from a deficiency of the child's body—which I

believe to be true ; but then not brought about after the fashion which its author supposed. And I will endeavour, with this illustration, to show the absurdity of the whole matter. The case is related, in p. 174. chap. xii., in Dr. Turner's book : — Speaking of a man greatly deformed, he says : “ But of this kind we have a sad instance at home (I mean in this city), in a child of Sir J. B——’s. His lady, when advanced five or six months in her pregnancy, was so frightened at the unexpected view of a beggar’s stump-arm upon the coach door, that the child, of which she was afterwards delivered, was born wanting one of its hands, the stump resembling that of the beggar.” Dr. T. adds, “ How these strange alterations should be wrought, or the child cut, wounded, or maimed, as if the same was really done with a weapon, whilst the mother is unhurt, and merely by the force of the imagination, is, I must confess, above my understanding ; but it is a fact, undeniable.”

Now let us for one moment consider, what an operation must have been performed to work this effect, to produce this fact undeniable ! The child was some months old when

the frightful object was seen by which the deformity was said to be produced. It is presumed it was of the natural and perfect form, and must, therefore, at this period, have been considerable in size, and the arm itself not small. This arm, then, must drop off by the power of the imagination; there must be no blood lost to endanger the life of the child; and the wound must be healed before the birth. This would seem improbable enough; but, admitting that the limb could drop off by the force of the mother's fancy, and that some cause could put a stop to the bleeding from the stump after the separation of the hand from the body, still the limb must remain in the womb until the delivery, and the bones at least could not putrify, or waste away, although the flesh might. But is it stated in this case, or pretended in any other of a like kind, that any part of the deficient limb was found by the medical attendant, nurse, or by any body else?—Never. We hear nothing of the decayed hand, either in this or in any similar case we may be curious enough to search after.

Will any one have the temerity to affirm

their belief that, in this case, the force of the affrighted lady's imagination lopped off her child's limb—staunched the bleeding wound—healed it without a scar,—and then, by some other extraordinary mental effort, rid itself of the offensive, but unoffending, member? Can man or woman by the force of imagination add an inch to their stature, or take an inch from it, or transform any part of *their* bodies into the resemblance of other animals, of vegetables, or of fruit? Is it not then absurd to suppose, that a woman has more influence over another than over her own body; that she should be able, by an effort of the imagination, to add *new* parts to a child already completely formed,—to destroy any of the parts so formed,—or *transmute* any of those parts into other forms of structure? There can be no doubt that deformity existed at birth in the case just quoted; but then the little one was deformed from other causes, months before the mother's alarm, and, therefore, altogether unconnected with it; at the same time, it must be confessed, the beggar's stump and the handless child were an extraordinary coincidence.

Again, with respect to marks, moles, and other blemishes on the skin; the resemblances which they are said to bear to fruit, wine, insects, or animals, is purely fanciful. For instance, I operated, only a short time since, upon a very large one situated on the forehead of a child. The lively imagination of the mother led her to believe that it was the exact counterpart of a ripe peach: it might be something like it; but it consisted, as all these *nævi* or marks do, of nothing more than a multiplicity or net-work of small blood-vessels; and at its most prominent part, the vessels being large and distended with blood, gave it the purplish or dusky red appearance, peculiar to all these tumours. This grew with the child from its earliest formation, as in the case of any other deformity—an extra toe, or finger, or hare-lip, for instance,—and was the creation of nature's will, and not the production of human caprice or fancy.

The late Dr. William Hunter investigated this subject at the Lying-in-Hospital to which he was attached. In every one of 2000 cases of labour, as soon as the woman was delivered, he inquired of her, whether she had been disap-

pointed in any object of her longing ; and, if she replied in the affirmative, what it was ; — whether she had been surprised by any circumstance which had given her any unusual shock ; and what that consisted of ; — whether she had been alarmed by any object of an unsightly kind ; and what that was. Then, after making a note of each of the declarations of the women, either in the affirmative or negative, he carefully examined the child ; and he affirms, that he never, in a *single instance* of the 2000, met with a coincidence. He met with blemishes, when no cause was acknowledged ; and found none, when it had been insisted on.

To conclude the whole matter ; I would ask, why should we be surprised at some irregularities on the skin, and other parts of the human body, since we see the same thing occurring daily throughout the animal and vegetable world ? They have their moles, their discolourations, their excrescences, their unnatural shapes, which resemble animals and other bodies, which it certainly would not be very philosophical to ascribe to any effort of the imagination ! *

* The following illustration of this point is from the *Gentleman's Magazine*, for October 1764 ; and is contained in a

I trust enough has been said to satisfy the reader upon this subject ; and shall only recall attention to the following points : —

Paper, entitled, A Letter from an eminent Physician to a Married Lady : —

“ Those who have been attentive to their poultry will inform you that chickens are as liable to a preternatural structure of their organs as children. Now the egg in order to be hatched is placed under the hen, the heat of whose body gives motion to the fluids which nourish the chick till it becomes sufficiently strong to break the shell, when it is produced with a claw extraordinary, or any other preternatural appearance to which chickens are liable. Now, in this case, the extraordinary claw, if we take this instance for our argument, must either have been formed in the moment of conception, or have been added at some period afterwards, when we suppose the hen to have been under the influence of some powerful imagination. If you grant that the chick was originally formed in this shape, it follows, from the rules of analogy, that all preternatural births have the same cause. If not, the fancy of the hen must have operated through the shell to work the effect. I flatter myself that this is too marvellous and absurd a notion to gain much credit from a woman of good sense. If, however, you still have a secret persuasion that the hen may, (in some wonderful manner, you know not how,) whilst she is sitting, affect the chick or the egg, so as to alter its frame, know for a certainty that eggs hatched in dunghills, stoves, and ovens, produce as many monstrous births as those which are hatched by hens ; which, I should imagine, proves irrefragably that the chick is produced in the very shape in which it was formed.”

This illustration at least seems to show how entirely unphilosophical and absurd are the views entertained on the subject before us.

First. That a disappointed longing cannot be in any degree more injurious during pregnancy than at any other time. It might indeed, nay it very often does, occasion sickness at the stomach, a temporary loss of appetite, and sometimes vomiting; but here the evil ceases.

Secondly. That while it is not denied that marks and deformities sometimes happen, yet they are to be accounted for in a much more scientific and natural manner, than by the influence of the mother's imagination; and,

Thirdly. That they cannot be produced by the power of the imagination of the mother, inasmuch as there is no nervous communication whatever between the parent and offspring; and, therefore, that any alarm or fright which a lady might accidentally meet with during her pregnancy, can in no way affect the symmetry of her little one, — although if her own health be seriously affected, the nutrition and health of the child must more or less suffer.

SECT. II.—OF THE SUPPOSED NECESSITY OF AN
INCREASED SUPPLY OF NOURISHMENT DURING
PREGNANCY.

It is presumed by some that, during pregnancy, a larger proportion of food is necessary for a female than at any other time, the support and nourishment of the child demanding the extra supply. This is a great mistake, and, when acted upon, injurious to the health of both mother and offspring. Its origin, no doubt, is simply this: if a female ordinarily only takes food sufficient to nourish her own system, surely, it is said, when she is pregnant, the extra demand made for giving support to another must require an extra supply of nourishment. This conclusion, though it appears at first sight reasonable enough, will, upon examination, be found fallacious. It is sufficient for me to remark, that we habitually take more food than is strictly required for the demands of the body; we therefore daily make more blood than is really wanted for its support: a superfluity amply suf-

ficient for the nourishment of the child is thus furnished—for a very small quantity is requisite—without the mother, on the one hand, feeling the demand to be oppressive, and, on the other, without a freer indulgence of food being necessary to provide it.

Nature herself corroborates this opinion; indeed she solicits a reduction in the quantity of support, rather than asks an increase of it; for almost the very first evidence of pregnancy is the morning sickness, which would seem to declare, that the system requires reduction rather than increase, or why should this subduing process be instituted? The consequences, too, which inevitably follow the free indulgence of a capricious, and what will afterwards grow into a voracious, appetite, decidedly favours this opinion; for the severest and most trying cases of indigestion are by these means induced, the general health of the female disturbed, and more or less impaired, and through it the growth and vigour of the child; so that the means intended for its good become a source of direct injury. A stronger proof of the fallacy of this error is not necessary. A female, then,

should guard against this opinion influencing her conduct during pregnancy.

If the appetite in the earlier months, from the presence of morning sickness, is variable and capricious, let her not be persuaded to humour and feed its waywardness from the belief that it is necessary so to do ; for, if she does, she may depend upon it, from such indulgence, it will soon *require* a larger and more ample supply than is compatible with her own health or that of her little one.

If the general health before pregnancy was delicate and feeble, and, as a consequence of this state, becomes invigorated, and the powers of digestion increase, a larger supply of nourishment is demanded, and may be met in such case without fear ; for instead of being injurious it will be useful. If, however, as in the majority of cases, the health is in no way interfered with, and the appetite as good as usual, it is not advisable that any essential difference should be made in the diet ; it is not called for, and, either way, would be attended with disadvantage.

During the latter period of pregnancy, if, although in the enjoyment of health, a dislike

to animal food of every kind, and under every form is experienced, and if a female prevailed upon to eat it incautiously is sensible of much inconvenience, and she prefers vegetables, fruit, and such articles of light digestion, which she finds may be eaten without prejudice, let her adopt such a diet; only I would impress upon her mind, that she should make the attempt to take a moderate quantity of fresh meat, or game, once in the four and twenty hours.

Lastly, a female, towards the conclusion of pregnancy, should be particularly careful not to be persuaded to eat in the proportion of two persons, for it may not only bring on vomiting, heart-burn, and constipation, but will contribute, from the accumulation of impurities in the lower bowel to the difficulties of labour. Stimulants, also, of all kinds at this period are generally hurtful, and from the increased activity in the system of the pregnant female, it will frequently be necessary to diminish, and even discontinue altogether the stimulants in common use.

SECT. III.—OF THE SUPPOSED NECESSITY OF
REFRAINING FROM EXERCISE AT THE COM-
MENCEMENT, AND THE BENEFICIAL INFLU-
ENCE OF ITS EMPLOYMENT AT THE CONCLU-
SION OF PREGNANCY.

THERE is no doubt that in some cases, in the early months of pregnancy, great and continued care is not only useful but absolutely necessary, in order to prevent miscarriage; but, that women should be encouraged to live more indolently, exercise being thought improper, unless towards the conclusion of pregnancy, when it is supposed to procure a more favourable delivery, is an error, equally injurious to mother and offspring. The fact is, a directly contrary method of proceeding is the most eligible and proper: exercise in the early months, gradually seeking a state of repose as the period of confinement approaches.

During the *first six or seven* months, frequent and gentle exercise in the open air, and domestic occupations, which require moderate exer-

tion, are exceedingly desirable; both have a beneficial influence on the health of the mother, and, through her, upon the child. The former invigorates health; the latter contributes, by its regular return, and succession of duties, to employ her time, and thus ensures that ease and serenity of mind so essential to her happiness. Crowded assemblies, however, of all kinds, public spectacles, and large parties; in short, every thing calculated to excite strong feelings, to depress the mind, or excite the passions, ought to be sedulously avoided.

On the other hand, *excessive effeminacy* is *highly injurious*. The female whose time is spent in indolence, continually reclining on a softly cushioned sofa, in the unwholesome atmosphere of an overheated apartment, who never breathes the fresh and pure air of heaven, but is fearful of even putting her foot to the ground, and who yet, perhaps, at the same time indulges pretty freely an immoderate appetite, under such circumstances is not likely to preserve her health, much less to improve it; in fact, it must suffer serious injury. Unfortunately, the evil will not stop here, for, by such

improper and injudicious conduct, the nutrition and growth of the child must, as a natural consequence, be much interfered with, and, when born, it will be feeble, perhaps emaciated, and will be reared with difficulty.

During the *last few weeks* exercise should still be taken in the open air; but as walking with some, is now attended with inconvenience, and so quickly with fatigue, that it is injurious instead of useful, exercise in a convenient and easy carriage becomes indispensable. Domestic duties must be almost altogether given up; and the recumbent position ought to be resorted to for at least two or three hours in the course of the day. And it should never be forgotten, that, throughout the whole period of pregnancy, every kind of agitating exercise, such as riding in a carriage with rapidity on uneven roads, dancing much and frequently, lifting or carrying heavy weights, ought to be avoided; in short, all masculine and fatiguing employments whatever.

SECT. IV.—OF THE SUPPOSED NECESSITY OF
LOSING BLOOD DURING THE PERIOD OF PREG-
NANCY.

THIS is an error which prevails to a very great extent, but amongst the lower class of society principally. Some poor women, as regularly as they become pregnant, after the second or third month go to a chemist with the request to be bled. They make a point of this, because they are impressed with the idea that pregnancy demands it. It is a remedy, however, which ought to be resorted to with the greatest precaution ; and, so far from pregnancy demanding it as a necessary consequence, *it is most erroneous* ; for I have known several delicate and weakly women, who, by the advice of their friends, regularly submitting to be bled, as regularly have miscarried, and who, on again becoming pregnant, warned of the mischief resulting from such practice, have avoided it, and become the mothers of healthy children.

That bleeding is sometimes useful, and even

loudly called for, there can be no question; but such indiscriminate use of it, and solely because pregnancy has taken place, is an error productive of manifest injury. And it is a prejudice which is perhaps more seriously mischievous to the child than the mother; for, if it does not cause its miscarriage, it will sometimes, in a weak and delicate woman, decidedly affect the stamina of the little one. So essential and important are certain observances of the parent during pregnancy, that health and vigour may be imparted to her offspring.

Such are the errors connected with pregnancy, which I have thought it might be useful thus briefly to notice. I have known them to be a source of much mental distress and physical suffering; and of these few observations expunge them from that list of evils, always supposed by many as necessarily connected with the pregnant state, I shall exceedingly rejoice, convinced that it is a process which ought not to be regarded with fear and trembling, although it certainly demands a little more than ordinary prudence and care. For it must never be forgotten, that on the judicious conduct of the

mother, while pregnant, a vigorous constitution on the part of the child much depends; and to her neglect, a feeble frame may, in some measure, be attributed; for, like fruit of every other kind, the child in the womb requires a certain amount of care for its preservation and perfection.

It would be well, therefore, on every account, that a female should engage her future medical attendant *early*: she will be able to seek his direction and guidance in every doubt that may arise, and, confiding her fears and anxieties to him, will derive, from his experience and knowledge, that rational and kindly explanation of her difficulties which may instantly dispel them.

CHAPTER II.

OF THE MODE BY WHICH PREGNANCY MAY BE
DETERMINED.

THERE are certain signs which a female is taught to regard as essential evidences of pregnancy; and it is supposed by most, if not by all women, that their presence is absolutely necessary to the existence of this state. In reference to one or two of these signs, this is far from the fact; for they are not unfrequently absent, although pregnancy exist, and the remainder may be present, although pregnancy be absent. Many a female, I am confident, has from this very circumstance experienced much difficulty in attaining certainty as to her state, and suffered months of anxiety and doubt. This has arisen from a want of those clear notions, and that precise information, which a question so important demands.

The object of this chapter is to remove this difficulty, by presenting a short account of those symptoms of conception which the female may herself observe, and to point out to what extent they may be relied on. It will be necessary to notice only *four* of the signs or symptoms of pregnancy, and they may be considered in the order in which they usually arise: *i. e.*, ceasing to be unwell; morning sickness; shooting pains through, enlargement of, and other changes of the breast; and, lastly, quickening.

SECT. I. — CEASING TO BE UNWELL.

THE first symptom of pregnancy is the omission of that regular monthly return, which, in female phraseology, would be described as “ceasing to be unwell;” and it may be adopted as a general rule, that, in a healthy woman, whose menstruation has been established, and continued regular, and who is not nursing, “conception is followed by a suppression of the menstrual discharge at the next return of its

period." Thus, a female may have been pregnant a week or two already; but she is not aware of it till that period of the month arrives when she is accustomed to menstruate, and then, when she expects to be unwell, she finds that she is not so.

Now this symptom, as a general rule, admits of four exceptions:—

1st. A young female shall never have menstruated and yet conceive.

2dly. A mother shall conceive while she is nursing, and not menstruating.

3dly. A female shall conceive, and yet be unwell during the first three, four, or more months of pregnancy.

4thly, and lastly. Occasionally conception takes place late in life, after menstruation has apparently ceased for ever.

First exception.—Many cases are on record proving this point. I have met with only two cases; one quite a girl, not having arrived at her seventeenth year, and yet was in her sixth month of pregnancy when she applied for a letter for the Finsbury Midwifery Institution; the other was in her nineteenth year. Men-

struation was, subsequent to confinement, established in the first ; with the result of the latter I am not acquainted.*

Although pregnancy under such circumstances is not of frequent occurrence, still it does now and then take place. A knowledge of the fact may therefore prove useful.

Second exception.—It is scarcely necessary to advert to the well-known fact, that a woman may conceive whilst she is nursing, without any previous return of the monthly discharge, except to expose the popular error, “that a female will not become pregnant during lac-

* A remarkable case is mentioned by Morgagni : — “ I was acquainted,” he says, “ with a maiden of a noble family, who married before menstruation took place, though the menses had been expected for some years ; nevertheless she became exceedingly fruitful. We were the less surprised at this circumstance, because the same thing had happened to her mother.”

Another instance is recorded in the Philosophical Transactions for 1817, of a young woman who bore two children successively without any previous menstruation ; which function did not commence till after the third pregnancy, which ended in a miscarriage.

Frank attended a patient who gave birth to three children without ever having been unwell. Capuron, also, refers to several cases of this description.

tation." This is very far from being the case. Poor women are much in the habit of nursing their infants eighteen months, two years, and even two years and a half, in order to protect themselves, as they imagine, from becoming pregnant; and many a poor creature have I seen with exhausted frame and disordered general health, arising from protracted nursing, pursued alone from this mistaken notion.

I have large opportunities of investigating this, as well as the several points touched upon in this chapter. On an average, between forty and fifty poor women call upon me every month, with midwifery letters for attendance in their confinement; and the result of my inquiries upon the present question has led me to believe, that more than one third of these women have conceived at least once while nursing, and very many of them oftener.*

Mrs. M——, ætat. 30, married six years. Became pregnant three months after her marriage. Having suckled this child for more than two years, became pregnant a second time. This last died in three

* The following cases, as well as others, are extracted from my Note Book.

weeks, and immediately after she proved pregnant for the third time. The third child she brought this morning (being out of health), and assured me that she had not seen any thing since she first conceived, *i. e.* three months after her marriage, and six years from the present time.

Mrs. W——, ætat. 25, married five years. Has not been unwell since she first fell in the family way : is now pregnant with a third child, having hitherto fallen pregnant always whilst nursing.

Many other cases illustrative of this fact I might insert, but these suffice to prove the exception.*

Third exception. — That a female should become pregnant, and yet be unwell during the first, three, four, or more months of pregnancy, may appear an extraordinary statement; but it is a fact, that the menstrual discharge sometimes continues in its usual regularity for two, three, or more months after conception, and without any dangerous consequences.

It has been asserted, as an objection, that this discharge is not truly menstruation; but the discussion of that question does not concern us

* Mr. Robertson of Manchester inquired very minutely into the result of 160 cases, in which he found that eighty-one women had become pregnant once or oftener during suckling.

here. We have only to consider whether there does not frequently, during pregnancy, take place a discharge, so closely resembling menstruation in its periods, quantity, duration, and appearance, that neither the female herself nor her medical adviser shall be able to detect any difference between them; and of this I have no doubt.

It may occur *once* only after conception, either in diminished quantity, or more profuse than usual. It may thus give rise to miscalculation as to the expected time of confinement.

It may continue in its usual regularity for *two* or *three months*. The following instance of a patient I attended illustrates the fact of its going on to the period of quickening:—

Mrs. R., ætat. 27, married eight years. Was first unwell when eighteen years of age, and continued to be so regularly until she became pregnant, two years from the time of her marriage. She suckled her first child for eleven months; soon after became unwell, and continued so until she quickened with her second child; a circumstance which she had not the slightest suspicion of, for there was no perceptible difference either in the quantity or appearance of the monthly discharge. During the remaining months of gestation she did

not see any thing ; she afterwards suckled her little one for ten months ; and then was obliged to wean the child, having an attack of cholera. She continued from this time regular for two years ; but meeting with a fall, much to her surprise, two or three days after, miscarried of a four months' child. She is now pregnant again, having been regular every month till she quickened, and expects to be confined, February, 1836.

In this case, then, the female was unwell in two pregnancies till the period of quickening ; and in the other for four months, when miscarriage took place from accident.

And, lastly, it may occur through the *whole* period of pregnancy.

Mrs. F. is now pregnant for the third time. In her first pregnancy the monthly returns appeared for three periods, regular as to time, and in quantity and appearance as heretofore. During the second child-bearing, at every month till confinement. During the third — her present pregnancy — for three months only. This patient is always unwell while nursing.

Mrs. J., now in her eighth pregnancy. Was unwell every month throughout the first six pregnancies ; but the quantity always slightly diminished. In the seventh, the same circumstance occurred ; but premature labour was this time induced, between the sixth and seventh months, by a fall.

During the present pregnancy she has not seen any thing. Is always unwell whilst suckling.

Mrs. P. is in her fourth pregnancy. In the first three was unwell, at her regular periods, to the time of confinement. The discharge the same in quantity, but of rather lighter appearance. Has been unwell in her present pregnancy every month up to the present time.*

The following case proves how important it is that this fact should be generally known ; for up to a very late period, some medical men have even denied the possibility of this occurrence.

The case I refer to was that of a young lady, privately married, the gradual enlargement of whose abdomen was decided by her medical attendant to arise from dropsy ; for, although she had most of the symptoms of pregnancy, and the medical man was aware she had been married eight months, still, as *she continued to menstruate*, he declared it impossible that she could be pregnant. Tapping was proposed ; and, except that her general health suffered much at this time, the operation would have

* Dr. Heberden was acquainted with a lady who never ceased to have regular returns of the menses during four pregnancies, quite to the time of her delivery. — *Heberden Commentaries*.

This opinion is confirmed by Gardien, Dewees, Hamilton, Desormeaux, Puzos, &c.

been performed. The delay saved the patient such unfortunate and mistaken treatment—it might have proved fatal in its results—and she shortly gave birth to a living and healthy male child.

Fourth exception. That women late in life have conceived after menstruation had apparently ceased for ever, the following cases prove.

In September, 1834, I was called to the assistance of a female in labour in her 49th year. She had not been pregnant for twelve years, and supposed she had ceased to menstruate two years previous to that time. She did well, and never afterwards saw any thing.

Mrs. B., ætat. 39. Has been married eighteen years, commenced to be unwell very early in life. Has had three children; the last pregnancy seven years since. Is now again pregnant, her menses having left her sixteen weeks prior to conception; before which, she had been much dodged, and supposed she had ceased to be unwell for ever.

Other cases of a similar nature are on record.

There can be no doubt they are authentic; but at the same time it must be acknowledged that a female is not unlikely to be deceived, by the irregularity which attends the returns of this discharge, late in life. It so happens, too,

that just before the change of life takes place, there appears in the constitution of some females a great disposition to pregnancy; so that many who have ceased to bear children for years, or have been hitherto barren through the whole of their married existence, at this time, to the surprise of their friends and themselves, become pregnant.*

* "A woman came to me one morning," says Dr. Gooch, "with a note from a medical man, containing the following statement: — The patient's age was forty-two; she had been married twenty-two years without ever being pregnant. About seven months ago she had ceased to menstruate; a few months afterwards the abdomen began to enlarge, and was now nearly equal to that of full pregnancy. For several months the practitioner had been using various means for reducing the tumour, but in vain. I examined the case, pronounced her pregnant, and seven weeks afterwards she brought forth a child at the full time."

Dr. Montgomery says: "A lady in her forty-third year, who was married to her present husband twenty years ago, remained without any promise of offspring until within the last few months; but, having missed her menstruation in September last, and finding her size increasing, I was requested to see her in January, when she exhibited evident symptoms of pregnancy. She was subsequently delivered of a healthy boy, after a natural labour of about four hours."

Mosse, one of the medical officers of the Dublin Lying-in Hospital in 1775, states, that eighty-four of the women delivered in the Institution under his superintendence were

A knowledge of these facts must be useful, as they will tend to allay apprehension at what might be supposed disease, both by the mother and by the hitherto childless woman.

A female must not forget, however, that she may mistake her condition, and that such mistakes are not at all unlikely to arise from the circumstance that the symptoms which naturally accompany the *cessation* of menstruation, much resemble those of pregnancy. She passes over the menstrual period; — she is struck with this. Other symptoms are soon manifested: the size increases, — the breasts even become swollen and painful, — the stomach disordered, and the appetite capricious; — flatulence collects in the intestines; and whilst on this account the size still increases, the air moving about the bowels gives an inward sensation which is mistaken by

between the ages of forty-one and fifty-four; four of these were in the fifty-first year, and one in her fifty-fourth.

In May, 1816, Mrs. Ashley, wife of John Ashley, grazier of Frisby, near Spilsby, at the age of fifty-four years was delivered of two female children.

The succession to an estate was disputed in France because the mother was fifty-eight years old when the child was born. The decision was in favour of the fact.

the female for the plunging of the child. Time alone, or the investigation of the medical attendant, detects the mistake ; and the symptoms are then to be easily removed by the exhibition of carminative and purgative medicines, the use of active exercise, and bandaging the distended abdomen.

It must be remembered, also, that *suppression* of the monthly return may arise from a variety of causes, altogether independent of conception. Every female is aware, that exposure to cold, just before the expected period, is a frequent cause. Different forms of disease, hardships, or mental emotions, may produce the same result. It does not follow, therefore, because a woman ceases to menstruate, she *must* be pregnant ; which naturally presents this inquiry : what dependence, then, is to be placed upon the omission of menstruation as a symptom or sign of pregnancy ?

When a female ceases to be unwell, and experiences other symptoms of pregnancy, she must consider her situation as yet uncertain, because these signs are common to disease as well as pregnancy. But if towards the third

month, while the suppression continues, she recovers her health, and if her appetite and colour return, she needs no better proof of pregnancy; for under other circumstances her health would remain impaired, and even become worse.

SECT. II. — MORNING SICKNESS.

SOON after conception, the stomach often becomes affected with what is called “morning sickness.” On first awaking, the female feels as well as usual; but on rising from her bed qualmishness begins, and perhaps, whilst in the act of dressing, retching takes place.

This symptom may occur almost immediately after conception; but it most frequently commences for the first time between two and three weeks after. Now and then it is experienced only the last six weeks or two months of pregnancy, when it is attended, generally, with much distress and discomfort. And, lastly, it is not unfrequently absent altogether.

It continues, more or less, during the first half of pregnancy, and subsides about the time when the movements of the child begin to be felt.

Irritability of the stomach, however, may arise from a variety of causes totally independent of pregnancy, and connected with disease or disordered function. Of what avail then, it will be asked, is this symptom, as a sign of pregnancy? It is so far available : —

The nausea and vomiting of pregnancy is not accompanied by any other symptom of ill health; but, on the contrary, the patient feels as well as ever in other respects, and perchance takes her meals with as much appetite and relish as formerly; but while doing so, or immediately after, she feels suddenly sick, and has hardly time to retire, when she rejects the whole contents of her stomach, and very shortly after is quite well again. Not so with sickness arising from disease, or disordered condition of the stomach.

SECT. III. — SHOOTING PAINS THROUGH — ENLARGEMENT OF—AND OTHER CHANGES OF THE BREASTS.

WHEN two months of pregnancy have been completed, an uneasy sensation of throbbing and stretching fulness are experienced, accompanied with tingling about the middle of the breast, centering in the nipple. A sensible alteration in their appearance soon follows: they grow larger and more firm. The nipple becomes more prominent, and the circle around its base altered in colour and structure, constituting what is called “the areola.” And as pregnancy advances, milk is secreted.

The period of gestation at which these changes may occur, as well as the degree in which they become manifested, varies very much. Sometimes, with the exception of the secretion of milk, they are recognised very soon after conception;—in other instances, particularly in females of a weakly and delicate constitution, they are hardly perceptible

until pregnancy is far advanced, or even drawing towards its termination.

Enlargement of the Breast.—The changes in the *form* and *size* of the breast may be the result of causes unconnected with pregnancy. They may enlarge in consequence of marriage, from the individual becoming stout and fat, or from accidental suppression of the monthly return. There are, however, these differences: enlargement from pregnancy may in general be distinguished from that produced merely from fat, by the greater firmness of the breast, and its knotty uneven feel, — it is heavier; and the tension and enlargement from suppressed menstruation, by its subsiding in two or three days, whereas that caused by pregnancy continues to increase. Nevertheless, the dependence which may be placed upon the enlargement of the breast only, as an evidence of pregnancy, is not very great, and, considered alone, but a doubtful sign.

The Nipple. — Not so the changes which take place in the nipple, and around its base. These alterations, if present, are of the utmost value,

as an evidence of pregnancy. The changes referred to are these : —

About the sixth or seventh week after conception has taken place, if the nipple be examined, it will be found becoming turgid and prominent, and a circle forming around its base, of a colour deeper in its shade than rose or flesh colour, slightly tinged with a yellowish or brownish hue, and here and there upon its surface will be seen little prominent points, from about ten to twenty in number. In the progress of the next six or seven weeks, these changes are fully developed; the nipple being more prominent and turgid than ever; the circle around it of larger dimensions, of an extent of about an inch or an inch and a half; the skin being soft, bedewed with a slight degree of moisture, frequently staining the linen in contact with it; the little prominences of larger size, from the sixteenth to the twelfth of an inch perhaps; and the colour of the whole very much deepened, but always modified by the complexion of the individual, being darker in persons with black hair, dark eyes, and sal-

low skins, than in those of fair hair, light-coloured eyes, and delicate complexions.

Such are the essential characteristics of the true areola, the result of pregnancy, and, I believe, of that condition only.

This, then, is a most valuable sign ; but, unfortunately, it is frequently absent ; and how often it is present, although I have examined many hundred cases for it, I cannot determine, as unfortunately no note was made upon this point. It should, also, be observed, that, both in dark and fair women, the change of colour, without the other appearances, may be present, and yet pregnancy exist ; and I have also seen frequently the dark circle alone, where pregnancy did not exist ; but I never saw an instance where these prominences were truly developed, without the presence of pregnancy.

This fact has been more particularly noticed of late years by an eminent physician-accoucheur, and the attention of the author has, in consequence, been much directed to it ; and, as a striking illustration of its truth, he may mention, that called upon very recently to visit one of the Institution patients the third day after her deli-

very, and having occasion to examine the breast, he pointed out to the gentleman in attendance the presence of these little prominences around the base of the nipple; upon which the patient, to his great surprise, immediately observed, "Ah, sir, I always know when I am pregnant by them, for they appear about ten days or a fortnight after its occurrence, and subsequent to delivery diminish gradually, as my milk leaves me."

It has occurred to me during the past year to be consulted in five cases of doubtful pregnancy. In *two* of them, circumstances forbade the probability of its occurrence; but in both the true areola was distinctly and fully developed. It decided my opinion; and the result proved its correctness: both became mothers. *Two others* had made themselves patients of the Lying-in-Institution, having obtained letters for attendance from governors of the charity, and upon which was marked, by their own calculation, the month of their expected confinement. But I was led to believe, from observing two or three symptoms, that pregnancy did not exist.

Their cases were examined, and at last the

breast: in both the true areola was wanting; the review of symptoms decided all doubts. Had, however, the true areola been present in either, it would at once have reversed, instead of confirming, my first suspicions.

The *fifth* was pregnant, but the true areola wanting; and I was obliged to refer to those signs which can alone be recognised by a medical man.

The absence, then, of this sign, except in combination with other circumstances, proves nothing; but, if present, I believe it conclusive.

The Presence of Milk. — With regard to the presence of milk in the breasts, as this is a symptom which may arise, and does very generally, in the latter months of gestation alone, when the existence of pregnancy has been long determined, it is only mentioned here to refute the popular error, “that the presence of milk in the breasts is an infallible proof of pregnancy.” It is no such thing; and many well-recorded instances could be brought forward to prove the possibility of its formation under circumstances totally independent of pregnancy.

Belloc speaks of a servant girl, who being

obliged to have sleeping with her an infant who was being weaned, and which by its crying disturbed her rest, bethought her of giving it her breast to appease its clamour; and the result was that in a short time she had milk enough to satisfy the child.*

The following case is related by Mr. George Semple. “ Mrs. B., wife of John Breward, Simpson Green, near Idle, aged forty-nine, the mother of nine children, the youngest of whom is twelve years old, lost a daughter-in-law about a year ago, who died in about a fortnight after giving birth to her first child. On her death, Mrs. B. took charge of the infant, a little puny, sickly baby. The child was so fretful and uneasy, that Mrs. B., after many sleepless nights, was induced to permit the child to take her nipple into its mouth. In the course of from thirty to thirty-six hours she felt very unwell; her breasts became extremely painful, considerably increased in size, and soon after, to her utter astonishment, milk was secreted, and poured forth in the same abundance as on former occasions, after the

* Cours de Méd. Légale, p. 52.

birth of her own children. The child, now a year old, is a fine, thriving, healthy girl, and only a few days ago I saw her eagerly engaged in obtaining an apparently abundant supply of healthy nourishment, from the same fountain which, nearly twenty years ago, poured forth its resources for the support of her father.”*

* North of Engl. Med. and Surg. Journ. vol. i. p. 230.

That the presence of milk in the female breast shall take place independent of pregnancy, from the above, and other recorded facts, there can be no doubt; but the following beautiful exemplification of its formation in that of the *male*, places the question in a still stronger light. This interesting fact is cited from Captain Franklin's Narrative of his Journey to the shores of the Polar Sea.

“A young Chipewyan had separated from the rest of his band, for the purpose of trenching beaver, when his wife, who was his sole companion, and in her first pregnancy, was seized with the pains of labour. She died on the third day, after she had given birth to a boy. The husband was inconsolable, and vowed in his anguish, never to take another woman to wife; but his grief was soon in some degree absorbed in anxiety for the fate of his infant son. To preserve its life he descended to the office of a nurse, so degrading in the eyes of a Chipewyan, as partaking of the duties of a woman. He swaddled it in soft moss, fed it with broth made from the flesh of the deer; and to still its cries, applied it to his breast, praying earnestly to the Great Master of Life to assist his endeavours. The force of the powerful passion by which he was actuated, produced the same effect in his case as it has done in some others which are recorded: a flow of milk actually took place from his breast.

SECT. IV.—QUICKENING.

THERE is only one other symptom which I think it useful to notice, i. e. quickening; by which is meant, the first sensation experienced by the mother of the *life* of the child within her womb.

The first time this motion of the child occurs, the sensation is like that of the fluttering of a bird within her, and so sudden that she frequently faints, or falls into an hysterical par-

He succeeded in rearing his child, taught him to be a hunter, and, when he attained the age of manhood, chose him a wife from the tribe. The old man kept his vow in never taking a wife for himself, but he delighted in tending his son's children; and when his daughter-in-law used to interfere, saying, that it was not the occupation of a man, he was wont to reply, that he had promised the Great Master of Life, if his child was spared, never to be proud like the other Indians. Our informant, Mr. Wenkel (one of the Association), added, that he had often seen this Indian in his old age, and that his left breast, even then, retained the unusual size it had acquired in his occupation of nurse." p. 157.

Man possesses the same organisation as woman for secreting and conveying milk, which enables us readily both to understand and believe in the truth of the foregoing singular statement.

oxysm. A day or two passes by when it recurs. It afterwards increases both in frequency and degree, until the movements of the child are fully recognised.

It is proper that a female should be informed that the *period*, when quickening takes place, is *very uncertain*; for an impression is popularly prevalent that it always occurs *exactly* at the end of four calendar months and a half. This is not the case; it varies in different women, and in the same women during different pregnancies, as the following one or two instances will prove.

Mrs. F. quickened with her first child at *four* months; quickened with the second, at *fourteen weeks*; and is now in her third pregnancy, and reckons from the *fourteenth week* again.

Mrs. B. has had seven children, and with all felt the motion of the child for the first time at the *third month*.

Mrs. Mc M. has been several times pregnant; seldom feels the movements of the child at all until the *sixth month*, and *not strongly* till the *eighth*.

The annexed table of the periods of quickening of 70 cases, taken in the order in which they have been entered in the author's note-

book, will forcibly stamp the truth of these opinions : —

9	Quickened at the 3d month.
11	Quickened at $3\frac{1}{2}$ months.
21	Quickened at the 4th month.
16	Quickened at $4\frac{1}{2}$ months.
8	Quickened at the 5th month.
1	Quickened at $5\frac{1}{2}$ months.
4	Quickened at the 6th month.

70

In a few of these cases, for the sake of convenience, I have used round numbers, when two or three days before and after was the exact time; and for the sake of correctness, have omitted several cases, in which there was the slightest doubt in the patient's mind of the exact time.

It appears from this table, that this symptom takes place more frequently between the 12th and 16th week, than before or after these periods; and that subsequent to the $4\frac{1}{2}$ and the expiration of the 6th month, it may occur in the proportion of more than one case out of every five. — Before the 3d month, quickening seldom arises.

This symptom may not be felt by the mother at all, and yet pregnancy exist. This is rare, but the fact is confirmed by many writers; and

I have met, during the last seven years, with two instances, and in both the mothers gave birth to living and healthy children.

Now comes the question, how far this symptom is of value, as a sign of the pregnant state?

If it has been experienced in former pregnancies, it is invaluable, for I believe it is not to be mistaken. If it is a first pregnancy, and doubtful, it removes all obscurity, provided the sensation grows stronger and stronger, until the movements of the child are distinctly felt.

Four only of the symptoms of pregnancy have been noticed, because the remainder are not recognisable, except by the accoucheur, although to him of the greatest value when pregnancy is complicated and doubtful from the presence of disease.

The nature of these symptoms have been described as plainly, and yet as briefly, as possible, because of the importance of their being clearly understood by the married woman.

I have also endeavoured to point out their real value as evidences of pregnancy—how they are sometimes absent in patients who are preg-

nant, and some of them present in those who are not so—because of the doubt and obscurity which arise from these variations.

And lastly, in bringing these observations to a conclusion, I venture to say, that if the married female will only take the trouble to make herself familiar with this little detail, she will not regret the time as lost or misspent, because it will generally guide her right, and I trust save her many moments of anxiety and discomfort.

CHAPTER III.

OF THE DISEASES OF PREGNANCY, AND HINTS
FOR THEIR PREVENTION AND RELIEF.

IN describing the diseases which are incident to the whole period of pregnancy, my design is to take a general popular survey of the subject. I wish simply to communicate that kind of information which every married and well-educated woman should certainly possess, and can usefully employ. To advance farther than this, to those points upon which the assistance of the medical adviser ought to be sought, would be on every account improper, and productive rather of evil than of good.

There is no organ in the body, with the exception of the stomach, that exercises a more extensive control over the female system than the womb. Hence, when in the condition of pregnancy, it affects, directly or indirectly, various

parts of that system. The effects of pregnancy, however, vary much according to the constitution of the female.

Sometimes a very salutary change is produced, so that the individual enjoys better health during gestation than before. The delicate and frequent ailing girl, for instance, — the propriety of whose marrying was a matter of doubt among her friends, — becoming pregnant, instead of realising the apprehensions and fears of those most dear to her, will, sometimes, acquire new life and vigour from the altered circumstances of her condition. On the other hand, speaking generally, it is sometimes the case that harassing and painful symptoms will arise. These are designated the “diseases of pregnancy.”

SECT. I. — MORNING SICKNESS.

NAUSEA, or vomiting, is one of the most common and distressing affections of pregnancy. It is chiefly troublesome in the earlier months

of gestation, continuing until the period of quickening, when it decreases or ceases spontaneously; — or, it does not occur until the latter months of pregnancy, when it subsides only upon delivery.

SICKNESS DURING THE EARLIER MONTHS. — This arises solely from sympathy with the newly commenced action, and irritable condition of the womb. This is evident from the fact, that, as the novelty of the pregnant state ceases, and the stomach becomes accustomed to it, the sickness subsides gradually, and is rarely troublesome afterwards.

It occasionally commences immediately after conception; and it is a remarkable fact, that a pregnant woman scarcely ever feels sick, until she first gets upon her feet in the morning. Hence it is called the “morning sickness.” She awakes refreshed and well, arises from her bed, and whilst dressing begins to feel qualmish. At the breakfast-table she has no appetite, or if she takes any thing, is shortly obliged to leave for her dressing-room, where she returns what she has taken; — or, if she has been unable to

take any thing, ejects a fluid, limpid, thin, and watery; and if the vomiting increases in severity, bile is thrown up at the same time. After the lapse of three or four hours, she feels quite well again, and by dinner-time sits down with an appetite to her meal.

Sickness without disordered digestive organs.— If there is merely nausea or vomiting, without the presence of bile, it is evident that it arises solely from irritability of the stomach, and is not connected with a disordered condition of the digestive organs; which latter circumstance is not unfrequently the case. The best means that can be employed to relieve this irritable state will be found in the following draught, taken twice a day for several days : —

Magnesia, fifteen grains ;
Tincture of calumba, one drachm ;
Distilled peppermint-water, one ounce and a half.

Medicine sometimes is hardly called for; and I have known a tumbler of warm chamomile tea, or even warm water only, taken immediately nausea was felt, by inducing immediate vomit-

ing, tranquillise the disturbed stomach, and thus abridge the morning attack. It is sometimes attended with advantage to take the chamomile tea before the female rises from her bed. I advised this with the most marked success very lately in the case of a lady who was very much reduced by the morning sickness. It had continued for several weeks, and with so much violence and straining, as to cause blood to be ejected with the fluid. In less than one week, when all other means had previously failed, the above suggestion was successful.

It frequently happens that the acidity is very great, in which case 15 or 20 grains of magnesia should be taken in a wine-glass of milk,—or, if it is preferred, a small tumbler of soda water; but the latter must not be persevered in for any great length of time, as it will then become injurious. The presence of acidity, however, is sometimes so difficult to overcome by alkalies, that these medicines must be given up, and acid remedies employed. Lemonade may first be taken, but lemon-juice and water is still better.

The *state of the bowels* must not be forgotten, and if any of the latter remedies are resorted to,

the most marked benefit will be derived from a gentle dose of Epsom or Cheltenham salts, every second morning, if so often necessary.

The diet in such a case must also be carefully attended to; but as this point will be referred to more particularly presently, it is only necessary now to say that the quantity of food taken must bear some proportion to the slightly diminished powers of the digestive functions, and that it will be well, when the sickness is very obstinate and distressing, to take no food at all for several hours after rising. If after a few hours the mouth is much parched, it may be moistened with a little broth, or weak beef-tea; but let nothing more be taken for five or six hours, and it is most probable that the sickness, which has resisted all other means, will thus be relieved.

Sickness, with disordered digestive organs.— If this irritable state of the stomach is connected with a disordered condition of the digestive organs, the sickness will be accompanied with the presence of bile in the matter vomited, a furred tongue, confined or irregular action of the bowels, and occasionally with what is termed

“a sick headach.” These symptoms are to be relieved by medicines which thoroughly clear out the bowels, allay the irritability of the stomach, and afterwards by those which restore tone to both. But it is to be observed that the following directions are only intended to apply to those simple cases, in which, whether necessary or not, no one ever thinks of consulting their medical adviser, and for which it is certainly desirable that they should have some judicious directions, rather than be left entirely without them. If these symptoms become at all aggravated, it is requisite that they should make immediate application for professional advice.

The bowels will need in the first instance a draught composed of infusion of senna and Epsom salts—the common “black draught”—with half a drachm of the tincture of henbane in addition. This, with five grains of blue pill, most probably effects the object desired: the bowels will be well purged, and the tongue become clean.

The next thing is to allay the irritability of the stomach, which is to be accomplished by the means already pointed out—the effervescing

draught of soda, magnesia, chamomile-tea, etc.; but in connection with this, two or three grains of the purified extract of aloes, with an equal quantity of the extract of henbane, must be taken two or three times a week, at bed-time. This will keep the tongue still clean, and the bowels in order.

After a little time, the sickness having subsided, tonic medicines may be taken; and a fourth part of the following mixture, taken three times a day, will, under the present circumstances, be the best means of restoring the tone of the stomach and bowels:—

Sulphate of quinine, six grains;
 Diluted sulphuric acid, half a drachm;
 Infusion of calumba, five ounces and a half;
 Simple syrup, half an ounce.

Sickness of a very obstinate character.— Having pointed out the means for mitigating sickness in the early months, there only remains one additional suggestion to make, and it is, that all the remedies for relief detailed may, in some case, fail. The sickness continues most obstinate; every time the female takes food, or even sometimes when abstaining from it, she

vomits; and at last, from this excessive irritability and long-continued violent action of the stomach, symptoms threatening miscarriage will manifest themselves. There is generally in such a case pain and a sensation of tension about the pit of the stomach, increased after every attack of sickness. If symptoms of miscarriage are not present, the application of nine or twelve leeches to the stomach, and pieces of soft linen rag well soaked with laudanum, constantly applied and renewed, will give the most decided relief. If, however, there is pain in the loins and hips, increasing in frequency and power, becoming at last slightly bearing down, I strongly advise the patient to consult her medical adviser, as the loss of a little blood from the arm, perfect rest in the recumbent position, and other directions which he alone can give, will in such a case be absolutely necessary, and I may add, if perseveringly acted up to by the patient herself, be certainly followed with success.

SICKNESS AT THE CONCLUSION OF PREGNANCY. — This arises from the distended state of the womb affecting mechanically, by its pres-

sure, the coats of the stomach, and certain parts in its neighbourhood.

This form of vomiting but rarely occurs; for do not let me be supposed to refer to the sickness which sometimes immediately precedes, and generally accompanies, the early part of labour. I am speaking of that irritability of the stomach which may arise about the sixth, seventh, or eighth month, and from which the female has been entirely free during the previous months of gestation, and now producing vomiting of an exceedingly troublesome form.

A lady suffering from sickness thus late in pregnancy ought to seek medical advice at once. From this cause, if severe, premature labour might be brought on, and judicious medical treatment is always decidedly necessary to mitigate this form of the complaint. The patient must lose a little blood, she must keep strictly to her sofa, and the bowels ought to be gently acted upon by small doses of Cheltenham or Epsom salt. A grain of the extract of opium may be given to allay the irritability at night, and cloths dipped in laudanum frequently applied to the pit of the stomach.

In all forms of sickness arising from pregnancy as its cause, the diet must be light, mild, and nutritious, taken in moderate quantities of three or four meals a day. It should consist of mild animal food, boiled or roasted. Chicken, white game boiled, mutton or beef roasted, are the viands most nutritious and easily digested. Stale pure bread untoasted, or captain's biscuit, mealy potatoes, or well boiled rice, in moderate quantities, may be taken with animal food for dinner. A glass of port wine with warm water, at the conclusion of the meal, is the best kind of beverage.

Advantage has often been derived from always taking brown bread, and Jamaica sugar in the morning's coffee. The healthy operation of the bowels has been thus promoted; although a system of regular walking exercise, apportioned to the strength, and short of fatigue, will generally effect this purpose, while at the same time it gives tone to the general health. Fatigue of body is sedulously to be avoided. Slow and moderate walks, exercise in an open carriage or on horseback (if the patient has sufficient strength), should be daily obtained between

breakfast and dinner; always avoiding to sit down to the latter meal tired, and therefore, probably, with a blunted appetite.

SECT. II. — HEARTBURN.

THIS is a very distressing symptom, and occurs early after conception; sometimes, however, not till after the fourth month; and occasionally is absent altogether. It is produced by an acid forming in the stomach, which rises into the throat, and, from the sensation it occasions, is called *heartburn*.

It is a very common complaint of pregnancy; and every female knows that she finds relief by taking a little magnesia, or chalk, or lime-water and milk, with the occasional use of magnesia; but although these means generally mitigate this symptom, occasionally it is very severe, and almost intractable, and they fail. Under such circumstances, the following draught taken three times a day, and continued for three or four days, will remove the complaint:

Magnesia, fifteen grains ;
Solution of the subcarbonate of ammonia, ten drops ;
Distilled peppermint-water, one ounce and a half.

If the bowels are confined, as is frequently the case, mild doses of Epsom or Cheltenham salts will be the best aperients. The use of these must be regulated by circumstances, — taken every second, third, or fourth day ; that is, resorted to with sufficient frequency and perseverance to guard against costiveness.

The *diet* must also in every case be strictly attended to, regulated upon the plan already stated.

SECT. III. — COSTIVENESS.

A COSTIVE state of bowels is one of the most common, and, at the same time, troublesome, of the diseases of pregnancy. It arises partly from the increased activity which is going on in the womb, and which induces a sluggish condition of the bowels, and partly from the pressure of the now enlarged and expanded womb on the bowels themselves.

A confined state of bowels is the frequent source of many and serious evils; it therefore behoves the female to be vigilant, and guard against it.

First, — Because, as before stated, pregnancy itself predisposes to constipation.

Secondly, — Because it is much more easily prevented than removed, when, after several days' confinement, an accumulation of hardened fæces has collected in the lower bowel.

Thirdly, — Because such an accumulation may give rise to inflammation of the bowel itself, and, in the earlier months of pregnancy, to miscarriage : and,

Lastly, — Because, if a female falls into labour with her intestinal canal so loaded, it will of itself be sufficient to render, what would otherwise have been a quick, easy, and safe labour, a long, painful, and difficult one; and may be the cause also of very serious and alarming symptoms, some forty or eight and forty hours after her labour is over.

The first and leading symptom of this affection is a costive or more consistent state than usual, of the fæcal excretions, with a less fre-

quent call for evacuation than is customary with the individual when in health. If this is not attended to, and several days, perhaps a week, pass by without the bowels being relieved at all, pain in the head, a foul tongue, and an increased degree of fulness and tension of the abdomen are experienced. These symptoms are followed, in all probability, by thin watery evacuations, attended with pain, weight, and pressure about the lower bowel: they become frequent; and the female at last, finding the bowels are not only open again, but even loose, takes chalk mixture. She is not aware that this very looseness is nothing more than increased secretion of the lining membrane of the bowel, caused by the pressure of the accumulated mass of hardened fæces, which it passes and leaves unmoved. The chalk mixture relieves the irritation upon which the looseness depends, but the disease is not removed, and instead of its being a case simply of costiveness, it has now become one of constipation; an accumulation of hardened stool is distending and irritating, by its pressure, the

lower bowel and the womb, and the serious consequences before enumerated may follow.

Very often have I been consulted by a female far advanced in pregnancy, for what she has supposed mere looseness of bowels, which has readily been found to originate under circumstances like these. It is of the highest importance that the patient should endeavour to guard against such a result; and without doubt she may avoid it, and regulate her bowels with great comfort to herself, throughout the whole period of pregnancy, if she will only use the means.

The means for regulating the bowels. — In pointing out a plan to accomplish this desirable object, the first prescription I have to offer is by far the most valuable, — “prevention is more easy than cure.” If the bowels are sluggish to-day, — that is to say, if they are not as freely relieved as usual, — and you do not assist them by medicine, depend upon it, to-morrow they will be confined, and there will be no relief at all. If, then, the bowels are *disposed* to be costive, I would recommend one large tablespoonful of castor oil — if it does not nauseate

the stomach, — and advise that the dose be repeated in four hours, if the desired effect has not been produced ; — or, a wine-glass of beaume de vie at night ; and early the next morning, before leaving the dressing-room, let the lavement be used, the injection consisting merely of a pint of blood-warm water ; — or, the following pills will be found useful to be kept in the patient's bedroom : —

Compound extract of colocynth, forty grains ;
Extract of henbane, twenty grains ;
Mix, and divide into twelve pills.

Two or three of these may be taken at bedtime, when the bowels have not been, during the day, satisfactorily relieved. These are always ready in the bedroom, and as they generally answer the object efficiently, and with comfort to the patient, are the most convenient form of aperient.

It will now and then happen, however, that the female has let the day slip. When this is the case, in combination with medicine, the use of the lavement is desirable. Medicine alone will not answer the purpose, unless it be taken in doses so strong as will not only move the

bowels but irritate them too. With the exhibition of the warm water, mild aperients never fail. Females, generally, are averse to the use of the lavement, and it is a prejudice which is most deeply to be regretted. I have known purgative medicines, so often resorted to, and in time, so increased in power and quantity, because they began to lose their effect, that, by their continued irritation, disease of the lower bowel has been produced, and death has at last been the consequence. If, then, the bowels have been one or two days confined, the lavement in the morning will render much less medicine necessary, and frequently have an effect when medicine alone would not. Many ladies use the warm water every second or third morning, during the latter weeks of pregnancy; and by this means they regulate their bowels — which would otherwise be confined — with great comfort to themselves, and need no medicine at all.

I will add only one word, in conclusion, upon this subject. Let it be remembered, that if the bowels have been confined several days, and diarrhœa comes on, that this is not a

natural relief, but the effect of irritation, caused by the presence of a loaded state of the lower bowel, which must be quickly removed by the medical attendant, or it may give rise to some one of those serious evils already enumerated.

SECT. IV. — DIARRHŒA.

AN affection the very opposite to that which has just been discussed, may occur during pregnancy. We have seen how diarrhœa may arise as a symptom of costiveness. It will manifest itself, however, independently of such a cause. The intestines may participate in the irritability of the womb, and, their vermicular action becoming morbidly increased, diarrhœa is the consequence. It is a disease which varies very much in different individuals, and may clearly be divided into two kinds.

One, in which the motions are more loose and frequent than in health, but not otherwise much altered in their appearance. The tongue is clean, or only slightly white, and the appetite

is pretty good. No medicine is required here ; a careful diet will correct the evil.

In the other case, the stools are liquid, dark-coloured, and very offensive, accompanied with a coated tongue, bad taste, offensive breath, loss of appetite, and more or less disorder of the digestive organs. In these latter circumstances, I have found at first the following draught, given every three or four hours, very useful : —

Rhubarb, eight grains ;
Ipecacuanha, one grain ;
Dill-water, one ounce.

As the tongue cleans, and the stools become more natural, a wine glass, three times a day, of some bitter infusion, such as cascarilla, orange-peel, or gentian, may be taken with advantage. If the diarrhœa continues for any length of time, it is always wise to have the surface of the body kept warm with flannel ; and this is best accomplished by a flannel roller bound gently round the abdomen.

But in either form of this disease, whatever remedies are proposed, there is one mode of treatment applicable to both, and which is the most important of all ; a proper system of

diet. The food must be sparing in quantity, of the mildest quality, and such as to leave, after the process of digestion, as little excrementitious matter as possible.

In a recent attack, the *first* day, the patient should only take mild drinks, containing a small quantity of unirritating nutriment; such as barley-water, or arrow-root made with water. During the *next* day or *two* the same diet must be continued, but may be given in larger quantity, and of greater strength. Tapioca, sago, and rice-gruel, might be added to the list. When the irritation is somewhat allayed, on the *third* or *fourth* day, perhaps broth may be taken; but no solid food of any kind, least of all solid animal food, until the disease is removed or greatly allayed. As soon as this is the case, a small quantity of the lightest animal food may be taken; chicken, with well-boiled rice, white game boiled, roast mutton and beef may follow; but lamb and veal, for the future, should be avoided.

It may be observed, that in some cases, where the diarrhœa has been of long standing, a *drier* diet is best, the liquid food appearing to keep

up the disease. Rice well boiled, and merely moistened with a little broth, is the best and one of the most desirable articles of diet in such cases.

SECT. V. — PALPITATION OF THE HEART.

THIS is an affection so common and well known, that it is unnecessary to describe it. If it occur for the first time during pregnancy, it is rarely connected with disease of the heart itself; it is, therefore, without danger, although a very distressing symptom. Occasionally there is connected with it, throbbing of the vessels in the temples, as also in the abdomen; the latter not unfrequently mistaken by the patient for the pulsatory beatings of the heart itself.

It will make its attack repeatedly in the course of a day, particularly after a meal; and very frequently at night, on first lying down in bed; and it may be brought on at any time by the slightest agitation of mind.

Treatment for an attack. — When it comes on, it is to be relieved by putting the hands and

arms up to the elbows in water, as warm as can be borne—friction with the warm hand applied to the feet—absolute rest—and taking the following draught:—

Compound spirits of ammonia, half a tea-spoonful;
Camphor mixture, a wine glass.

It may be repeated again in an hour or so, if necessary. It will be well to keep a bottle of this mixture in the bedroom; a resource will always then be at hand, and the dread which attends anticipation in a great measure removed. This is the more necessary, as an attack, if it comes on in the night, is always very distressing. The patient awakes, perhaps out of a frightful dream, with a sense of fluttering in the region of the heart—calls out for breath, begs to have the curtains of the bed withdrawn—the door of the room opened—and will tell you she feels as if she was dying,—wine, brandy, any stimulant that is at hand is resorted to, for the husband or friend of the patient is naturally much excited, and in his alarm scarcely knows how to act. Now there is no occasion for alarm; the sufferer must be assured of this;

her mind must be soothed and quieted; the means just pointed out for the relief of a paroxysm must be used; the palpitation will after a little time cease, and the patient will drop off into a quiet and tranquil sleep.

These attacks may be prevented, by taking for ten days or a fortnight a tea-spoonful of the following mixture, three times a day:—

Carbonate of iron, one ounce and a half;
Syrup of ginger, one ounce and a half.

The bowels must be carefully regulated; a wine glass of beaume de vie is the best aperient, provided there are no piles. Fatigue and all exertion must be avoided, and the mind kept perfectly tranquil.

SECT. VI. — FAINTING FITS.

FAINTING may occur at any period of pregnancy, but is most frequent during the first three months, and especially about the time of quickening.

It may come on when the person is at perfect rest, but it is ordinarily produced by more than usual exertion, — exposure to heat, — or any sudden excitement of the mind.

The paroxysm or fit is sometimes of short duration; and the female does not lose her recollection; she has a knowledge of what is going on about her, and soon recovers; but in other instances the fainting fit is complete, and of long duration, continuing for an hour or upwards.

The treatment during a fit. — This consists in immediately placing the patient in the recumbent posture — the use of pungent volatiles — sprinkling the face with cold water — free exposure to air, and the cautious administration of cordials. And if the fit continue long, the extremities must be kept warm, and the friction of a warm hand be applied to the feet.

It is scarcely necessary to add, that those who are subject to these attacks ought to avoid fatigue — crowded or hot rooms — fasting too long, quick motion, and agitation of mind. The bowels must be strictly attended to; and a wine glass of the infusion of calumba or cascarilla,

taken every morning will be useful in giving tone to the system.

After a few weeks the disposition to fainting will altogether subside.

SECT. VII. — PILES.

PREGNANT women are very subject to piles. Both with costiveness and diarrhœa they are a frequent attendant, but particularly with the former. They will usually disappear, if they are slight, as soon as the bowels are restored to healthy action; but they may not, and then will give rise to great suffering.

They are sometimes occasioned in the early part of pregnancy by the pressure of the enlarged womb, and are cured spontaneously in such a case about the period of quickening, by the rising of the womb into the abdomen, which necessarily removes this pressure.

The pregnant woman recognises piles under two forms:—

1st, Where they exist as little tumours within

or just without the bowel, becoming, very soon after their exclusion, more solid and firm; unless indeed they early break and bleed; and

2dly. Where they present, without the bowel, a tumour, large in circumference, separable into lobes, altogether like a piece of sponge coloured, and bleeding occasionally from the surface.

Causes. — Of all the causes which operate in the production of piles, habitual constipation is the most frequent. The excrementitious matter is delayed in the bowel, becomes hard and knotty, and a source of great irritation; this irritation induces a determination of blood to the part, and the gradual dilatation of its vessels takes place as a consequence, which eventually forms the tumours known under the appellation of *piles*. Now, as in pregnancy there is a greater disposition to costiveness than at any other time, and as piles may be a consequence of this disordered function, so this disease is much more prevalent during the pregnant state than at any other period; another argument, and a

very powerful one, why costiveness should be diligently guarded against.

Symptoms. — The symptoms of this complaint are well known. There will be weight, heat, and a sense of fulness about the lower bowel, a frequent desire both to relieve the bowels and bladder; all of which symptoms are removed for a time if a discharge of blood takes place.

If the piles be without the bowel, they are constantly irritated by the friction of the parts in the ordinary motion and erect position of the body, and that to a painful degree during the period of the evacuation of the bowels. If exercise be taken in a carriage, the pain is much aggravated; and if the irritation produce inflammation, the piles will become swollen, red, or purple, and excessively painful.

Treatment. — The treatment of this disease, when it occurs during pregnancy, is two-fold — general and local. We must remove the *cause* by such means as excite a brisker action of the bowels; and our choice of aperients must be directed to those which act efficiently but mildly, and without irritating the lower bowel itself. Next to small and repeated doses of castor oil —

say a table-spoonful, — the most desirable form of aperient that can be employed is the confection of senna (*i. e.* lenitive electuary), combined with sulphur and magnesia. Of the following form, a dessert spoonful or more should be taken, at first, twice daily : —

Confection of senna, two ounces ;

Flowers of sulphur, one ounce ;

Carbonate of magnesia, two drachms and a half.

In conjunction with this medicine, much benefit may be derived by the injection of half a pint of warm or cold water (whichever soothes most) as a lavement ; but it must be administered very cautiously, to avoid irritating the parts with the pipe of the instrument.

It is important that medicine, in frequent use, should be so taken as to act upon the bowels in the evening only ; for if the bowels are acted upon in the morning, the patient, being obliged to move about all day, will suffer considerable distress and local irritation ; whereas, if the bowels are not evacuated till the evening, the horizontal position, and the perfect rest of a long night, will obviate all inconvenience.

Great assistance may be afforded in the cure,

and also in alleviating pain, by external applications to the tumours themselves. If, however, the piles are swollen and inflamed, and the pain experienced great, half a dozen leeches, or from half a dozen to a dozen, should be first applied in their immediate neighbourhood, the parts fomented, and then warm bread and water poultices renewed every three hours.

These remedies will afford very considerable relief; and, when the inflamed state is subdued, the following ointment must be employed to the tumours and around them, night and morning:—

Powdered galls, two drachms;
Camphor, half a drachm;
Lard, two ounces.

Or,

Powdered black hellebore-root, one drachm;
Lard, one ounce.

The latter preparation will, for some time after its application, give much pain, but proportionate relief will follow.

The *diet* must be sparing in quantity, mild in quality, and such as to leave, after its digestion, as little to pass through the bowels as possible.

I would beg attention to one more observation on this subject. The removal of piles by operation, during the pregnant state, is perhaps never justifiable. Let the patient, therefore, consult her medical attendant in time, and not, by a false delicacy, expose herself to an evil which it is her duty to endeavour to prevent.

SECT. VIII. — ENLARGEMENT OF THE VEINS OF THE LEGS.

THIS is a frequent, but not very troublesome, accompaniment of the latter months of pregnancy. It arises in some degree from the pressure of the womb upon the large venous trunks, impeding to a certain extent the free flow of blood through them. It is frequently remarked in pregnant women who have passed a certain age; but it is particularly unusual for it to happen, in the case of young women, even during a series of repeated pregnancies.

When first observed, *if the veins have not become knotty*, — that is, having little lumps or swellings in their course up the leg, — the

only means which it is necessary to employ, is the application of a calico bandage, — six yards in length, and as wide as three fingers — from the sole of the foot up to the knee, and sufficiently firm to give support to the venous trunks. This bandage well and equally applied to the limb, with a little aperient medicine twice a week, and the recumbent position for two or three hours in the middle of the day, will cure this form of the affection.

When after a time the *veins, more and more distended, have become lengthened, tortuous, coiled up, or knotty*, the female begins to experience a sense of heaviness, numbness, and sometimes very acute wandering pain, through the whole of the affected limb. In a more advanced stage, in proportion as the knotty tumours increase, the limb becomes generally swollen.

This form of the disease calls for much care and patience on the part of the sufferer. The legs should be strapped, from ankle to knee, with strips of adhesive plaster, and over this a calico bandage must be applied with a moderate degree of tightness, and kept wet with Goulard water. In conjunction with these local appli-

cations, it is sometimes wise to lose a few ounces of blood from the arm, and always necessary to take every other night a gentle aperient, to live upon a spare diet, and for some days to keep the horizontal posture. An elastic laced stocking, made for the purpose, may be afterwards worn, and will be found at once a sufficient support to the limb, and a source of great comfort to the wearer.

SECT. IX. — SWELLING OF THE FEET AND
LEGS.

IN the course of pregnancy, during the latter months particularly, the feet and legs frequently become much enlarged. This is partly owing to the pressure of the womb, but sometimes apparently independent of it. It is first observed towards night, about the ankles ; by degrees the swelling rises higher, and the legs may become of a very large size. The female suffering from this complaint always goes to bed with legs much swollen, but towards morning her face swells, and the enlargement of the legs dis-

appears to a greater or less extent, returning, however, as the day advances.

Sometimes this disease is very trifling in its character; and in ordinary cases, except aperients, no medicine is necessary, and support may be given by a well applied flannel roller: but when the swelling is extensive and permanent, remaining in the same degree after the patient has been for several hours in bed, and connected with uncomfortable sensations in the head, and an accelerated pulse, a medical man ought to be consulted; for the consequences might otherwise be dangerous.

SECT. X. — TOOTHACH.

THIS may appear a trifling disease, to notice in connection with the subject before us; but, in the course of pregnancy, females will sometimes suffer severely from erratic pains in the face and teeth. As these pains are generally induced by the increased irritability of the nervous system, the result of the new action

which is going on in the womb, and not from the decay of any particular tooth, extraction of any tooth for its cure is out of the question. Indeed, did the suffering arise from a carious tooth, its removal is unadvisable, inasmuch as this operation has been immediately followed by a miscarriage. The fact is, that the patients who have consulted me while suffering from this affection, have had, apparently, in most cases, very sound teeth; and, feeling confident that its cause has been what has been before pointed out, the treatment has been purely constitutional. The following pill may be taken, night and morning: —

Socotrine aloes, one grain and a half;
Blue pill, two grains;

together with one drachm of the rust or carbonate of iron, mixed with treacle or milk. The latter must be repeated twice a day, for four days, and then a third dose may be added in the middle of the day; and the remedy continued, even after all uneasiness in the face has subsided for some time, with great advantage to the general health.

The only local application I would advise, is that of washing out the mouth and teeth, night and morning, with salt and cold, or lukewarm, water. This plan of treatment not only relieves the painful affection of the face and teeth, but allays also that local irritability of the nerves, upon which it depended.

If a carious tooth seems alone affected, it has been proposed carefully to apply a drop or two of nitric acid, which is said to be infallible.

SECT. XI. — SALIVATION.

A PREGNANT female must not be surprised, if, some little time after conception, or during any of the months of gestation, the ordinary quantity of saliva, which lubricates and keeps the mouth constantly moist, should increase to such an extent as to be exceedingly troublesome; and, indeed, sometimes become so excessive, as seriously to affect her health. It is a symptom of pregnancy, but a very unusual one; although

the quantity of saliva discharged has now and then exceeded three, and even four, pints daily.

It differs essentially from the salivation produced by the exhibition of mercury, inasmuch as in this case there is no tenderness of the gums, or disagreeable fœtor in the breath. The fluid itself is either perfectly colourless and transparent, or more tenacious and frothy. It has an unpleasant taste, and, when tenacious, induces vomiting. It is generally accompanied with acidity; and the plan of *treatment* most advisable, when the disease is moderate in its character, is the frequent use of from 20 to 30 grains of magnesia, say every morning, rinsing the mouth out very often with lime-water, and to resist the desire to discharge the saliva from the mouth as much as possible, for, if it is not very great in quantity, it may be swallowed with advantage. Should this symptom, however, be very excessive, the health will suffer considerably in consequence, and the assistance of the medical man is imperatively called for.

SECT. XII. — A PAINFUL AND DISTENDED CONDITION OF THE BREASTS.

PAIN and tension of the breasts frequently attend, as also they are natural consequences of, conception.

In a first pregnancy, a large and rapid development of this organ may take place, the breast becoming two or three times as large as before marriage; but if tight lacing be only avoided, and the breasts be permitted to expand, no material inconvenience will arise from this circumstance.

As, however, these symptoms are sometimes attended with considerable distress, I would advise, under such circumstances, the application of half a dozen leeches, tepid fomentations, and a gentle aperient, viz. two drachms of Epsom salts, in a little peppermint-water, night and morning. These means, by relieving the overdistension and fulness of the vessels of the part, remove the cause and complaint at once.

If these symptoms occur to a female who

may have been several times pregnant, and formerly has had an abscess in one or other breast, that bosom is generally most painful which was before affected, and there will be an increased hardness about it, which may give rise, perhaps, to the apprehension of an abscess again forming, or, what is much worse, to the disease terminating in cancer. Both these fears are groundless: and if she will only use fomentations, gentle friction frequently during the day, with almond oil and laudanum — about a drachm of the latter, to an ounce of the oil, warm, — and exercise patience, every thing will do very well.

Nature often seeks her own cure, and a colourless, thin fluid runs from the nipple, which relieves the symptoms.

SECT. XIII. — CRAMP AND PAINS IN THE LEGS, ETC.

SOME females, during the latter months of pregnancy, suffer dreadfully from cramp and pain in the legs, and about the sides and lower part of the stomach. This symptom arises from the pressure of the womb upon certain

nerves in its neighbourhood, which proceed to the extremities.

If the cramp be seated in the muscles of the legs, a hard knotty induration is perceivable to the touch, accompanied with great soreness, the latter continuing for a long time after the lump has disappeared. An uneasy position of the muscles is a sufficient cause of irritation to produce it, and it is frequently removed by simply rising from the bed or sofa, and walking the room, so as to put the muscles of the leg into action. If this does not succeed, warm friction with the naked hand, or with camphorated oil, generally will.

If spasm affect the sides, or lower part of the stomach, the speediest relief will be obtained from twenty to five-and-twenty or thirty drops of laudanum, with a little æther, in distilled peppermint-water, or, even at the moment, a little brandy and water; but I generally order, for patients who are at all subject to this affection, the following mixture:—

Batley's sedative solution of opium, one drachm;
Compound tincture of lavender, half an ounce;
Distilled peppermint-water, six ounces.

Two table-spoonsful to be taken before retiring to rest, if there is the slightest intimation of an approaching attack, and also direct that the feet be put into a mustard foot-bath. During the attack, great benefit will be derived from the external application of hot flannels, moistened with the compound camphor liniment.

SECT. XIV. — VIOLENT MOVEMENTS OF THE CHILD.

BEFORE the third month of pregnancy, the child is not sufficiently developed to enable it to move. When a little further advanced in growth, it moves, but so feebly, and imperfectly, that the mother is not yet sensible of it. A period, however, soon arrives, when its movements, although at first like the mere fluttering of a bird, acquire a power and force that enable it to give decided proof of life. It is instantly recognised; the female knows she has quickened, and perhaps the sensation experienced is so sudden, that she faints. After

this time the motions of the child increase both in frequency and degree, and are readily perceived by the mother; but after a time the womb, accustomed to this action within itself, is less sensible of its effects, and, except as a satisfactory evidence of the life of the child, is little regarded.

Sometimes, however, the child is *disagreeably active*, so violent as not merely to alarm the mother, but occasion much sickness and uneasiness; sleepless nights; and feverish symptoms; and all this to such an extent, as to require medical interference. If this is not thought necessary, relief will be obtained from losing blood, when not otherwise objectionable, to the amount of a few ounces; gentle aperients, and a night draught, containing from 25 to 30 drops of Batley's sedative solution of opium. These remedies will afford the greatest relief; and if the symptoms are not altogether removed by them, the female must then endure patiently, recollecting they are a proof that the child is alive and vigorous.

SECT. XV. — SORENESS AND CRACKING OF
THE SKIN OF THE ABDOMEN.

It will sometimes happen during the latter months of pregnancy, that the skin covering the abdomen will not yield readily. This produces much uneasiness ; the skin becomes tender and fretted, and, if there is very great distension, cracks. It forms a source of great discomfort, and renders the female miserable whenever she moves.

It is to be relieved by fomenting the parts with a decoction of poppy-heads* ; and the frequent use of warm almond oil, applying in the intervals spermaceti ointment, spread very thinly on a piece of soft linen.

* This decoction is made by taking four ounces of poppy-heads, breaking them up, putting them into a vessel, pouring upon them four pints of boiling water, boiling the whole for fifteen minutes, and then straining off the liquor.

SECT. XVI. — INCONVENIENCE FROM SIZE.

MANY women in the latter months of gestation experience considerable annoyance, and sometimes severe suffering, from the great size of the abdomen, and from want of support, when even not so very large. This is a rare occurrence in a first pregnancy, owing to the firmness of the abdominal muscles, but very frequent in subsequent ones. Little women especially suffer from this unpleasant cause, and, in fact, it is so universally the case with all who have borne children *rapidly*, that it is highly important for a female to be provided with the means of relieving it.

There is but one remedy with which I am acquainted, but have usually found it answer every purpose. It is wearing during the day-time *a well applied belt*, next the skin. It must be sufficiently broad for its upper edge to surround the abdomen above the point of its greatest diameter, and its lower edge to come down to, and be supported by, the hips. It must

be drawn tight by a lace-string behind, as circumstances may require, and it must likewise be supported by broad straps passing over the shoulders. This will give the required support to the womb, and when the patient is in an upright position, as much as possible of the weight, of what she externally carries, will be thrown upon, or hang from, her shoulders.

Those who suffer much from this cause, ought also to lie down upon a couch or bed, for two or three hours every day; this will give great relief to the muscles.

SECT. XVII. — BEING UNWELL DURING PREGNANCY.

A FEMALE may be pregnant, and yet be unwell for one period or more whilst in that condition. Indeed it may take place every month to the time of quickening, and has even continued in some rare cases up to the time of delivery.

Now, although this can scarcely be called one

of the diseases of pregnancy — for it, ordinarily, in no way interferes with the health — still, as while the discharge is actually present it predisposes to miscarriage, it is necessary to give one or two hints of caution.

Any female, then, thus circumstanced should manage herself with great care immediately before the appearance, during the existence, and directly after the cessation of the discharge. She should observe the most perfect quiet of body and mind — keeping upon the sofa while it lasts, and carefully abstaining from any stimulating or indigestible article of food, and if any symptoms of pain, uneasiness, or threatening miscarriage come on, immediately seek medical advice.

A case, showing the necessity of carefulness under such circumstances, occurred to me some time since, and its relation is all that I need add upon this point.

A lady, resident in Gloucestershire, missed one period, suspected herself to be pregnant, but being unwell on the following month, supposed herself mistaken. She had occasion, however, to come to London on the second day of her being unwell — Monday. On the Wednesday following she suf-

ferred considerable uneasiness from the exertion attendant upon the journey; and on Friday, whilst from her hotel, was obliged to return home in haste, and before night, miscarried.

Here then is a case in point — first proving, what some persons deny, that a female may be unwell and yet be pregnant, for she could not perceive the slightest difference in the appearance of the discharge from what ordinarily took place, and it was exact as to the time of its return — and, next, showing how necessary is great caution, and the most perfect quiet, since undoubtedly this lady would not have miscarried, if her journey had only been delayed another week.

SECT. XVIII. — AFFECTIONS OF THE BLADDER.

THE bladder is often affected by pregnancy. In the *early* months it may, like the intestines, become more torpid than formerly, or, on the other hand, unusually irritable. In the *latter* months there may be an inability to retain the urine.

1. *Torpidity of the bladder.* — In this case the female retains her water long, and then expels it with some difficulty, and in considerable quantity at a time. This state requires great attention on her part; for, if it occur about the third or fourth month, serious consequences might attend its neglect — miscarriage, for instance.

There is not much to be done by medicines; the relief that is to be obtained from soda and similar remedies is very partial. But all that is required for its relief, is the *regular efforts* of the sufferer to pass her water. She must never allow the bladder to become distended; and therefore never permit six hours to elapse without attempting to relieve herself. If she fail to do this, and an inability to pass water arises, the medical attendant must without delay be called in.

2. *Irritability of the bladder.* — More frequently the bladder is rendered unusually irritable, and uneasiness in the region of the bladder itself is felt.

This state requires a very different treatment from the former; for here soda and all saline

medicines, which would render the urine stimulating, must be strictly avoided. Small doses of castor oil, so as to keep the bowels gently relaxed; three or four grains of the extract of henbane, twice a day, for four or five days; and drinking freely of mucilaginous fluids (barley-water, &c.), will give decided relief.

3. *Inability to retain the urine.* — This is not at all an uncommon circumstance in the last two or three months of pregnancy. It is produced by the pressure of the womb on the bladder, by which the urine is forced off involuntarily whenever the female coughs, or moves quickly; or, if not so troublesome in degree as this, she will be unable to retain much of it, being obliged to void it frequently.

It is to be relieved by the recumbent posture — by wearing, during the day-time, a well applied belt to the abdomen *, which will give support to the womb, and prevent, in some measure, the pressure upon the bladder; but it is only to be permanently cured by delivery.

* See section xvi. of the chapter, p. 98.

SECT. XIX. — IRRITATION OF THE EXTERNAL PARTS.

A FEMALE is naturally loath to consult her medical attendant when labouring under this affection. Delicacy causes her to shrink from making any communication to another about it, and she will endure the physical distress to which it gives rise for days and weeks, rather than do violence to her feelings. But this troublesome and distressing complaint, without some remedy is early had recourse to, always grows worse and worse; and, as at its first commencement it admits of speedy and permanent relief, I think it right to point out in what this consists.

This tender and irritable state may affect the external parts only, or it may extend within. In either case it will produce the most intolerable itching, especially during the night, when it is sometimes hardly bearable.

It now and then commences in the early part of pregnancy; and when this happens, and it is neglected, it may continue until delivery

takes place. At other times, and this I believe to be the most common, it does not attack the female until the sixth or seventh month.

If it is only slight, it may be quickly removed with a lotion composed of one drachm and a half of Goulard's extract, diluted with a pint of distilled water, with which the parts should be washed four or five times a day; and, at the same time, from half a pint to a pint of the same lotion must be thrown up into the vagina by means of a proper syringe.* These means, together with a little laxative medicine, will produce speedy and perfect cure.

If, however, the irritation is very great, and extends within the vagina;—the disease has existed some time;—and nothing has been hitherto done for its relief, some additional means must be had recourse to. A dozen leeches must first be applied to one of the groins, or as near the external parts as possible; and when they drop off, the bleeding must be encouraged by using a sponge and warm water. This will unload the distended vessels of the vagina, upon which the disease principally depends.

* See note, p. 107.

Next, the parts just within should be smeared over with the Goulard's extract, and this must be repeated morning and night; the external parts being washed freely four or five times a day with the Goulard's lotion: Goulard's extract, one drachm and a half; distilled water, sixteen ounces; — or with a strong solution of borax: borax, four drachms; distilled water, sixteen ounces; which must be had recourse to if the former fail to give relief. These measures, with the exhibition of a gentle laxative night and morning: sulphate of magnesia, two drachms; infusion of roses, one ounce; simple syrup, one drachm; — and the recumbent posture, will remove this troublesome affection.

If the itching is very intolerable at any time, iced-water will afford a temporary suspension of the fit; and it may be necessary to repeat the application of the leeches, if the disease is very obstinate.

SECT. XX. — A WEAKNESS, OR THE WHITES.

A DISCHARGE sometimes accompanies pregnancy, occurring, however, most frequently to those who are bearing children in quick succession.

In the early months. — If the discharge is but small in quantity, it will be only necessary to use the bidet with cold water, liberally, night and morning, and to sponge the body generally, every morning.

If, however, it is present to such an extent as to render the female uncomfortable, if she only take a gentle walk, it will be necessary to throw up into the vagina with the syringe *

* The female syringes in common use are highly objectionable; they are too small, and produce considerable irritation from the frequent necessity of withdrawing the pipe for the purpose of refilling the instrument. This inconvenience is obviated by the use of the common domestic enema syringe, and fixing it to a proper *vaginal pipe*. In this way, any quantity of fluid may be injected into the vagina without withdrawing the tube.

Weiss and Son, 62. Strand, and other instrument makers, always keep this part of the instrument by them.

a pint of cold water three or four times a day, to observe the recumbent posture for at least three or four hours in the middle of the day, and to keep the bowels open with some mild aperient (a drachm or two drachms of Epsom salts), and every morning to use the shower bath. This condition will now and then be accompanied with a feeling of bearing down, as if every thing would drop through; symptoms which will receive appropriate treatment by the adoption of the above plan, (more particularly the recumbent posture,) and, if not entirely relieved, will be found to disappear altogether between the fourth and fifth month.

If it is in excess, the female should allow no scruples of delicacy to prevent her seeking medical advice; for if it is not attended to, most probably miscarriage will result.

In the latter months.—Coming on in the latter months for the first time, provided it is not profuse, it is useful; for there will generally be symptoms of weight, heat, and discomfort present, which are alleviated by the discharge.

If, however, it is excessive, the frequent use of the bidet, and injections of tepid water into

the vagina, will materially serve to promote the female's comfort. The bowels should be kept constantly open by mild aperient medicines. And the recumbent position, by diminishing the amount of pressure of the womb upon the parts from which the discharge proceeds, will tend greatly to reduce the quantity. Should these means fail to diminish the amount of discharge, the Goulard injection may be thrown up into the vagina with great relief, night and morning: Goulard's extract, one drachm and a half; distilled water, one pint.

I think it right to observe, that when this discharge *continues in considerable quantity during the whole period* of pregnancy, it predisposes to premature delivery. Again and again have I known the same individual prematurely confined from this cause alone: — her hopes thus repeatedly blighted; and, what is worse, her health unstrung for a long period.

In such women, the discharge exists more or less abundant when they are not pregnant; the menstrual secretion being more plentiful than it ought to be, and the intervals between the periods generally shorter than natural.

Such women are generally weak, although they may have the appearance of strength; they can take very little exercise without fatigue; and their habits, although perhaps originally sedentary by choice, after a while become so from necessity. The symptoms, disregarded for months, nay years, by the sufferer, increase; and now she has pains in the head, giddiness, and perhaps indistinct vision, and many other symptoms which it is unnecessary to mention. At last the urgency of the symptoms leads her to seek for professional assistance. How much wiser, if the advice of the medical attendant had been sought at an early stage of the complaint, when the inconvenience was slight, and easily manageable; for in proportion to the duration of the disease will be the difficulty in removing it.

SECT. XXI. — PAIN IN THE SIDE.

THIS affection comes on towards the latter period of pregnancy, never being felt in the earlier months. It is exceedingly troublesome; and it too frequently happens that the remedies

given for its relief, although varied enough, produce no good effect.

The pain at first is slight. The female suffers little in the morning, but a few hours after dinner the pain becomes more violent; she is obliged to lie upon a sofa, and is frequently observed to place her hand over the part in pain, and press it pretty forcibly. Cough does not necessarily accompany this complaint, but it is not unfrequently present, but is then unconnected with inflammatory action in the chest.

Women are much in the habit of resorting to bleeding for this affection; but never, as far as I have observed, with the slightest advantage. Depending, as it does, on an irritable condition of the liver, nothing relieves it so speedily as those cathartic medicines which act on this organ.

Take at first, then, two pills composed of four grains of calomel, six of the compound extract of colocynth, and two of the extract of henbane; after which keep the bowels relaxed with three grains of blue pill, and three grains of the purified extract of aloes, taken every

night. The diet being carefully attended to; no animal food or stimulants to be taken for some days.

The medicines will bring away black and offensive stools, and must be continued until these secretions are perfectly healthy in their appearance. This object gained, the pain in the side will have subsided, and all that is then necessary, is for the patient carefully to watch over the state of her bowels for the future.

SECT. XXII. — HEADACH.

HEADACH during the latter months of pregnancy ought never to be trifled with; for although it will most frequently arise from a disordered stomach, and is then easily removed, it now and then is the effect of a cause much more important.

Headach from disordered stomach.— This will, generally, depend either on a costive state of the bowels, indigestion, or nervous irritation: is attended with acid eructations, occasional

giddiness or slight sickness, foul tongue, and perhaps paleness of the countenance, the attacks being frequently periodical, and confined to one side of the head.

This kind of headach is to be relieved by taking a mild aperient every other night, until the bowels are fully relieved, and the tongue clean,—rest,—abstaining from animal food for a few days, and from all stimulants (wine, beer, &c.) for the remaining period of pregnancy. During the attack itself, æther, or eau de Cologne, may be applied to the head.

Headach from fulness of its vessels. — This is an important disease when severe and constant, and more particularly if the patient is far advanced in her pregnancy. It is to be recognised by a dull appearance and suffused condition of the eye; by the presence of giddiness, especially upon stooping or lying down; and by a sense of heaviness or weight over the eyes, or in the head. Its presence is still more strongly marked, if there is ringing in the ears, fiery objects before the eyes, and indistinctness of vision. The seat of the pain is, generally, in the back of the head, and is usually accom-

panied by a fixed pain in some part of the spinal column.

This form of headach is *very rare* ; but if the foregoing symptoms manifest themselves, as they indicate the approach of an attack of an alarming character, *which may be prevented*, (and it is therefore here alluded to,) timely recourse should be had to the medical attendant. Blood-letting and purgatives are always necessary.

SECT. XXIII. — JAUNDICE, ETC.

JAUNDICE sometimes occurs in the early or latter months of pregnancy; now and then a troublesome cough, accompanied with considerable pain in the head, and sudden attacks of difficulty of breathing. These and many other slight affections may manifest themselves during gestation, but of these I say nothing: it would be advancing beyond the bounds by which I thought it right to limit myself, and departing from the object proposed.

I have finished what was purposed, and presented the married female with that information, for direction and relief in those little ailments and discomforts which frequently arise during pregnancy, for which she does not think it necessary to consult her medical adviser, and yet from which she will not unfrequently go on suffering for weeks, rather than speak of them.

CHAPTER IV.

ON THE PREVENTION OF MISCARRIAGE.

THERE is no accident befalling female health which forms a greater source of dread, anxiety, and subsequent regret to a married woman than miscarriage. When this occurrence becomes habitual, there is no circumstance the consequences of which are productive of more serious injury to the constitution, blasting the fairest promises of health, and oft-times laying the first seeds of fatal disease.

The frequency of its occurrence, however, would excite little surprise, were the delicacy of attachment which exists in the early months of pregnancy between the future offspring and its parent only understood, for it would then be easily perceived with what facility this union may be destroyed.

If, then, this disease is so frequent in its occurrence, — if its consequences are so serious when the habit of miscarriage is established, and if the facility with which it may occur is so great from the delicate and slight connection which exists between parent and offspring at this early period, it will be asked, are there any means by the adoption of which an accident so sad in its results may be prevented? Can the female herself contribute in any measure to avert its liability? Or can any plan be pointed out, the rules of which, when strictly observed, shall eventually remove this disease when it has grown into a “habit,” and reward the female by carrying her securely and safely through to the termination of gestation, when next she shall become pregnant? In the majority of cases, and without hesitancy, I confidently reply in the affirmative, and it is because the success of such a plan depends for the most part upon the prudence and perseverance of the female in carrying it to a happy result — for a medical man can do little to arrest a miscarriage when the process is once set up — that she ought to be fully acquainted with the means of prevention.

There is another fact, also, which I am sure will have considerable weight with any well-regulated mind : and that is, that the subject is of the highest importance to the party chiefly interested, not only as respects her own health, but also that of her offspring, whose condition from the first is dependent upon that of the mother ; a disregard therefore to her own health may destroy the very life of her child.

SECT. I. — THE PERIOD AT WHICH IT MOST
FREQUENTLY OCCURS.

THE usual term of pregnancy is forty weeks, or nine calendar months. At any time, however, within this period, the child may be expelled, and if this take place before the commencement of the seventh month it is usually called a miscarriage. The process of gestation may be checked from its earliest period, for many of the causes producing miscarriage, which can operate afterwards, may operate through the entire term, and hence miscarriage occurs

not unfrequently within three weeks after conception; it most frequently, however, takes place between the eighth and twelfth week.

SECT. II. — ITS SYMPTOMS, ETC.

WITH regard to the nature of this process, and the mode by which it is effected, we have in this place little to do. In warning the female of its probable approach I have only to mention certain local appearances, and other general and constitutional symptoms, which indicate its commencement.

Thus, if during pregnancy a female experience an unusual depression of strength and spirits, without any apparent cause, — if this is accompanied with attacks of faintness, pains going and coming about the lower part of the stomach, loins, and hips, — *she threatens to miscarry.*

If these symptoms are after a time followed by the discharge of more or less blood, *a partial separation* of the child has already taken place. If the pains in the loins and hips increase, be-

coming sharper and more expulsive, — bearing down — with a free discharge of clotting bright-coloured blood, *the child is altogether separated*. And, in fine, if the blighted and dead child is not quickly expelled, thus terminating the whole process, this will be the case before many days elapse, preceded, however, in such a case, by the breasts becoming flaccid, the stomach and bowels more or less disordered, and the discharge altered in appearance and offensive in character.

Here, then, the presence of the discharge, the quantity poured forth, and the subsequent alteration in its colour, are, as will be afterwards pointed out, signs of considerable importance in marking the progress of miscarriage.

SECT. III. — THE CAUSES.

THE causes of miscarriage are numerous : they are either of an accidental or constitutional kind. The most important of these are the following : —

ACCIDENT may give rise to it. The delicacy of attachment between the offspring and parent, and the facility with which this union may be destroyed, have already been alluded to. If then a sudden shock by a fall, or a blow on the stomach, occur to a female while pregnant, she can readily perceive how miscarriage may take place as a consequence.

VIOLENT EXERCISE OR EXERTION is a very frequent cause. Immoderate exercise in dancing, riding, or even walking; lifting heavy weights; the fatiguing dissipations of fashionable life, — all or any of these will sometimes produce so much disturbance of the nervous and vascular systems as seriously to affect the well-doing of the child, and frequently produce miscarriage.

VIOLENT PURGATIVES, EMETICS, etc., may produce miscarriage. It is well known that drastic purgative medicines, by their cathartic influence upon the lower bowels, now and then cause miscarriage; and that the violent action upon the stomach of powerful emetics may pro-

duce a like effect. Both, therefore, should be carefully avoided during pregnancy.

This leads me to observe, that strong purgative medicines, used with a view to promote miscarriage, are necessarily taken in such quantities as generally to produce inflammation of the stomach and bowels, and, if abortion is thus intentionally and wilfully effected, not unfrequently at a sacrifice which is never calculated upon — the death of the mother !

VIOLENT MENTAL EMOTIONS are capable of disturbing the organs of the body, and so producing miscarriage. It is notorious that our physical condition is affected by the state of the mind. In the peculiarly sensitive condition of the pregnant female, any extraordinary excitement, or depression, especially when produced suddenly, may therefore give rise to the evil of which I am speaking.

THE FORCE OF HABIT on the part of the womb to expel the child at a certain period of pregnancy is the *most frequent* cause of miscarriage. What I mean is this: miscarriage

having once occurred, from accident or any other cause, there is a tendency to its repetition. A female goes on in a very promising way to a certain time, and then miscarries, and again and again this occurs. Thus "a habit" is induced on the part of the constitution of the individual to the production of this accident, and then also slighter causes, applied at the period when miscarriage formerly happened, will be sufficient to induce it, than would be required at another time.

DELICACY OF CONSTITUTION, connected with habits of indulgence, may give rise to a state of health producing miscarriage. In high and fashionable life, among those who use little exercise, live luxuriously, and sleep in soft warm beds, there is often a weak condition of the vessels produced, which conveys the blood from the parent for the nourishment of the child, and the increased impetus and force given to the circulating fluid, induced by these habits, detaches one or more of these vessels, so that the supply necessary for the growth of the child is cut off, and it withers, dies, and is expelled.

In a NATURALLY ROBUST AND VIGOROUS CONSTITUTION, the same effect may be produced. Miscarriage may arise from a rupture of the vessels of communication between parent and offspring, but then it is under different circumstances. An increased quantity of blood is made, more than is compatible with health; it is propelled, as a consequence, with unnatural power, through the vessels of the body,—the vessels of the womb participate in the irresistible vehemence of this action, and if they do not suddenly give way, the female experiences a sensation of weight and tension about these parts, with shooting pains about the loins, hips, and in the neighbourhood, which, if not relieved, rupture of the vessels quickly takes place, and miscarriage follows.

Lastly, a peculiar excitable state of constitution; continuing to be unwell during pregnancy; advancement in life before marriage; piles, in an inflamed state; as also severe and large loss of blood, from their rupture;—these, and some other causes, may give rise to this accident.

SECT. IV. — THE MEANS TO BE ADOPTED FOR ITS PREVENTION.

HAVING thus briefly reviewed the principal causes which may excite miscarriage, we proceed to consider the means to be adopted for its prevention. I shall divide this subject into two distinct parts : —

- I. The plan to be followed for preventing miscarriage by those who are subject to it ; and,
- II. The means which are to be used, to put a stop to miscarriage, when it is occasionally threatened.

I. *The plan to be followed for preventing miscarriage by those who are subject to it.*

This plan has reference to two distinct periods : *before* the female becomes again pregnant, and *after* she conceives. And I may illustrate the subject in two kinds of constitution, widely differing from each other, and requiring, in part, rules and directions directly opposite : —

1. The plan to be adopted by a female of delicate and feeble health and spare habit.

Before she again becomes pregnant, her object ought to be to invigorate her general health. This is to be accomplished, first, by attention to the stomach and bowels. The latter may be comfortably regulated, by taking a wine glass of the *beaume de vie* at night, the last thing, twice a week, or oftener if necessary, the object being to induce a full and consistent evacuation daily. This medicine unites a cordial with its aperient qualities, and therefore strengthens the bowels, at the same time that it keeps them unloaded and free. - But although it may be continued for a considerable time, and with benefit, it is better, as the bowels again acquire tone, from the improvement in the general health, to discontinue its use, and have recourse to the lavement every morning before leaving the dressing-room. I have known many instances where much harm accrued from the long continued use of purgative medicines; and although the exhibition of the one just advised will be found exceedingly necessary, and bene-

ficial in its influence for some weeks, I would much rather, after a time, do without purgatives at all, and simply use the warm or cold water injection; a little less than a pint in quantity every or every other morning.

In conjunction with the aperient, if there is much debility of stomach, manifested by little or no appetite, and uneasiness and sense of weight after taking a meal, great benefit will arise from taking, three times a day, a pill consisting of sulphate of iron, one grain and a half; sulphate of quinine one grain; extract of gentian, two grains. This will not only strengthen the stomach and increase its digestive power, but, at the same time, sharpen the appetite. It may be pursued for some weeks, and then only continued once a day, about an hour before dinner.

The *diet* must be small in quantity at first, but nutritious in quality. Mild animal food, as boiled chicken or white game, mutton and beef: these must be well masticated, and, therefore, eaten slowly. The meat of young animals, as veal and lamb, must be avoided, as also pork. Fish should be seldom taken,

as it leaves a large quantity of excrementitious matter in the bowels. Mealy potatoes, or well boiled rice, stale bread, or captain's biscuit, should be the only solid taken with one kind of animal food, as the dinner meal; towards the conclusion of which, a glass of port-wine, thrown into half a tumbler of hot water, with sugar and nutmeg, is the best kind of beverage. Coffee, with brown sugar, and brown bread, not toasted, and a new-laid egg, are best adapted for breakfast; and coffee, in preference to tea, in the evening.

Animal food may be taken twice a day, when the stomach has acquired sufficient power to digest it, but in moderate quantities, and certainly never at night. The wine, too, may be increased to two glasses, but then without water. Port-wine is most suitable, and it should never be taken until the conclusion of the meal.

Lying on a couch after dinner, to induce sleep, does not at all assist digestion. Rest for a couple of hours is certainly necessary; but the time should be employed in conversation, or light reading, rather than the frequently

unrefreshing after-dinner doze. The patient must rise and retire to rest early; she must lie on a hair mattress, and there must be no further drapery about the bed than curtains at its head. The chamber ought to be large and airy.

She must at once use *the shower-bath*, and at first, the temperate salt-water shower-bath, for a week or ten days. The temperature of the water must not exceed 85° , and not be lower than 75° ; and so gradually reduced, until the shock of the cold shower-bath can be borne. It must be used every morning, immediately upon getting out of bed—provided there is no perspiration present at the time—while the surface of the body retains the warmth of the bed. This insures reaction, or the well known delightful glow, which will be proportioned, in a feeble and delicate woman, to the warmth of the skin and extremities, previous to receiving the fall of the shower. Warm water should previously be put into the bottom of the bath, so that the ankles are covered; this will tend, in some degree, to lessen the shock, and, at the same time, to increase the reaction.

Upon coming out of the bath, the surface of the body must be rapidly dried, by a servant, with coarse towels, or flannels, and as rough as they can be well borne, as the friction thus produced is exceedingly useful.

If the patient is residing on the coast, in the summer, she may bathe. It will be well, however, for her to commence with the tepid shower bath. After this has been employed for ten days, or a fortnight, she may bathe; and the best time in the day is two or three hours after breakfast, exercise being taken previously, but not to an extent to cause fatigue or perspiration. The patient ought to plunge in, or be dipped suddenly: one or two dips at first, and, after a time, the stay may be prolonged from five to ten minutes, and the body must be speedily dried.

A very nervous and delicate woman, who cannot bear, from apprehension, the shock of plunging into the sea, or that produced by the shower-bath, will derive great benefit from daily having the body rapidly sponged with cold salt water, and quickly rubbed dry with rough flannel; the more friction employed

here the better, because the greater will be the subsequent warmth produced. This method is not adopted by many, from fear of taking cold; but if it is effected quickly, I have no hesitation in saying, it is the best *preventive*, and diminishes the susceptibility to the impressions of cold. During the winter, the head and chest should alone be sponged; and, during the period of being “unwell,” the cold bath is inadmissible.

It is not only necessary, however, to attend strictly to diet, and to the other means pointed out; the patient must also adopt a regular system of exercise, proportioned to her strength. She should commence by taking gentle exercise on foot, or in an open carriage, between breakfast and dinner. As her strength increases, she may extend the walk or drive, or take horse exercise; never forgetting, that it should always precede a meal, and never follow it; that the amount of it should always be far short of fatigue;—in a word, that she should always feel refreshed and invigorated by it.

A change of air is often very desirable, and affords one of the most powerful means of im-

proving the general health. In midsummer, autumn, and during the winter, a residence on the coast is best for such a patient; but in the spring and early part of the summer, inland is to be preferred.

By such a plan of proceeding, I feel confident the general health will be restored, the female will no longer have a capricious appetite, foul tongue, disordered stomach and bowels—sometimes sluggish, sometimes relaxed; she will no longer rise in the morning unrefreshed by sleep, and retire to rest at night, fatigued with the slightest exertion of the day: her flesh, which, by slow but progressive steps, she was losing, and had become flabby, and apparently bloodless, will now return, hard and firm, and possessing the blush of health and strength;—she will have found out how to obtain health; and she will, if I mistake not, be careful to preserve it.

After the patient becomes pregnant, let every cause which might excite miscarriage be avoided. The principal causes have been pointed out. The patient must sleep alone—this is absolutely and imperatively necessary; she must be

more careful and attentive than ever to her diet, and the regulation of the bowels; and, above all, guard against costiveness. Let the shower bath be still continued, and gentle exercise; but carefully avoid any fatigue. As the period *approaches*, when *miscarriage occurred before*, let vigilance and attention to rule be redoubled. The patient must now keep on the sofa nearly all day; retire to rest early, still using a mattress, and taking care that the bed-room be airy and well ventilated. If the slightest pain or uneasiness is felt about the loins, or hips, the sofa must be immediately resorted to, and the medical attendant called in. If he approves it, a little blood should be lost, and the bowels gently acted upon. When these symptoms subside, the recumbent position must be continued, and the above directions carefully observed for six or seven weeks beyond the time miscarriage last occurred. At the expiration of that time, I might say, I believe *you safe*; gestation will go on. The health is invigorated, and the womb now strengthened, through the general improvement and increased tone of the whole system, is not so irritable, and therefore is

not so likely to throw off its contents. It is not so weak, and therefore does not flag as it did before; but is able to carry on those processes which are necessary for the continued life and perfecting of the offspring.

2. The plan to be followed by a female of vigorous and robust health.

BEFORE PREGNANCY takes place, the excitement and fulness of the system must be gradually reduced, at the same time that its general tone must in no way be impaired. The plan proposed is the following:—

Let the *bowels* be regulated, keeping them slightly relaxed with Rochelle, Epsom, or Cheltenham salts: and if this is effected, no other medicine will be necessary.

Let the quantity of food be diminished, taking sparingly of meat; selecting that kind only, and but once a day, to which reference was made before: dining from vegetables, rather than from animal food; taking no wine or stimulant of any kind, no fermented liquor; the beverage with dinner being water only. Fashionable hours and habits must be given up; for they

tend to keep up that excited state of the whole system which it ought to be the grand object to allay.

I would recommend rising early; sleeping in a large and airy room, with little clothes about the person, to prevent the accumulation of too much heat.

The salt-water shower-bath must be used every morning; the quantity of the water being considerable, and, from the first, cold; observing the precautions, before alluded to, in reference to rapidly drying the body. After the bath, a short walk may be taken before breakfast; the latter should consist of coffee, brown bread, and fresh butter. The patient may use considerable, but regular exercise, between breakfast and dinner; horse exercise, if it can be accomplished, is best; but never to fatigue.

Change of air is not absolutely necessary; but in spring, and the early part of the summer, great benefit will arise from pursuing this plan during a residence at Cheltenham or Leamington; for every thing there will contribute to its regular and successful employment. In mid-

summer and autumn, the sea-side is most desirable; as bathing, instead of the shower-bath, may be employed, in this case, with great advantage.

AFTER PREGNANCY has taken place the *diet* must be still sparing. If there is headach shortly after, with a full pulse, this slightly renewed excitement of the system, depending as it will upon the new action set up in the womb, must be allayed by the loss of a little blood. This measure must be repeated, in small quantities, if judged necessary by the medical man; never, however, ought it at any time to produce faintness. The cold salt-water shower-bath should be still employed daily; and cold water, used as *an injection* night and morning. The female syringes are all too small for the latter purpose, and much inconvenience is produced by the frequent necessity of withdrawing the pipe for the purpose of refilling the instrument. This is easily obviated by substituting for the common ivory tube of the lavement pump, a four inch gum elastic tube, about half an inch

in diameter, and having several holes in its point, which must be rounded off.* Any quantity of fluid may be injected into the *vagina*, with this instrument so prepared, without withdrawing the tube. Exercise must be continued, — but not on horseback, and with care. It is most important that the more evident and immediate exciting causes of miscarriage,—such as fatigue, dancing, etc., should be carefully guarded against; and the patient, from the time she conceives, must sleep alone.

As the *period approaches when she formerly miscarried*, care and attention must be more than ever exercised. She must now keep to the sofa altogether; and continue to do so for five or six weeks. If slight pain in the back should be experienced, it must not create alarm, but it will be right at once to seek medical advice. If however a female has acted up to the rules laid down for her guidance, both for *before* and *after* conception, she need not fear any threatening symptom of her former accident presenting itself; but I confidently promise that

* Weiss and Son, 62. Strand, always have a quantity of these by them.

she will, by going her full time, receive the ample reward of all her continued care and little privations.

II. *The means which are to be employed to put a stop to miscarriage when it is threatened.*

Now and then, particularly when it occurs for the first time, the whole process of a miscarriage does not occupy more than six or seven hours from the very earliest symptom of its approach to its final completion. But in by far the greater majority of cases, more especially when it has become "habitual," its progress is not terminated in as many days or even weeks. When this is the case — as is already evident — it may be clearly separated into Three Stages; a division I propose to adopt. This will tend to bring this important portion of my subject in a clearer light before the reader, and at the same time assist me considerably while pointing out, though with necessary brevity, those directions which are to be followed in the different stages of this accident: —

THE FIRST STAGE. — I shall speak of that as the “First Stage,” in which the child as yet has sustained no injury, and the symptoms are only those *menacing* miscarriage.

It commences usually by the female experiencing a great depression of strength and spirits, without any assignable cause. She loses her appetite, and has a little fever. Pains about her loins and hips soon follow; these are at first transitory, they go and come, and, after a while, increase in frequency. Or if the patient be of a strong and vigorous constitution there will be an excited condition of the circulation, manifested by a full pulse, throbbing in the temples, followed by a smart headache, a hot skin, thirst, and no inclination for food, and united with the pains in the loins and a sense of weight and tension. These are so many symptoms *threatening* miscarriage, but of course much modified by the constitution and previous state of health of the individual. For instance, some will experience only an indistinct, dull aching pain in the loins, with slight languor, continuing for many days without any other symptom: but if these feelings come on

about the same period from conception at which miscarriage formerly occurred, it behoves the patient at once to attend to them ; for, if she does not, she may depend upon it the same event will befall her, however apparently trifling and unimportant the symptoms may be considered.

If then any of the foregoing symptoms present themselves, the female ought *immediately* to send for her medical attendant. This is the time at which the latter can interfere with the most certain prospect of success ; and almost every thing depends upon its being done at a sufficiently early period. This is the first direction offered, — and with the next includes everything ; — *the imperative necessity of a strict and unvarying attention to the rules and regulations which he enjoins.*

It has already been intimated, that, at the first approach of these symptoms, the female must at once retire to her bed. She must strictly confine herself to it, resting on a mattress, with few clothes upon her, no curtains about her bed, or fire in the room, — which ought to be large, and airy. Her diet must be most sparing,

a little toast and water, lemonade, or thin gruel, tapioca, or sago; and whatever is taken must be given cool. Some gentle aperient, Cheltenham or Epsom salts, in two drachm doses, may be taken every four hours. By this time, in all probability, the medical man will be at her bed-side.

THE SECOND STAGE. — But suppose the patient has not heeded these symptoms; that she has thought nothing of a little pain in the back, etc., and never having before miscarried, she has looked upon them as of no consequence; the local pains will increase in frequency and power, and soon a discharge of blood, in clots, will be discovered, or, if more freely, of a clotting bright colour. This indicates that a partial separation of the child has taken place, and brings us to what I call the “Second Stage.”

Now, although it must be apparent that, under these circumstances, the probability that the process of miscarriage will go on is much greater than in the former stage, still I have no hesitation in saying that it is possible to check it even here; and that frequently. But in a situation

so critical it will require a prompt and vigorous practice on the part of the medical man, and an equally decided and vigilant conduct on the part of the patient herself; and let the patient recollect when tempted to disobey the instructions she receives, because they may appear trifling, or a little too rigorous, that no man who enjoys her confidence would willingly lay down one rule too strict, or one injunction, the performance of which was unimportant; and remember, also, that by *one* act of disobedience she may blast every hope of success; and thus throw away, in a single moment, the result of hours, nay, of days and weeks of careful and persevering deprivation. The only directions advisable for a female's adoption before her medical adviser arrives, are,—strict rest in bed, —cold water dashed over the loins and hips, and the sudden application now and then of a piece of linen dipped in cold vinegar and water, —perfect abstinence,—and the aperient, as in the former case, every four hours.

A female never ought, if the premonitory symptoms have been present, to advance to this stage of the accident; but it may be brought

about very quickly, by the shock from a fall, or any great exertion, when the first and second stages will frequently merge into one, — separation of some portion of the child having taken place from the first. Let her, under these circumstances, follow the above directions, until she can obtain further advice.

THE THIRD STAGE. — If the previous means for stopping the progress of the threatened miscarriage are unsuccessful, — if the discharge continues, the pains increase, becoming slightly bearing down, and the other signs follow, which have before been pointed out, the “ Third Stage ” is far advanced ; and of course every expectation of success on the part of the patient, or her attendant, must have fled, — and it only remains for the latter to conduct her safely through to the end ; and afterwards adopt means for restoring her health and strength.

THE FIRST STAGE, then, is one of *warning* ; and, by improving it in time, a female ought never to miscarry.

THE SECOND STAGE is one of *hope* ; and, with strict attention, that hope may be realised.

THE THIRD STAGE is one in which all means of prevention are useless ; and therefore its treatment has not fallen under our notice.

It may be useful to add, that patients generally go about too early after a miscarriage. The womb at this time being larger and heavier than in its natural state, this is likely to induce “a falling down” of this organ, or the lesser evil, a troublesome attack of “the whites ;” both of which are avoided by keeping the recumbent posture for a week or ten days after a miscarriage.

CHAPTER V.

HINTS FOR THE LYING-IN ROOM, REFERRING TO
THE MOTHER.

SECT. I. — THE PERIOD PREVIOUS TO LABOUR.

RECKONING. — The period when confinement may be expected, is naturally enough, to the female mind — particularly if it be a first labour — a matter of considerable importance; and it is very desirable that this event should be as accurately determined upon as may be.

It is very difficult, however, by what is popularly called “reckoning,” to determine positively the precise day upon which labour shall commence; although I have known frequent instances where this has occurred.

Conception, I believe, generally takes place a day or two after the last menstrual period; and if a female calculate on this supposition,

reckoning nine calendar months from this date, she will commonly be right. Some are in the habit of reckoning from the middle period, between the last menstruation, and the one that should next ensue. Neither mode is infallible, and indeed it is impossible to decide the matter to an hour or a day; but as the first method noticed is preferable, I advise a note to be made of *the period when last unwell, and the reckoning to commence from the third day of its cessation.*

There are circumstances which may throw a female out of her reckoning altogether, referred to at length in the second chapter. If such should exist, she must wait till “quickenings” occurs; and consider herself advanced four months and a half the day it takes place. This is at best an uncertain mode of calculation; but it is the only one I have to offer.

FALSE PAINS. — Many females are subject, towards the close of pregnancy, to pains, which, in their situation, continuance, and recurrence, so much resemble those of labour, that, though in reality of a different kind, a woman who has even had many children may not be able to dis-

tinguish them. These are called "False or Spurious Pains." They will be situated in the back and bowels, passing round to the loins, and descending to the hips and thighs, going and coming like labour pains. They are sometimes attended with an involuntary effort to press down, when they bear so close a resemblance to the pains of an advanced stage of labour, as not only to make a woman believe that labour has commenced, but that she is about to be delivered.

They may come on ten days or a fortnight previous to actual labour, and may continue irregularly until that period; which circumstance explains those cases we occasionally hear of, where women are said to be in labour ten days or more, when, in all human probability, they were not really so, half the number of hours. Again, before a first labour, false pains frequently occur, last for some hours, and are then followed by actual labour, which is thus made to appear a very long, tedious, and wearisome process to a young female, who is entirely ignorant of the matter; when, in fact, the labour, perhaps, was, for a first, of fair average duration.

As they may be produced by a disturbed condition of the bowels, from flatulence, costiveness, or an attack of diarrhœa, — also from great physical fatigue, or mental excitement, — all these causes ought to be carefully avoided. And if an attack come on, medical aid must at once be sought.

SYMPTOMS OF LABOUR APPROACHING. — Labour is commonly preceded by certain symptoms, called “premonitory;” they sometimes appear several days, oftener only a few hours before its commencement. I shall notice only one of these, viz. *a subsidence of the abdomen*, — arising in part from the fact of the child being situated lower than formerly.

This sinking down of the child may occur either *gradually*, and therefore almost imperceptibly, from day to day, yet sufficiently obvious after the lapse of several; or *suddenly*, during the course of one night.

It is a *useful* symptom, affording to the medical attendant satisfactory information, and pointing out to the patient, that her labour is not far off.

And it is attended with certain effects — in part agreeable, and in part productive of discomfort. Agreeable, because the female now feels lighter and more alert, and breathes with more ease and comfort than she has done for weeks past, and her night's rest is less interrupted. Attended with discomfort, because the child being lower, the bladder and rectum are somewhat interfered with, and an irritable condition of one or both may arise.

ATTENDANTS, ETC. — At this time the nurse should be in attendance, if possible, and every thing in the lying-in room in order. The latter ought to be large and airy, and should have a dressing-closet attached to it.

The friend that is to be present during the labour should be fixed upon. And it may be proper to suggest that medical men do not like unmarried females in the room; they are neither the most fit companions for the patient, nor the most useful assistants to the practitioner. Let a confidante be selected in some judicious and affectionate married friend, whose presence,

during the hour of trial, will insure sympathy and yet encouragement.

During the labour the medical man, the nurse, and the patient's friend, are all the assistants the occasion demands. The lying-in room is not the place for a crowd. A great number of persons breathing the atmosphere of the same room soon pollute it; and if there happen to be a fire, its temperature will inevitably be raised to a point which will make the patient restless and feverish — add to her feelings of fatigue, and often, by rendering the pains irregular or ineffective, protract labour considerably.

The patient also is much disturbed by their conversation; and what is a much greater evil than this, by their imprudent remarks they frequently diminish her confidence in her own powers, or in the judgment and skill of her necessary attendants. The mind in a state of distress is easily excited and alarmed, and whispering in the lying-in chamber, or any appearance of concealment, quickly produces an injurious impression.

APERIENT MEDICINE.—As labour approaches, the bowels should invariably be cleared by some aperient, or consequences exceedingly disagreeable to a delicate woman will inevitably occur at the latter stage of the labour. A table-spoonful of castor oil is the best medicine for this purpose, particularly if the bowels have already been confined a day or two; otherwise the use of the lavement is preferable, the injection to consist of one pint of warm gruel, or tepid water with two table-spoonsful of castor oil.

SECT. II. — THE PERIOD DURING THE PROCESS
OF LABOUR.

THE BED. — As the patient is to lie on her *left* side, the bed must be so placed that she may be either at the foot, or right side of the bed. Many prefer the foot, because the foot-post serves to support the feet during what is called the second stage of labour; but then this post should have *a small hair cushion* secured firmly to it by straps for the feet to press

against, otherwise they will be found tender and fretted subsequent to labour.

Where there is both a mattress and bed, it is better for the mattress to be uppermost. The patient in a feather-bed is likely to sink into a hole, which is inconvenient to the attendant, and keeps the patient too hot and close.

And next, the bed must be “guarded,” as it is popularly called. The method of doing this is very simple: The blanket and sheet having been placed upon the feather-bed, or mattress as usual, a blanket is to be spread upon the right side of the bed and towards the lower end, and upon this a skin of leather, or a large sheet of oil-skin; one or two blankets are now to be folded over this — then a sheet, upon which the patient lies on her left side; and, lastly, a sheet, blanket, &c. is to be thrown over her person as the season of the year may determine. Patients are frequently too warmly covered by the nurse, which relaxes and weakens when strength is of so much consequence.

THE DRESS. — When the pains of labour first commence, the dress should be so arranged

that, if its progress becomes suddenly rapid, it may be readily changed,

A loose dressing-gown is best in the earlier part of the labour. This must be exchanged, when the patient lies down for good, for a chemise and bed-gown folded up smoothly to the waist, and a flannel petticoat without shoulder straps, that it may afterwards be readily removed.

Some persons suppose that wearing their stays during labour assists them, affording support; but they are improper, being rather in the way than useful.

SHIVERING. — Rigours are very common during the early part of labour, and will vary in degree from a gentle tremour to an agitation of the frame so violent, as to shake the bed on which the patient rests. It is most desirable that this should be known, lest it should produce alarm, for which there is not the slightest ground. I am acquainted with one lady, where this symptom always ushers in her labour, which is quickly and easily accomplished.

The attendants in the room will wish to give spirits, warm spiced wine, &c. to relieve these

rigours, but this should be resisted. — Warm diluting drinks are always useful, as tea, a cup of coffee, or plain gruel; but wine, or spirits-and-water, ought to be absolutely forbidden, for they are unnecessary, and are always productive of fever, and subsequent mischief.

VOMITING. — An inclination to be sick, followed by actual vomiting, is one of the most frequent occurrences attending the *early* part of labour.

It may be produced by the close sympathy which exists between the stomach and womb, but an overloaded stomach is a more frequent cause. In either case it is useful: in the latter, it clears the stomach of improper food; — in the former, the practitioner sometimes is very sensible of the good effects arising from it, in forwarding the labour. It is an every-day saying of a monthly nurse, “that one fit of vomiting has more effect than six pains,” and there is a good deal of truth in it.

CRAMP. — This is very likely to trouble the patient who has been unnecessarily kept for

many hours on the bed in one position. It may affect the muscles of the side, the thighs, or legs.

Except that it produces intense pain for the moment it lasts, it is not attended with any unfavourable result; is relieved by the friction of a warm hand; or, if the patient be able, by getting up, and walking for a minute or two in the bed-room.

THE BLADDER. — In the *early* part of labour there will be a constant inclination to pass the urine; and very frequently it will be driven from the bladder in small quantities at every pain, which often leads the patient and her friends to believe that “the waters” are escaping. The latter circumstance naturally excites alarm if the medical attendant has not arrived. There is not the slightest cause for this.

Sometimes an opposite condition will exist in a *more advanced* stage of the labour, particularly if it has been protracted — *an inability to pass the urine when the desire arises*. This should never be disregarded by the patient: the medical

man should always be informed of it, as also if many hours pass by without the desire itself occurring.

Much present inconvenience, and sometimes lasting mischief, have arisen from the neglect of this precaution.

EXAMINATION BY MEDICAL ATTENDANT. —

Soon after the arrival of the practitioner, if labour has commenced, he requests through the intervention of the friend of the patient, or the nurse, to make an examination, "*to take a pain,*" as it is termed. This is frequently objected to; and from false delicacy the patient does not consent to his wish until obliged by the severity of her pains in a more advanced stage of the labour.

Now it is highly important that in the *earliest* stage of the process this examination should be made; for the medical attendant obtains necessary and valuable information, which regulates his conduct. Thus he ascertains whether labour has actually commenced, or if her pains are spurious or false pains only, requiring a plan

of treatment for their relief, which he at once prescribes.* He is enabled to determine by it whether his assistance is necessary; whereas if it is deferred he might be the means of occasioning mischief, by being an idle spectator, when he ought to be acting. And, moreover, it enables him to acquaint his patient not only how far she has advanced in her labour, but what is of much more importance, whether the position of the child is natural.

On the other hand, there exists a vulgar prejudice that these examinations are attended with great benefit, that they materially assist the labour, and expedite the termination of the female's sufferings, and she is, therefore, naturally enough, continually looking for such supposed assistance. This is an injurious mistake; for frequent examinations are not only superfluous, but may materially retard or interrupt the processes of labour.

POSTURE, ETC. — The time occupied by the labour, if well managed by the attendants, may

* See p. 146.

be relieved of much of its tediousness. Until the patient is advised to lie down for good by her medical attendant, she may be allowed to pass through this period in that posture most agreeable to herself. Walking, standing, sitting, kneeling, lying on the bed, will all be tried in turn, and there is not the slightest objection to this. Indeed, confining a patient even to her bed-room during this time is quite unnecessary; she will be more amused by being allowed a greater range; this likewise will be rather useful than otherwise, by changing the air, as well as the scene.

The bed must not be too much indulged in: it heats, oppresses, and weakens the patient. If fatigued, she may lie down on the sofa, and should lie on her back, or right side, rather than the left, as this must be her future position. It is too much the practice of medical men and nurses to keep the patient on the bed from the very first, thus adding to the tediousness of the labour, unnecessarily wearying and weakening the patient, and frequently inducing severe attacks of cramp in the side, thighs, or legs.

A patient may almost determine for herself whether it is necessary for her to keep to the bed or not. What is called the first stage of labour is by far the longest usually, the pains being short and far between, becoming longer and more frequent as the stage advances, but unaccompanied by any disposition to *bear down*; the latter circumstance being the striking distinctive mark between those of the first and second stage. Now so long as the pains are not bearing down, the patient may keep about, and with advantage.

But during this time, perchance she will be importuned by the attendants "to bear down forcibly," that is, to exert the muscles under the power of the will in forcing downwards. This is a very bad practice, adds greatly to fatigue the patient, but does not expedite the labour. She will soon be *obliged* to bear down, and *then* it will be useful.

At this period, too, the female's mind is often depressed by being told through the whispering of some *kind* friend, that her pains do no good. This, however, is not the fact. The pains may not be so effectual as we might wish

them to be, but every parturient thro' during the first stage, however slight, is useful in forwarding the process. It is sometimes a very unfortunate occurrence when the attendants in a lying-in chamber acquire an idea that the pains do no good, or are unprofitable. This has led to many improper practices intended to encourage the pains, to the use of cordials and strong drinks, or to the exhibition of medicines supposed to have the effect of hastening delivery, by which it has often happened that a labour, which would have terminated easily and happily in a few hours, remains unfinished for many hours, sometimes for days.

It is at this time, too, that the patient complains of great pain and *suffering in her back*, and is very urgent to have pressure made in order to alleviate the pain. This support, however, must be given with care. For it would seem that the degree of pressure made must sometimes tend to bruise the back, so powerfully is the hand pressed upon it. But the patient is desirous of having it made, and conceives that it so much relieves her that it is impossible almost to forbid it altogether.

DIET.—This must be light and simple. Tea, coffee, broth, plain gruel, arrow-root—light nourishment of this kind is best. Solid animal food is hardly admissible; and wine, spirits, or caudle, are always followed with mischievous consequences.

It is a very common practice to urge females to eat and drink, *to keep up their strength*, great muscular exertion being supposed essential to the accomplishment of labour, and that this can only be supported by the free use of nourishing and stimulating articles of diet. The opinion is not only incorrect, for experience fully proves this, but if acted upon is decidedly *unfavourable* to a *safe and speedy delivery*.

PROBABLE DURATION OF THE LABOUR. — Though the progress of labour is almost always slower with a first, than with any subsequent child, I can confidently declare, that, under proper management, there is not a jot more danger with a first than with future deliveries. This fact ought to inspire confidence in the powers of nature, and in the skill of the medical attend-

ant, and thus prevent both needless anxiety and injurious impatience.

Labours vary considerably in respect to duration, whether a first labour or not. In the same woman the process shall have been accomplished with rapidity for three or four successive confinements, and then a tedious and protracted labour shall follow. This circumstance, however, does not necessarily involve either difficulty or danger, but in ninety-nine cases out of a hundred is equally safe with former labours, provided no *meddling interference* be used, and nature left to the secure, though it be slow, accomplishment of her object.

Generally it is quite impossible for a medical man to form an opinion worth any thing, as to the probable duration of a labour, and therefore the incessant inquiries made upon this point are in fact useless: but not so the confident assurance of the medical man that all is *going on well*; it ought to inspire the *patient* with confidence, and with that gentle and patient endurance, which at such an hour will prove of inestimable value to her.

Labour is looked upon by the timid and inexperienced young female with apprehension and dread, arising in a great degree from ignorance and idle gossip. I have known young women who have, after marriage, dreaded lest they should become pregnant, simply from the fears they entertained of labour. I do not of course mean to deny that it is attended with pain, although I have known females give birth to their offspring, acknowledging that their sufferings were so slight as to excite their surprise; but all I mean to say, is this, that labour is a *natural* process; as such, judiciously managed, it is unattended with danger, and the amount of pain falls very far short of what is generally anticipated.

CLOSE OF LABOUR. — When the labour is proceeding rapidly, and *the pains become bearing down*, as it is now far advanced, *the bed must be kept altogether*. This is what medical men call the second stage; and having arrived, the patient may assist somewhat with voluntary effort, viz. exerting her abdominal muscles and diaphragm; and to enable her to do this she

must not scream, but during pain, hold her breath. A cloth or jack-towel will also be fixed to the bed-post for her to pull by, or the hand of another person. But this auxiliary ought not to be employed to pull by so much as *to fix* the trunk. And if the patient only follow the dictates of nature in this matter, she will do right; for she will find that all that is required is almost an involuntary exertion of voluntary muscles. Let her, however, be careful to make no straining effort in the absence of pain, during the intervals of which she ought to lie at perfect rest, renewing her strength. As its termination immediately approaches, the patient must be careful not to give way to feelings of impatience and become restless, but implicitly follow the directions of her medical attendant, otherwise serious consequences to herself might hereafter ensue. And now, if she have previously obeyed his instructions, she will be in possession of that strength and fortitude, which are called for at this time, and prove invaluable.

The labour *completed*, the patient may turn slowly on her back, and a *broad bandage* will be slipped under her, spread evenly, and pin-

ned sufficiently tight around the lower part of the person, to give a comfortable degree of support. This bandage or belt, made of linen or cotton cloth, should always be in readiness for the medical man.

A little tepid gruel may now be taken by the patient, and she should be left to rest. If disposed to sleep, she should indulge it; but if not, must be kept perfectly quiet, and undisturbed by conversation.

HOW TO PROCEED IF THE CHILD BE BORN BEFORE THE ARRIVAL OF THE MEDICAL ATTENDANT. —It not unfrequently happens, subsequent to a first confinement, that with some females their labours are so rapid and short (two or three strong and powerful pains being sufficient to bring the child into the world) that it is quite impossible for any medical man to get to them in time for their delivery.

Under these circumstances, the friends are generally excited and alarmed. There is no occasion for this. All that it is necessary to do, is to see that the child is so placed that it shall obtain plenty of air.

Some nurses will tie the cord and separate the child. There is no objection to this, provided the child is alive, and respiration *fully* established. *But no nurse ought to be permitted to remove the after-birth.* This hint cannot be too strongly borne in mind; for an injudicious interference with the after-birth might be attended with the most serious consequences.

SECT. III. — FROM AFTER DELIVERY TO THE
TIME OF LEAVING THE CHAMBER.

ARRANGEMENT OF PATIENT'S DRESS, ETC. —
The medical attendant having retired from the room, it will frequently happen that the nurse proposes to make her mistress comfortable, and if allowed will change the linen about her person, and alter her position in the bed; in effecting which she will perhaps lift her off the bed, or if not, place her in an *erect* or *sitting posture*, upon it. Nothing can be so improper, or more likely to induce serious consequences. It is the duty of the medical man himself to

leave his patient comfortable, as it is called, and it is in his power to do this, without running any risk, or altering her situation in the bed, that is, if the previous directions about her dress have been attended to. Little things are often of great importance, and are sometimes found to be so when it is too late.

An hour, or an hour and a half, however, having elapsed from the time of delivery, the necessary alterations about the bed and dress may be made. The soiled linen is to be removed, and the chemise and night-gown, previously folded around the chest, drawn down. The patient is then to be carefully moved to the upper part of the bed, in effecting which *the horizontal position is to be strictly preserved, and on no account, for one moment, must the female be raised upright.* She must now seek a long and refreshing sleep.

THE BLADDER.—If the labour has been tedious, some difficulty may be experienced on the following day in passing the water, and, if fomentations do not effect relief, the medical man must be informed of it at his next visit.

This inability occurs very frequently, and a lady should be very careful that she does not deceive herself in this particular. — Passing a little water drop by drop does not empty the bladder, and she may rest assured, assistance is demanded, if such be the case. It would be a sadly mistaken delicacy that kept a patient from hiding such a circumstance from her attendant, and if too long delayed might be followed by the most disastrous consequences to herself.

THE BOWELS. — On the evening of the second, or morning of the third day, some aperient medicine should be taken, and this ought to be given even if the bowels have been previously moved, for they will be only *partially* relieved. Castor oil is the best medicine. Fill two thirds of a wine-glass with milk, coffee, or mint-water, and upon this pour a large table-spoonful of the oil, which may be thus swallowed without being tasted. If it does not have the desired effect after four or five hours, the dose must be repeated. If the stomach will not retain the oil, some mild aperient draught may

be substituted, or the common domestic lavingment.

THE DISCHARGE. — The liberal use of tepid milk and water as a wash during the existence of the discharge will be necessary, and give rise to great comfort. This must be delicately and carefully managed by the nurse. Let no lady permit the prejudices of the latter personage to interfere and prevent this. In general her dictum upon such a point, however unreasonable it may appear, is received and submitted to by the young married woman, because she is supposed by her experience to be fully informed upon all such points. Now, I could not have believed it, except that a very few weeks since it happened to me whilst in attendance with a highly respectable lady during a miscarriage, to hear from her whilst giving directions on this very matter, that her nurse in the country never permitted any thing of the kind until a full fortnight after delivery, lest she should take cold. Was any thing ever more preposterous, and something much worse ! The milk and water then should be used three or four times

a day for the first week, and gradually left off as the discharge diminishes.

It is right also to observe that this discharge is sometimes *very profuse*, and may continue thus for many days — nay weeks, after delivery. When such is the case, the *medical attendant* should be *early informed* of the circumstance, or serious consequences to the health of the patient may follow. It is but too frequently the result of leaving the recumbent posture too soon.

THE DIET AND MANAGEMENT FOR THE FIRST THREE DAYS. — For the first three days after delivery the diet ought to be small in quantity and more simple in quality than before labour. The sudden and great change in the habits and situation of the patient, from one of activity to the perfect quietude of the chamber, renders this necessary; as also, the possible existence of a more or less excitable condition of the whole system, the effect of the labour. Not, however, that I consider the lying-in room a sick room, or approve of a very usual plan of treatment. For it is a frequent

but very injurious practice for nurses, for several days after delivery, to keep the bed-room curtains drawn close — to increase the number of blankets — and to be continually giving every thing as hot as it can be swallowed, deluging the patient's stomach with water-gruel and slops with a view to promote perspiration, and prevent her taking cold. This is the most direct way to produce the evil so much dreaded, for it follows as a natural consequence, that by these means, she is rendered more than ever susceptible to the impression of cold — is sure to be much debilitated, and a troublesome species of fever will be induced, which it may be found difficult to remove.

Coffee in the morning, a light pudding for dinner, coffee again, or tea, in the evening, and moderate quantities of gruel in the intervals — if the patient desire it — is the simplest and best diet at this time, and all other kinds of nourishment must be abstained from during these first three days.

The body and mind of the patient must be kept at perfect rest — and the lying-in apartment cool, well ventilated, and free from visitors.

THE FOURTH DAY. — The fourth day having arrived, and every thing going on well, the patient may take the wing of a chicken, or what is better, a mutton chop, but must not have wine, porter, or any stimulant. Her beverage should consist of equal parts of barley water and milk, which will allay thirst, relieve any sinking of the stomach, and produce milk better than any thing else.

THE FIFTH DAY. — On the fifth day she may be removed from the bed — the heat of which is relaxing — to the outside of it, or to a sofa previously placed at the side of the bed; but on no account must she give the *slightest assistance* in her removal, and when on the sofa must strictly keep *the horizontal position*. Indeed for *three weeks* after delivery an almost constant compliance with the latter direction is highly important. Among the poorer classes of society, who get up very soon after delivery, and undergo much fatigue, “*the falling down of the womb*” is a very common and distressing complaint. It is the effect, simply, of their not being able to keep the

recumbent posture long enough. I cannot too strongly endeavour to impress upon the recollection of a female the importance of this hint, the more especially as some nurses are the first to induce the lying-in patients to break it.

THE TENTH DAY. — The usual mode of diet may now be resumed, except that, in addition to the former beverage, half a pint, and after a few days a pint, of good sound ale may be taken daily, provided it is found to agree with the stomach.

It matters little from this time, whether the patient remains in the lying-in chamber or not, as if a sitting-room adjoins it, it is better for her to be wheeled into it for the day, returning to the chamber in the evening. The atmosphere of which will thus be preserved purer and more refreshing to sleep in. This plan however can only be adopted where the bed-room opens into a sitting room, as it would be quite out of the question to remove the patient through any passage, or to another floor. And she should be wheeled from her bed-room *lying* on the sofa; not *walk* from it.

It is never safe for her to join her family before the expiration of the third week — and the *month* from her delivery having terminated, she gradually resumes her accustomed domestic duties.

CHAPTER VI.

HINTS FOR THE LYING-IN ROOM REFERRING TO
THE INFANT.

SECT. I. — THE MANAGEMENT OF THE CHILD
DIRECTLY AFTER ITS BIRTH.

WASHING. — The infant warmly wrapped up in a flannel receiver by the medical man and given to the nurse, if it be cold weather, is to be dressed by a good fire. This is necessary, both because the temperature of the child's body at birth is several degrees below that of the adult, and because its power of retaining its warmth is also less.

The first thing to be done is to *wash* the child; and, as its body will be found covered with a white, greasy, curd-like substance, this must be removed, and with great care, particu-

larly from the eyelids, groins, armpits, and from the folds in the skin. This is most easily accomplished with warm water, fine soap, and a soft sponge. Sometimes the nurse will wish to use spirits of wine, or a little gin, especially to the head, under the idea that it prevents the taking of cold. It does neither good nor harm, so long as the head alone is bathed with it, but *warm water* alone is far preferable, and with a mild unirritating soap is fully efficient. If any of this secretion is not removed, it dries, hardens, irritates the delicate skin of the infant, and sometimes even produces severe excoriations.

PUTTING UP THE NAVEL-STRING AND DRESSING. — The surface of the child's body having been thoroughly dried with a soft towel, the next thing is to put up the remains of the navel-string. Having been examined by the medical man previous to his leaving the chamber, it is presumed that its vessels are properly secured, and it is now to be protected from injury, until it separates from the body of the child, an occurrence which usually takes place somewhere between the fifth and fifteenth day from deli-

very. The mode is as follows : — A piece of soft old linen rag doubled, and about four or five inches in diameter is to be prepared, and a circular hole cut in its centre, through which the cord is to be drawn. The cord being carefully folded up in this envelope, is to be laid on the abdomen of the child, and secured by what is called the belly-band, viz. a band of thin flannel, five or six inches broad, and long enough to go twice round the body. This ought to be fastened with strings, pins in any part of an infant's dress being objectionable.

The child is now to be dressed ; and about this it is unnecessary to say more, than that it should be sufficiently warm, and not calculated to place the slightest restrictions upon the movements of the limbs ; and in reference to the head-dress, that a thick muslin cap is all that is required, and more than this or any thing that shall compress or restrain the free motion of the child's head is highly injurious.

MEDICINE AND PUTTING THE INFANT TO THE BREAST. — Immediately the infant is dressed, many nurses are in the habit of dosing it with

castor oil, or honey of roses and almond oil. This is objectionable on many accounts ; it is quite uncalled for so early, and it may be altogether unnecessary if they only wait. The infant should at once be put quietly to sleep in a cot or bed, so situated that it shall not be exposed to draughts of cold air, and that the eyes of the babe shall be protected from a strong light, which as yet they are unable to bear. It should thus be allowed to repose for some hours, when the mother having also obtained some sleep, it is proper to place the child to the breast. This should always be done within the first four and twenty hours, partly to draw out and form the nipple before any hardness of the breast occurs and renders that difficult, and partly to encourage the flow of milk ; for the very effort made by the infant to obtain it, will excite its secretion.

It has been supposed by some that the milk first secreted is improper for the child, that it teases its bowels. The fact is, that there is a difference in its quality to that which is soon after poured forth ; but then it is a difference which nature has ordained and designed for a

wise purpose. For the bowels of the little one when born are loaded with a dark black secretion, of which it is essentially necessary they should be relieved. Now the means for its removal are found in the aperient qualities of the milk which is first secreted in the breast of the parent; so that instead of being injurious when the child is allowed to take it, it is highly necessary. Should the child, therefore, not get the first draught of the mother's breast from being put to a wet-nurse, or from any other cause, or should the abdomen, even some five or six hours only after birth, become full, the child fretful, and no evacuation take place, a gentle purgative must be given, and half a drachm of castor oil is best. The fact is, there is generally no secretion of milk for the first twelve hours. About the end of this time a pricking sensation will be felt in the bosom, which gradually enlarging, a full supply is produced in twenty-four hours.

Not so, however, in *first* confinements; there is rarely any quantity secreted before the *third* day. At this period, now and then a little later, the breasts become hard, swollen, and

very soon painful. As the process of secretion proceeds, the breasts more swollen than ever, appear to be made up of large, extremely hard lumps or knots, and become very heavy and very tender. After a time the milk is at "its height," as it is termed, and if the breasts be fomented or gently pressed, a small quantity of milk will be seen oozing from the nipples. When the infant is placed at the breast, the action of suckling will be attended with some degree of pain, but followed by considerable relief; and as the milk flows, the hardness will diminish, the general swelling subside, and the milk being freely and frequently drawn off, the feelings of the patient will become more comfortable, and all pain removed; the breasts will be distended only when some few hours have elapsed since they were drawn, and thus *lactation* will be established.

The *difficulty* which the infant experiences *in drawing out the nipple when the breast is hard and swollen* is very great; and various measures have been suggested to obviate this. The mode I always propose is as follows: first, foment the hardened breast with flannels wrung

out in warm water — or take small wooden bowls soaked in warm water, wrap them up in flannel, and then place them over each breast, — or apply nicely made bread and water poultices. Any of these means will promote the easy flow of the milk. Having done this, let the nipple be drawn out either by a vigorous child of three or four weeks old — by a grown person — or by the following method : — Take a pint decanter, or a wine bottle with a smooth mouth, fill it to the neck with boiling water, pour out this water almost immediately, and, provided it is not too hot, apply the mouth of the decanter to the flattened nipple. As the decanter cools a vacuum will be created, and the nipple will be elongated in its neck ; retain it thus a few minutes when the bottle is to be gently removed by depressing it, and immediately apply the child.

Various kinds of breast-pumps, and other machines have been invented, but none answer the purpose so well as the simple warm bottle, — the mouth of another child, — or that of a grown person.

It is unnecessary for the child to take any

nourishment until ten or twelve hours after birth. Usually, at this time, the mother will be able to supply it with its natural nutriment; should not this, however, be the case, as will always happen with first labours, the child must be fed, every four or five hours or oftener, with a small quantity of thin gruel, mixed with a little milk sweetened with sugar, — or with two thirds milk and one third water. To be left off as soon as lactation is fully established.

After this time it must obtain its nourishment from the breast alone. And for the first week or ten days, as the stomach will be feeble and unaccustomed to food, the child will take but little at a time, but it will require to be nursed the more frequently. There can therefore be no fixed time for nursing at the commencement of suckling; the appetite of the infant must be the mothers guide, taking care, however, to allow the appetite to appear, before the breast is offered, and not to attempt to provoke it.

At the expiration of this period the suckling should be performed at regular intervals of about four hours, during the night as well as day. And during sleep, the nipple ought not

to be allowed to remain in the infant's mouth, as is too often the case ; nor during the day, the child put to the breast every time it cries, to quiet and soothe it. Both much interfere with the health of the infant, the stomach is kept constantly loaded, and unable therefore to digest its contents ; — time must be given for this purpose, and an interval of four hours is not too much. A child thus nursed will be found less troublesome and fractious than one that is hushed by the breast at every cry, and will awaken with great regularity as the time for its meal approaches.

SECT. II. — DIRECTIONS FOR CERTAIN ACCIDENTS AND DISEASES WHICH MAY OCCUR TO THE INFANT.

I. STILL-BORN.

The child may be born long before the arrival of the medical man, and the question then arises what is to be done ? Nothing, if he is near at hand, except allowing a free ingress of air to the child's mouth to prevent suffo-

cation. If, however, medical assistance cannot be obtained for some time, then the cord may be divided, provided the child cry or breathe vigorously. This is to be effected by first tying the navel string with common sewing thread, three or four times doubled about two inches from the body of the child, and again two inches from the former ligature, and then dividing the cord with a pair of scissors between the two. The *after-birth* and every thing else should be left, *without interference*, till medical aid can be given.

But sometimes the child comes into the world apparently dead, and unless the most active exertions are made by the attendants, is certainly lost. The superintendence of the means used, devolves upon the medical man, but it would be often well if his assistants were already acquainted with the measures pursued under these circumstances, for they would be more likely to be carried into effect, with promptitude and success, than they now frequently are. And again the still-born child, is frequently in this state from having been born very rapidly, and before the medical man can have arrived;

it will be more especially useful in such a case, that the attendants in the lying-in room should know how to proceed.

The various causes producing this condition it is unnecessary to mention.

The condition itself may exist in a greater or less degree: the infant may be completely still-born, with no indication of life except, perhaps, the pulsation of the cord, or a feeble action of the heart; or it may make ineffectual efforts at breathing, or even cry faintly, and yet subsequently perish from want of strength to establish perfectly the process of respiration. Under all these circumstances a good deal can often be affected by art. In every instance, therefore, in which we have not positive evidence of the child being dead, in the existence of putrefaction, or of such malformation as is incompatible with life, it is our duty to give a fair trial to the means for restoring suspended animation; and as long as the slightest attempt at motion of the respiratory organs is evinced, or the least pulsation of the heart continues, we have good grounds for persevering and hoping for ultimate success.

The measures to be employed to restore a still-born child, will be a little modified by the circumstances present.

If there is no pulsation — no beating in the cord, when the child comes into the world, the ligatures may be applied, the cord divided with the scissors (as already described), and then the means for its restoration made use of, detailed below, viz. inflation of the lungs, and perhaps the warm-bath. And if the child's face be livid and swollen, some drops of blood should previously be allowed to escape before the ligature is applied to that part of the navel string which is now only attached to the child.

If there is pulsation in the cord, but respiration is not fully established, it must not be divided; and as long as pulsation continues, and the child does not breathe perfectly and regularly, no ligature should be applied. The first thing to be done here, is to pass the finger covered with the fold of a handkerchief or soft napkin, to the back of the child's mouth to remove any mucus which might obstruct the passage of air into its lungs, and at the same time, to tickle those parts, and thereby excite respiratory

movements. The chest should then be rubbed by the hand, and a gentle shock given to the body by slapping the back. If these means fail, the chest and soles of the feet must next be rubbed with spirits, the nostrils and back of the throat irritated with a feather previously dipped in spirits of wine, and ammonia or hartshorn may be held to the nose.

The pulsation in the cord having ceased, the infant may be separated, and *inflation of the lungs* resorted to. This is to be effected gently and cautiously as follows :—

The child wrapped in flannel, is to be laid on its back upon a table placed near the fire. Its head is to be slightly extended, and the nostrils held between the fingers and thumb of one hand, whilst with the fingers of the other, slight pressure is to be made upon the pit of the stomach, so as to prevent the air from passing into that organ. The lungs of the child are now to be filled with air, by the operator applying his own lips—with a fold of silk or muslin intervening, for the sake of cleanliness—to those of the child, and then simply blowing into its mouth, he is to propel the air from his own

chest into that of the infant. Previously, however, to his doing this, he should make several deep and rapid inspirations, and finally a full inspiration in order to obtain greater purity of air in his own lungs.

When the chest of the child has been thus distended, it is to be compressed gently with the hand, so as to empty the lungs, and then the inflation, with the alternately compressing the chest, must be repeated again and again, until either the commencement of *natural respiration* is announced by a sneeze or deep sigh, — or, until, after *long continued, steady, persevering* but unavailing efforts to effect this object, shall have removed all ground of hope for a successful issue.

Whilst these efforts are being made, some other individual must endeavour to maintain or restore the warmth of the infant's body, by gently but constantly pressing and rubbing its limbs between his warm hands. And after respiration is established, the face must still be freely exposed to the air, whilst the warmth of the limbs and body is carefully sustained.

More reliance may be placed upon the above

method, to restore animation, than upon the *warm bath*. Still this is sometimes useful, and therefore must not be neglected. Whilst inflation is going on, the bath may be got ready, then resorted to, and if unsuccessful, inflation may, and ought again to be followed up. If the bath is useful at all, it will be so immediately upon putting the infant into it, respiration will be excited, followed by a cry; and if this does not occur at once, it would be wrong to keep the child longer in the bath, as it would be only losing valuable time, which might be devoted to other efforts. The temperature of the bath should be about 100° ; and if upon plunging the infant into it, it fortunately excite the respiratory effort, it should then be taken out, rubbed with dry but hot flannels, and when breathing is fully established, laid in a warm bed, or what is still better in its mother's bosom, letting it, however, have plenty of air.

2. INJURIES RECEIVED DURING BIRTH.

An infant (especially after a tedious labour), may be born with a large swelling on its head, or the head itself may be elongated to a considerable degree; or even some other part of the body may be bruised and disfigured, particularly the face of the child. Such a circumstance need not occasion uneasiness; all that is generally necessary is to apply a cloth dipped in brandy or vinegar and water to the swelling, keeping it free from pressure, and it will rapidly become absorbed. It will be right to direct the attention of the medical man to the circumstance.

3. RETENTION OF URINE.

Occasionally an infant will not pass any urine for many hours after its birth. This most frequently arises from the fact of none being secreted. Sometimes, however, it is the effect of another cause, which the use of the warm bath will be found to remove.

It is always important for a nurse to pay attention to the above point, and it is her duty to direct the attention of the medical man to the subject, if any thing unusual or unnatural should exist.

4. SWELLING OF THE BREASTS.

At birth, or two or three days subsequently, the breast of the infant will be frequently found swollen, hard, and painful, containing a fluid resembling milk. Nurses generally endeavour to squeeze this out, and thus do great mischief, for they excite inflammation in the part, and sometimes abscess ensues.

If the breasts are but slightly enlarged it is unnecessary to do any thing more than rub them occasionally and very gently with warm almond oil, and a little time will restore them to their proper size; if, however, they are inflamed, and unusually large, a bread and water poultice applied every three or four hours will be necessary, and will prevent either the formation of matter, or any other unpleasant consequence.

X 5. DISCHARGE FROM THE EYES.

About the second or third day after the child's birth, an inflammation sometimes attacks the eye, which is of considerable consequence. The more so from its commencing in a way not calculated to excite the attention, or alarm the fears of the mother or nurse. The child cannot express its sensations, and the swelling of the eye conceals the progress of the disease, so that serious mischief is frequently done, before the medical man sees the patient. In the first place, the inflammation is not immediately noticed, and in the second, the measures employed are frequently insufficient to check its progress; hence it causes more blindness (I refer to the lower classes of society more particularly) than any other inflammatory disorder that happens to the eye; and the number of children is very considerable, whose sight is partially or completely destroyed by it. The parent and nurse are apt to suppose, when this inflammation first appears, that it is merely a cold in the eye, which will go off, and the consequences which I have just mentioned

take place, in many cases, before they are aware of the danger, and before the medical man is resorted to for assistance.

I only desire in noticing this complaint, to inform the attendants of the lying-in room of its great importance, that it may not be trifled with, that upon its first approach the physician may be informed of it, and that the treatment he directs for its cure may be sedulously and rigidly followed.

Symptoms. — The inflammation commonly comes on about three days after birth, but it may take place at a later period. It may be known by its commencing thus:—When the child wakes from sleep, the eyelids will be observed to stick together a little; their edges will be redder than natural, and especially at the corners; the child experiences pain from the access of light, and therefore shuts the eye against it. A little white matter will also be observed lying on the inside of the lower lid. After a short time the lids swell, become red on their external surface, and a large quantity of matter is secreted, and constantly poured from

the eye, the quantity of discharge increasing until it becomes very great.

But enough has been said to point out the importance of the disease, and the signs by which it may be recognised at its first approach.

Treatment. — Keeping the eye free from discharge, by the constant removal of the matter secreted, is what the medical man will chiefly insist upon; and without this is done, any treatment he may adopt will be useless; with it, there is no doubt of a successful issue of the case, provided his attention has only been called sufficiently early to it.

6. HARE-LIP.

This is a blemish too well known to require a formal description: the questions most interesting to the mother in relation to it, are, How is her child to be nourished that is born with it? — and when ought an operation to be performed for its removal?

If the defect is but trifling, the infant will be able to suck, provided the mother's nipple is large,

and the milk flows freely from it. If this is not the case, the difficulty may be obviated by using the cork-nipple shield. I have known this to answer the purpose admirably, when the mother had previously despaired of nursing her infant, from the nipple being too small for it to grasp it.

If, however, the defect exists in a still greater degree, feeding by means of the spoon must be resorted to; the greatest care being necessary as to the quantity, quality, and preparation of the food.

With regard to the operation for the removal of this deformity, I would strongly warn parents against desiring its too early performance. Various considerations contribute to make the distressed parents wish this. But very seldom indeed — except the deformity be very great, and implicating other parts beside the lip — will the operation be required, or ought to be resorted to, before the second year and a half of the infant's life; and for this, very cogent reasons exist. Convulsions may thus be induced, which often terminate fatally.

The most proper age for removing this de-

formity by operation is from that of two years and a half to four years.

7. BLEEDING FROM THE NAVEL-STRING.

Bleeding from the navel-string will sometimes take place hours after it has been supposed to be carefully secured. This will arise, either from the cord being carelessly tied, or from the cord being unusually large, and afterwards shrinking so much as to leave the ligature from any longer making pressure on the vessels. In either case, it is of importance that the attendants in a lying-in room should understand how to manage this accident when it occurs, that it may not prove injurious or fatal to the child.

The whole cord without delay must be unwrapped, and a second ligature be applied below the original one, (*viz.* nearer to the body of the infant,) taking great care that it shall not cut through the cord when drawn very tight, but at the same time drawing it sufficiently tight to compress the vessels. The

ligature should be composed of fine linen thread, three or four thicknesses, and not of tape or bobbin, or any substance of this nature, as it cannot be relied on for this purpose.

8. ULCERATION, OR IMPERFECT HEALING OF THE NAVEL.

The cord separates from the navel generally some time between the fifth and fifteenth day from delivery, and the part usually heals without giving the slightest trouble. This, however, is not always the case, for sometimes a thin discharge will take place; and, if the part be examined, will be found to proceed from a small growth about the size, perhaps, of a pea, or even less. This must be removed by applying a little powdered alum, or slightly touched with blue-stone, if necessary; and afterwards dressed with calamine cerate.

At other times, though fortunately very rarely, excoriation of the navel and the parts around takes place, which quickly spreads, and assumes an angry and threatening character.

If, however, the attention of the medical man is called to it early, it will always do well.

9. BLEEDING FROM THE NAVEL.

Sometimes a day or two after the cord separates, or at the time of separation, bleeding takes place from the navel. Fortunately this very seldom occurs: indeed it is very rarely met with; and I only mention it to observe that, upon its occurrence, the point of the finger should be placed over the part, and pressure steadily applied until medical assistance is obtained.

10. JAUNDICE.

It frequently happens during the first or second week after birth, that the skin of the child becomes very yellow, and it has all the appearance of having the jaundice. This gives rise to great distress to the parent, when she perceives it, and she becomes very anxious for

the medical man's next visit. Now, ordinarily, it is of no consequence, commonly disappearing spontaneously, and requiring no medical treatment. If, however, it does not go off in two or three days, a tea-spoonful of castor oil should be given once, or oftener, if necessary.

It is of course possible for an attack of real jaundice to occur at this early period, and a disease of a very serious nature will then have to be dealt with; but except as a consequence of malformation (a very infrequent occurrence) it is not likely to arise; and therefore jaundice during the first and second week after delivery need not excite alarm.

11. TONGUE-TIED.

This arises from the bridle under the tongue being so short, or its attachment to the tongue extended so near the tip, as to interfere with the motions of the organ in sucking, and, in after years, in speaking. It is *a very rare occurrence*, although nothing is more common than for medical men to have infants brought

to them supposed to be labouring under the above defect.

The best guide for a parent to determine whether it exist or not, is for her to watch whether the infant can protrude the tip of the tongue beyond the lips; if so, it will be able to suck a good nipple very readily, and nothing need or ought to be done. No mother would unnecessarily expose her infant to an operation, which, unless very carefully performed, is not altogether unattended with danger, and, if she suspects any defect of this kind to exist, she has only to observe the circumstance mentioned above, to satisfy her mind upon the subject.

CHAPTER VII.

ON THE BREAST.

+ SECT. I. — MANAGEMENT OF THE NIPPLES
PRIOR TO DELIVERY.

EVERY female, especially in a first pregnancy, ought during the six weeks prior to her confinement *to prepare* the nipples for nursing. The skin covering them is generally so thin and irritable, that suckling soon makes them tender and excoriated, and if this irritability is not diminished, and the delicate skin rendered thicker and more callous before labour comes on, nursing will frequently be obliged to be given up very soon after.

The plan to be adopted is simple enough: — all pressure upon the nipple and bosom must be most carefully avoided, flannels, or any thick

covering, must be laid aside, and the nipple itself must be washed, and rubbed three or four times a day with green tea, brandy, or with the infusion of oak or pomegranate bark, and exposed to the air each time for ten minutes at least.

If the above remedies should not succeed, the following astringent lotion will :—Thirty grains of the sulphate of zinc, to six ounces of distilled rose-water ; to be used liberally.

These means must be regularly and perseveringly employed up to the day of confinement, and will accomplish the object desired — the prevention of sore nipples.

SECT. II. — SORE NIPPLES.

THE previous directions having been neglected, one of the most early and troublesome attendants upon suckling may arise — soreness of the nipples.

This condition is frequently occasioned, solely, from the infant being allowed to have the nipple continually in its mouth. Half a dozen times

in the night does it get to the breast. So long as this injurious habit is indulged, no remedies that may be applied for the cure of the sore nipple will avail.

1. *If they are only tender and fretted*, the strong infusion of green tea, brandy, or the lotion of zinc just mentioned — ringing the changes upon each, employing each daily in its turn, will quickly harden the skin, and remove its irritability. If they do not succeed, try a lotion containing one grain of the nitrate of silver dissolved in one ounce of distilled rose-water.

These applications should be used freely and frequently during the day, and the part exposed to the air afterwards.

2. *If they are tender and fretted, but also hot, dry, and very painful to the touch, and yet not chapped*, the stimulating applications before advised would only aggravate the mischief. A bread-and-water poultice should be first applied, changed every three hours, and fomentations of warm water, or decoction of poppy-heads, after each poultice is removed.

When the unnatural heat, and great pain of the part is relieved, it must be dressed with a

little spermaceti ointment spread upon thin linen or lint.

3. From the friction, however, of the child's tongue and gums, *the skin may have become excoriated, and cracks formed upon the nipple, or around its base.* Every time the infant sucks they bleed, and the mother suffers exquisite pain.

The first object in the treatment is this: that the infant shall obtain its nourishment from the breast without its mouth coming in contact with the nipple. This is accomplished by means of shields made of glass, wood, ivory, or silver. The shield is neatly covered with an artificial, or prepared cow's teat, through which the child sucks without biting or irritating the nipple.

But this contrivance frequently fails, not because it is not good, but because it is badly managed. When the teat is sewn on the shield its extremity should not extend beyond its apex more than half or three quarters of an inch; for if it projects more, the child will get the teat between its gums, press the sides of the teat together, and thus prevent the passage of

the milk through it. The teat should also closely cover all the orifices to which it is stitched; for if not, air will pass in, no vacuum will be formed, and the child will draw nothing but air.

The India-rubber teat is now much used instead of that of the cow, and as it resembles in softness and pliability the human teat more than any other, it would be preferable, if it did not, unfortunately, soon become useless, from the little openings at its extremity becoming so large as to run one into the other.

Of late I have employed a shield with *a cork nipple* as a substitute for the prepared teat. The nipple shield is made of ivory, or box-wood, with a small ivory tube for the passage of the milk. The cork nipple is placed upon the ivory tube, and secured by means of a small collar which screws over the nipple on to the shield. The cork being of a particularly fine texture, is supple and elastic, yielding to the infant's lips while suckling. The cork being perfectly harmless, more cleanly and durable than the teat, and the ivory tube through its centre obviating the difficulty frequently met with from

the misapplied teat, I would strongly advise its use.*

I would recommend a lady subject at every lying-in to sore and cracked nipples, in consequence of the great delicacy and thinness of her skin, at her next confinement from the first hour of suckling, to use the cork-nipple shield. I attended a lady four months since, with her fourth child, and this is the first she has been able to continue to suckle; from the fact, that previously the nipples have always, some ten days subsequent to her delivery, become so irritable and excoriated, that although every means were diligently used to cure the part, the suffering endured whilst the suckling was proceeded with, gave rise to such misery, as to oblige her to abandon it altogether. With the present child, however, all difficulty has been obviated by using the cork-nipple shield from the first, through which the infant draws its parent's milk, with the greatest ease and comfort to both, the child never having had, up to the present moment, its mother's nipple in immediate contact with its lips.

* It is the invention of M. Darbo, of Paris, and is sold by Weiss and Son, 62. Strand.

For the cure of the excoriated and chapped nipple, any one of the following remedies will be found useful : — Half an ounce of brandy to eight ounces of rose-water ; — four grains of the sulphate of zinc, dissolved in one ounce of rose-water ; — two grains of the sulphate of copper, in one ounce of camphor julep ; — or one grain of the nitrate of silver, in one ounce of rose-water. These lotions, by means of linen dipped into them, are to be applied frequently. If they fail, the surface of the sores or cracks may be *slightly* touched once a day with the nitrate of silver in substance, and in the intervals the part kept smeared with an ointment, composed of two drachms of honey, and one ounce of spermaceti ointment, — or half a drachm of Peruvian balsam, and one ounce of spermaceti ointment.

The nipple should always be washed with a little milk and water, both before and after suckling, which it will be remembered is to be effected through the shield.

These measures are commonly successful ; if, however, they should not succeed, and the parent's health suffer from the continued pain and irritation attendant upon nursing, she must

obtain either a wet nurse, or rear the child by an artificial diet.

Sometimes one nipple alone is affected ; when this is the case, the child should not be allowed to suckle from this breast, until the soreness and cracks are removed. By adopting the treatment before directed, this will be readily effected ; and it is only necessary to add, that if the breast becomes distended with the milk, a saline aperient (two drachms of Epsom salts in an ounce of distilled peppermint water) should be taken once or twice a day ; that is sufficiently often to prevent distension of the breast from the milk, but not so as to drive it away.

SECT. III. — UNCONTROLLABLE FLOW OF THE MILK.

THIS occasional evil seems to arise either from some original defect in the structure of the nipple itself, or from the milk tubes, which terminate at the nipple's point, having lost their elasticity, and therefore their power of retaining

the milk ; so that the mouths of these little tubes never being closed, during the intervals of suckling there is a constant draining of milk from them. This uninterrupted flow not only proves a source of great annoyance to the patient, but, after a time, seriously affects her health.

The means proposed to remedy this defect have been many, but I am obliged to confess their success infrequent. Benefit may be obtained by frequently applying a lotion containing one drachm of alum dissolved in a pint of spring water,—or thirty grains of the sulphate of zinc in a pint of the decoction of oak-bark. The breast must be exposed for at least ten minutes after the application of the lotion, and the nipple washed with milk and water before the child is put to it. A glass receiver, made for the purpose of catching the milk, must be constantly worn, and the breast have but slight clothing.

These measures I have always found successful where the case has not been in its worst form ; if, however, such a case should occur (fortunately they are very rare), and the treatment is of no avail, the flow of milk not checked, and the

health of the mother decidedly and seriously affected, the child must be weaned and the milk dispersed. This becomes absolutely necessary for the mother's safety.

SECT. IV. — MILK ABSCESS, OR BAD BREAST.

THERE is no evil that can arise in the lying-in room more dreaded by the patient than "a bad breast." And the reason why it so frequently occurs is, either that false delicacy and fear on the part of the patient, lest the breast should be examined, almost constantly induce her to submit its management to the nurse ; or, the nurse herself supposing that she is equal to the task, the physician is not consulted until so much mischief is done that he can but in part repair it. Inadequate means are thus advised and persevered in, until the time for the successful application of the proper remedies is irretrievably lost.

The fact is, that there is no inflammatory complaint which requires more judicious and active treatment, than that, which attacks this organ.

On this account, not a moment is to be lost in temporising; for an impression must be made, and that quickly, on the disease, or all efforts will be unavailing. And, again, I must add, that there is too frequently a want of perseverance and conformity, on the part of the nurse, to the prescriptions of the medical attendant, after he has seen the breast. Both these circumstances then should be counteracted by the good sense and vigilance of the patient.

But she cannot accomplish this desirable purpose unless some hints are given her upon the subject. This is what I now propose; not to enter upon a full detail of the treatment of mammary abscess, but only to point out in what the general management consists, that she may be able to carry out fully the intentions of the medical attendant, so that they may not be thwarted by ignorance on the one hand, or a want of proper diligence and perseverance on the other.

Inflammation of the breast, terminating in abscess, may take place at any period of nursing; but it is more readily excited within a month after delivery. It sometimes occurs after a first

delivery, upon the first coming of the milk ; most frequently, however, about the third or fourth week.

1. *How to prevent a bad breast upon the first coming of the milk.*

About the third day after delivery, in a first confinement, and occasionally in subsequent confinements also, the breasts become hard, swollen, and very soon painful. And as the process of the secretion of the milk proceeds, the breasts, more swollen than ever, appear to be made up of large, extremely hard lumps, or knots, and become very heavy and very tender. After a time the milk is at "its height," as it is termed, and if the breasts be fomented or gently pressed, a small quantity of milk will be seen oozing from the nipples. When the infant is placed at the breast, the act of suckling will be attended with some degree of pain, but followed by considerable relief ; and as the milk flows, the hardness will diminish, the general swelling subside, and the milk being freely and frequently drawn off, the feelings of the patient will become more comfortable, and all pain re-

moved ; the breasts will be distended only when some few hours have elapsed since they were drawn, and thus *lactation* will be established.

This is the usual mode. But it may happen that from some mismanagement ; from the flatness of the nipple, or because some cause prevents the milk running freely, the distension of the breast is not relieved ; it gets harder, heavier, larger, extending into the armpits, and more painful than ever ; inflammation ensues, a bad breast is threatened. To prevent this the following treatment should be adopted : —

The bowels kept relaxed by saline aperients ; the thirst allayed by effervescing saline draughts, and no other fluid taken ; the breasts fomented every third hour, for five minutes, with flannels rung out in warm water, then gently and tenderly rubbed with a liniment, warmed, and composed of one ounce and a half of soap liniment and three drachms of laudanum, and afterwards each breast completely enveloped in a large and well applied warm bread and water poultice. And last of all, the breasts must be supported, by a large silk handkerchief passed under each, and then tied over the neck, so as

entirely to prevent their hanging by their own weight.

After the above measures have been pursued perseveringly for six and thirty hours;—and the principal points to which the attention of the lady should be directed are the regular fomentation of the breasts; the gentle friction with the liniment; the application of the warm large poultices, well made, not so dry that they will irritate, and not so moist that they will make her wet and miserable; and last of all, though not least, the well applied support;—I say, after these means have been efficiently employed for six and thirty, or eight and forty hours, the breast will begin to mend; great relief will be experienced after the application of the poultices, and when taken off, that part which was next the nipple will be found saturated with milk. From this time they must be drawn regularly by the attendant, or by means of a pump; and the extreme swelling and tension having somewhat subsided, the child will be able to grasp the nipple, to draw the milk, and, if regularly applied, prevent any injurious accumulation.

If the breast subsequently continue lumpy and hard, the liniment should still be rubbed every four hours, and in the intervals a piece of flannel, soaked in some of it, warmed, should be laid over the breast, which is to be covered by a piece of oiled silk, to prevent evaporation and keep the part nicely moist. And, thus, by proper management, abscess, or bad breast, at this period, may, and ought to be, prevented.

2. *How to prevent a bad breast when threatened about the third or fourth week.*

This complaint much more frequently occurs about three or four weeks after delivery, or even after the female has left the lying-in room. It is at this time generally caused by the direct application of cold, or as a consequence of sore nipples. I have elsewhere pointed out how the latter may be avoided, or if produced, cured.

And here I would observe that, immediately a lady feels any uneasiness, heat, tension, or any thing like a lump forming in the bosom, or that the child has the slightest difficulty in drawing the milk, the medical man should at once be

informed of it, and no time lost in trying this little remedy, or that :—the early application of the proper remedies is of vital importance here.

The progress of the case before matter forms, and when remedies will be of avail to prevent its occurrence, will be this : — the part will enlarge, become tense, heavy, and painful, and the surface will soon appear red; or the enlargement will be irregular, and seem to consist of one or more large lumps, situated in the substance of the breast; this difference arising from the particular part of the breast which is affected. The milk in either case will be partly suppressed, or altogether so.

The means to prevent the inflammation terminating in an abscess will consist in the application of leeches to the part so long as there is pain; the exhibition of saline purgatives; a low and dry diet; keeping the inflamed breast from hanging down; gentle friction with the soap and opium liniment, and preventing the over distension of the breast from milk, by its occasional abstraction.

The leeches. — So long as the pain returns, half a dozen or more leeches must be applied.

Saline purgatives. — These are essentially necessary, so as to produce three or four watery motions in the four and twenty hours. And if this is not effected, the medical attendant ought to be informed of it.

Low diet. — A spare and dry diet is called for. This diminishes the quantity of blood sent to the breast, and thus lessens the amount of distension and milk secreted.

Gentle friction. — This is to be effected with a liniment, composed of three fourths of soap liniment and one fourth of laudanum. A little should be poured into a saucer and placed upon the hob to warm, and then be very gently rubbed over the breast for about four or five minutes. After this a piece of flannel, the size of the breast, with a hole in the centre for the nipple, is to be soaked with the liniment, and put upon it, and then covered by oiled silk to prevent evaporation; and this is to be repeated every three hours. The breast at this time is better without a poultice.

Drawing the milk. — This ought only to be resorted to when the breast is painfully distended with milk; because the very act of doing

this, promotes further secretion. The object here is just to relieve the over distension, nothing more; and it is at this period to be accomplished gently and delicately by the nurse only, as the efforts of the infant would be likely to fail; or if not, so violent as to be productive of mischief.

Keeping the breast from hanging down. — This is an important point to attend to—may be easily accomplished, and if well managed, the ease and comfort arising from it will be manifest enough. For this purpose the breast may be suspended in a silk handkerchief from the neck, and thus firmly and securely held, as in a sling. Even when the liniment is being applied, the hand should be passed under the breast for its support, so that it should at no time be permitted, in its present large and heavy condition, to hang by its own weight.

These measures, when fairly applied, and perseveringly followed out, prevent the formation of matter; the inflammation subsides; a bad breast does not take place; the patient perfectly recovers, and is able to suckle her infant as well with this breast as the other.

But suppose the formation of the abscess is unavoidable, and matter forms ! Then, immediately the part affected is felt to throb, a large bread and water poultice should be applied, and as soon as the abscess can be lanced, this ought to be done ; and the patient must be careful that the opening made into it is kept *freely* open, that the matter may easily escape, until the abscess shall have healed. If the poultice, after a little time, should fret the skin, so as to produce an eruption, it may be exchanged for a piece of lint, placed over the opening of the abscess ; and over the breast itself a piece of linen, spread with spermaceti ointment. This eruption should give no uneasiness to the mind of the female (which it frequently does) ; it is of no consequence, and will soon disappear after the poultices are discontinued.

Is the child to be suckled from the breast affected ? — If the matter from the abscess is not mixed with milk, and the abscess is small, it may do so with advantage to the breast, and no detriment to itself ; but if much of the bosom be involved in the disease, the child should be put to the other breast only.

If the milk has left the breast, is it likely to return? — In some instances it soon returns, and the female may then nurse the infant from it, as well as from the other breast; more frequently, however, it does not, and then the child must be brought up on one breast alone.

Will the hardness which remains in the breast after the abscess has healed be removed? — Yes, in time; and the female need not give herself any uneasiness upon this point. I know that this circumstance gives rise frequently to the most painful and gloomy apprehension; cancer is supposed likely to ensue. Now there is not the slightest foundation for any such fears; the hardness will remain for a long time, but only because a long time is required for its absorption, which may be promoted by the part being gently rubbed twice a day with the soap liniment.

In conclusion, I have only to observe that, whether your medical attendant pursue the plan of treatment for the management of a bad breast just detailed, or adopt one in some respects differing from it, fail not to give him an *early* opportunity of attacking the disease; and, when

he has pointed out the plan to be pursued, follow his direction to the letter, not permitting the suggestion of another in any way to interfere with or alter that plan.

CHAPTER VIII.

NURSING.

+ SECT. I. — PLAN OF SUCKLING.

FROM the first moment the infant is applied to the breast, it must be nursed upon a certain plan. This is necessary for the well doing of the child, and will contribute essentially to preserve the health of the parent; who will thus be rendered a good nurse, and her duty at the same time will become a pleasure.

This implies, however, a careful attention on the part of the mother to her own health; for her child's is essentially dependent upon it. Healthy, nourishing, and digestible milk, can be procured only from a healthy and well-constituted parent; and it is against common sense to expect that, if a mother impairs her health

and digestion by improper diet, neglect of exercise, and impure air, she can nevertheless provide as wholesome and uncontaminated a fluid for her child, as if she were diligently attentive to these important points. Every instance of indisposition in the nurse is liable to affect the infant.

And this leads me to observe, that it is a common mistake to suppose that, because a woman is nursing, she ought therefore to live very fully, and to add an allowance of wine, porter, or other fermented liquor, to her usual diet. The only result of this plan is, to cause an unnatural degree of fulness in the system, which places the nurse on the brink of disease, and which of itself frequently puts a stop to, instead of increasing, the secretion of the milk. The right plan of proceeding is plain enough: only pay attention to the ordinary laws of health, and the mother, if she have a sound constitution, will make a better nurse than by any foolish deviation founded on ignorance and caprice.

The plan to be followed for the first six months.—
Until the breast milk is fully established, which

may not be until the second or third day subsequent to delivery (almost invariably so in a first confinement), the infant must be fed upon a little thin gruel, or upon one third water and two thirds milk, sweetened with loaf sugar.

After this time, it must obtain its nourishment from the breast alone, and for *a week or ten days* the appetite of the infant must be the mother's guide as to the frequency in offering the breast. The stomach at birth is feeble, and as yet unaccustomed to food; its wants, therefore, are easily satisfied; but they are frequently renewed. An interval, however, sufficient for digesting the little swallowed, is obtained, before the appetite again revives, and a fresh supply is demanded.

At the expiration of a week or so it is essentially necessary, and with some children this may be done with safety from the first day of suckling, to nurse the infant at regular intervals of four or five hours, day and night. This allows sufficient time for each meal to be digested, and tends to keep the bowels of the child in order. Such regularity, moreover, will do much to obviate fretfulness and that constant cry which

it seems as if nothing but for ever putting the child to the breast would allay. A young mother very frequently runs into a serious error in this particular, considering every expression of uneasiness as an indication of appetite, and whenever the infant cries, offering it the breast, although ten minutes may not have elapsed since its last meal. This is an injurious and even dangerous practice; for by overloading the stomach, the food remains undigested; the child's bowels are always out of order; it soon becomes restless and feverish, and is perhaps eventually lost; when, by simply attending to the above rules of nursing, the infant might have become healthy and vigorous.

For the same reason the infant that sleeps with its parent must not be allowed to have the nipple remaining in its mouth all night. If nursed as suggested, it will be found to awaken, as the hour for its meal approaches, with great regularity. In reference to night-nursing, I would suggest suckling the babe as late as ten o'clock p. m., and not putting it to the breast again until five o'clock the next morning. Many ladies have adopted this hint, with great advan-

tage to their own health, and without the slightest detriment to that of the child. With the latter it soon becomes a habit; to induce it, however, it must be taught early.

The foregoing plan, and without variation, must be pursued to the sixth month.

After the sixth month to the time of weaning.— If the parent has a large supply of good and nourishing milk, and her child is healthy and evidently flourishing upon it, no change in its diet ought to be made. If otherwise, however, the child may be fed twice in the course of the day, and that kind of food chosen, which, after a little trial, is found to agree best.

Leman's tops and bottoms, steeped in hot water, with the addition of a little fresh milk, and sweetened or not with loaf sugar, is one of the best description.

If the stomach reject this, farinaceous food, boiled in water, and mixed with a small quantity of milk, may be employed. Or, weak mutton broth, or beef-tea, clear and free from fat, and mixed with an equal quantity of farinaceous food.

The sucking-bottle from this period may be

discontinued, and the food given with the spoon, having, however, been previously passed through a sieve.

When the large or grinding teeth have appeared, the same food is still to be continued, but need not now be expressed through the sieve.*

SECT. II. — DEFICIENCY OF MILK.

It is the custom with many, two or three weeks after their confinement, if the supply of nourishment for the infant is scanty, to partake largely of malt liquor for its increase. Sooner or later this will be found injurious to the constitution of the mother. But how then is the deficiency to be obviated? Let the nurse keep but in good health, and this point gained, the milk, both as to quantity and quality, will be as ample and good as can be produced by the individual.

I would recommend a plain, generous, and

* See Artificial Feeding, p. 250.

nutritious diet — not one description of food exclusively, but, as is natural, a wholesome, mixed, animal and vegetable diet, with or without wine, according to former habit. Regular exercise after leaving the lying-in room, and the use of the cold salt water shower bath every morning; if the latter cannot be borne, sponging the head and chest as a substitute.

A pint of good sound ale may be taken daily and with advantage, if it agree with the stomach.

In this case, however, where there has been any early deficiency in the supply of nourishment, it will most frequently happen that long before the sixth or seventh month the infant's demands will be greater than the mother can meet. The deficiency must be made up by artificial food, which must be of a kind generally employed before the sixth month*, and given through the bottle. If, however, this plan of dieting should disagree, the child must have another nurse.

* See Artificial Feeding, p. 247.

SECT. III. — DRYING UP THE MILK.

It may be necessary, from the delicate health of the mother, — local defect, the nipple, for instance, being too small or obliterated by the pressure of tight stays, — death of the infant, or some equally urgent cause, to dry up, or “backen the milk,” as it is popularly called.

For this purpose, if the breasts are only moderately hard, easy, and but little distended with milk, they must not be emptied; for this would encourage further secretion, and they would soon fill again. If, however, they are very hard and painful, and give much uneasiness from their distension, they must be partially emptied, so as just to relieve the distension — nothing more; and this is to be repeated as often as is absolutely necessary.

It is a very frequent practice to apply cold evaporating lotions to the breast. It is true they may produce a rapid dispersion of the milk, but they ought never to be resorted to,

as they frequently give rise to symptoms of an alarming and dangerous character. The best and safest local application consists in the following liniment:—Compound soap liniment, three ounces; laudanum, three drachms; camphor liniment, one drachm;—or, if this is found too irritating, compound soap liniment alone. Either of these liniments must be applied warm, and constantly, by means of several layers of linen or flannel, covered by a piece of oiled silk; and the breast gently pressed, or rubbed for five or ten minutes, every four or five hours, with warm almond oil.

A gentle aperient should be taken every morning, and, if necessary, at night, the object being to keep the bowels slightly relaxed. The diet must be very scanty, and solid nourishment only taken.

Following up this plan, the distress arising from the extreme distension of the breasts, if it have been present, will be removed; although several days will transpire before the milk is thoroughly dispersed, or the remedies can be discontinued; and a sensation described by females as of “a draught of milk” in the

breasts, will sometimes be felt, two or three times a day, for weeks afterwards.

SECT. IV. — CHOICE OF A WET-NURSE.

ILL health and many other circumstances may prevent a parent from suckling her child, and render a wet-nurse necessary. Now although she will do wisely to leave the choice of one to her medical attendant, still as some difficulty may attend this, and as most certainly the principal points to which his attention is directed in the selection of a good nurse the mother herself ought to be acquainted with, it will be well to point out in what they consist.

The first thing, then, to which a medical man looks, is the general health of the woman — next, the condition of her breast — the quality of her milk — its age, and her own — whether she is ever unwell while nursing — and, last of all, the condition and health of the child.

Is the woman in good health? — Her general appearance ought to betoken a sound constitu-

tion, and free from all suspicion of a strumous character — her tongue clean, and digestion good — her teeth and gums sound and perfect — her skin free from eruption, and her breath sweet.

What is the condition of the breast? — A good breast should be firm and well formed — its size not dependent upon a large quantity of fat, which will generally take away from its firmness, giving it a flabby appearance, but upon its glandular structure, which conveys to the touch a knotted, irregular, and hard feel — and the nipple must be perfect, of moderate size, but well developed.

What is the quality of the milk? — It should be thin, and of a bluish-white colour; sweet to the taste; and when allowed to stand, should throw up a considerable quantity of cream.

What is its age? — If the lying-in month of the patient has scarcely expired, the wet-nurse hired ought certainly not to have reached her second month. At this time the nearer the birth of the child and the delivery of its foster parent the better. The reason for which is, that during the first few weeks, the milk is

thinner and more watery than it afterwards becomes. If, consequently, a newly born infant be provided with a nurse who has been delivered three or four months, the natural relation between its stomach and the quality of the milk is destroyed, and the infant suffers from the oppression of food too heavy for its digestive power.

On the other hand, if you are seeking a wet-nurse for an infant of four or five months' old, it would be very prejudicial to transfer the child to a woman recently delivered; the milk would be too watery for its support, and its health in consequence would give way.

The nurse herself should not be too old. — A vigorous young woman from twenty-one to thirty admits of no question. And the woman who has had one or two children before is always to be preferred, as she will be likely to have more milk, and may also be supposed to have acquired some experience in the management of infants.

Inquire of her *whether she is ever unwell while nursing.* If so, reject her at once. You will have no difficulty in ascertaining this point,

for this class of persons have an idea that their milk is *renewed*, as they term it, by this circumstance, monthly; and, therefore, that it is a recommendation, rendering their milk fitter for younger children than it would otherwise have been. It produces, however, quite a contrary effect: it much impairs the milk, which will be found to disagree with the child, rendering it at first fretful, — after a time being vomited up, and productive of frequent watery dark green motions.

Last of all, *what is the condition of the child?* — It ought to have the sprightly appearance of health, to bear the marks of being well nourished, its flesh firm, its skin clean and free from eruption. It should be examined in this respect particularly about the head, neck, and gums.

If a medical man finds that both mother and child answer to the above description, he has no hesitation in recommending the former as likely to prove a good wet-nurse.

SECT. V. — DIET OF A WET-NURSE.

THE regimen of a wet-nurse should not differ much from that to which she has been accustomed; and *any change* which it may be necessary to make in it *should be gradual*. It is erroneous to suppose that women, when nursing, require to be much more highly fed than at other times: a good nurse does not need this, and a bad one will not be the better for it. The quantity which many nurses eat and drink, and the indolent life which they too often lead, have the effect of deranging their digestive organs, and frequently induce a state of febrile excitement, which always diminishes, and even sometimes altogether disperses, the milk.

It will be necessary then to guard against the nurse overloading her stomach with a mass of indigestible food and drink. She should live as much as possible in the manner to which she has been accustomed; she should have a wholesome, mixed, animal and vegetable diet,

and a moderate and somewhat extra quantity of malt liquor, provided it agree with her system.

A very prevailing notion exists that porter tends to produce a great flow of milk, and in consequence the wet-nurse is allowed as much as she likes; a large quantity is in this way taken, and after a short time so much febrile action excited in the system, that instead of increasing the flow of milk, it *diminishes it greatly*. Some parents, however, aware of this fact, will go into an opposite extreme, and refuse the nurse even that which is necessary. Either excess is of course wrong. It is difficult in general terms to say what ought to be considered a proper daily allowance; but some is in general necessary; and whenever a woman has been used to drink malt liquor, she will rarely make a good wet-nurse if she is denied a reasonable quantity of that beverage. Good sound ale sometimes agrees better than porter.

The nurse should take exercise, daily, in the open air, and the use of the shower-bath, or sponging the body with salt and water every morning, should be insisted upon, if possible. She should also be employed in some little duty

in the family, an attendance upon the wants of the child not being alone sufficient.

An amiable disposition and good temper is very desirable. A violent fit of passion may exert so peculiar an influence in changing the natural characters of the milk, that a child has been frequently known to be attacked with a fit of convulsions after having been suckled by a nurse while labouring under the effects of a fit of anger. The depressing passions frequently drive the milk away altogether. It is hence of no small moment, that a wet-nurse be of a quiet and even temper, and not disposed to mental disturbance.

SECT. VI. — THE INJURIOUS EFFECTS TO THE
MOTHER OF UNDUE AND PROTRACTED SUCK-
LING.

THE period of suckling is generally one of the most healthy of a woman's life. But there are exceptions to this as a general rule; and nursing, instead of being accompanied by

health, may be the cause of its being materially, and even fatally, impaired. This may arise out of one of two causes : either, a parent continuing to suckle too long, — or, from the original powers or strength not being equal to the continued drain on the system.

Examples of the first class, I am meeting with daily. I refer to poor married women, who, having nursed their infants eighteen months, two years, or even longer than this, from the belief that by so doing they will prevent pregnancy, call to consult me with an exhausted frame and disordered general health, arising solely from protracted nursing, pursued from the above mistaken notion.

Of the second class, I most frequently meet with it in the delicate woman, who, having had two or three children in quick succession, her health gives way, so that she has all the symptoms arising from undue suckling, when perhaps the infant at her breast is not more than two or three months old.

Since the health of the mother, then, will suffer materially from this circumstance, she ought not to be in ignorance of the fact; so

that, when the first symptoms manifest themselves, she may be able to recognise their *insidious* approach; and, tracing them to their real cause, obtain medical advice before her health be seriously impaired.

Symptoms. — The earliest symptom is a dragging sensation in the back when the child is in the act of sucking, and an exhausted feeling of sinking and emptiness at the pit of the stomach afterwards. This is soon followed by loss of appetite, costive bowels, and pain in the left side. Then, the head will be more or less affected; sometimes with much throbbing, singing in the ears, and always some degree of giddiness, with great depression of spirits.

Soon the chest becomes affected, and the breathing is short, accompanied by a dry cough and palpitation of the heart, upon the slightest exertion. As the disease advances, the countenance becomes very pale, and the flesh wastes, and profuse night perspirations, great debility, swelling of the ankles, and nervousness ensue. It is unnecessary, however, to enter into a more full detail of symptoms.

Treatment. — All that it will be useful to say in reference to treatment, is this; that,

although much may be done in the first instance by medicine, change of air, cold and sea-bathing, yet the quickest and most effectual remedy is to *wean the child*, and thus remove the cause.

There is another and equally powerful reason why the child should be weaned, or rather, have a young and healthy wet-nurse, if practicable. *The effects upon the infant*, suckled under such circumstances, will be most serious. Born in perfect health, and having continued so up to this period, it will now begin to fall off in its appearance; for the mother's milk will be no longer competent to afford it due nourishment, — it will be inadequate in quantity and quality. Its countenance, therefore, will become pale; its look sickly; the flesh soft and flabby; the limbs emaciated; the belly large; and the evacuations fetid and unnatural. And, in a very few weeks, the blooming healthy child will be changed into the pale, sickly, peevish, wasted creature, whose life appears hardly desirable.

It will be naturally asked, for how long a period a mother ought to perform the office of a nurse? No specific time can be mentioned; and the only way in which the question can be met is this. No woman, with advantage to

her own health, can suckle her infant beyond twelve or eighteen months; and at various periods between the third and twelfth month, many women will be obliged partially or entirely to resign the office.

The *monthly periods* generally reappear from the twelfth to the fourteenth month from delivery; and when established, as the milk is found invariably to diminish in quantity, and also to deteriorate in quality, and the child is but imperfectly nourished, it is positively necessary in such instances at once to wean it.

SECT. VII. — MOTHERS WHO OUGHT NEVER TO SUCKLE.

THERE are some females who ought never to undertake the office of suckling, not so much on account of their own health, as that of their offspring.

The woman of a consumptive and strumous constitution ought not.—In the infant born of such a parent there will be a constitutional predis-

position to the same disease ; and, if it is nourished from her system, this hereditary predisposition will be confirmed.

The constitution, then, of such a female renders her unfit for this task ; and however painful it may be to her mind at every confinement to debar herself this delightful duty, she must recollect, that it will be far better for her own health, and infinitely more so for that of the child, that she should not even attempt it ; that her own health would be injured, and her infant's, sooner or later, destroyed by it.

The infant of a consumptive parent, however, must not be brought up by hand. It must have a young, healthy, and vigorous wet-nurse ; and in selecting a woman for this important duty very great care must be observed.* The child should be nursed until it is twelve or fifteen months old ; and, in some cases, it will be right to pursue it until the first set of teeth have appeared. After the sixth month, if necessary, it may be partially fed ; but the food should be of the lightest quality, and constitute but a small proportion of its nutriment.

* See Choice of a Wet-Nurse, p. 231.

But not only must the nourishment of such a child be regarded, but the *air* it breathes, and the *exercise* that is given to it; as also, the careful removal of all functional derangements as they occur, by a timely application to the medical attendant, and maintaining, especially, a healthy condition of the digestive organs. All these points must be strictly followed out, if any good is to be effected.

By a rigid attention to these measures the mother adopts the surest antidote, indirectly, to overcome the constitutional predisposition to that disease, the seeds of which, if not inherited from the parent, are but too frequently developed in the infant during the period of nursing; and, at the same time, she takes the best means to engender a sound and healthy constitution in her child. Any sacrifice is surely worth this.

The mother of a highly susceptible nervous temperament ought not. — There are other women who ought never to become nurses. The mother of a highly susceptible nervous temperament, who is alarmed at any accidental change she may happen to notice in her infant's coun-

tenance, who is excited and agitated by the ordinary occurrences of the day, — such a parent will do her offspring more harm than good by attempting to suckle it. Her milk will be totally unfit for its nourishment: at one time, it will be deficient in quantity, — at another, so depraved in its quality, that serious disturbance to the infant's health will ensue.

The mother who only nurses her infant when it suits her convenience ought not. — The mother who cannot make up her mind exclusively to devote herself to the duties of a nurse, and give up all engagements that would interfere with her health, and so with the formation of healthy milk, and with the regular and stated periods of nursing her infant, ought never to suckle. It is unnecessary to say why; but I think it right for the child's sake to add, that if it does not sicken, pine, and die, *disease will be generated in its constitution*, to manifest itself at some future period.

The child, then, under all the foregoing circumstances, must be provided with its support from another source, and a wet-nurse is the best.

SECT. VIII. — WEANING.

The time when.—The time when weaning is to take place must ever depend upon a variety of circumstances, which will regulate this matter, independently of any general rule that might be laid down. The mother's health may, in one case, oblige her to resort to weaning before the sixth month, and, in another instance, the delicacy of the infant's health, to delay it beyond the twelfth. Nevertheless, as a *general rule*, both child and parent, being in good health, weaning ought never to take place earlier than the ninth (the most usual date), and never delayed beyond the twelfth month.

I should say further, that if child and parent are both in vigorous health; if the infant has cut several of its teeth, and been already accustomed to be partially fed, weaning ought to be gradually accomplished at the ninth month. On the other hand, that if the child is feeble in constitution, the teeth late in appearing, and the mother is healthy and has a sufficient supply of

good milk, especially if it be the winter season, it will be far better to prolong the nursing for a few months. In such a case, the fact of the non-appearance of the teeth indicates an unfitness of the system for any other than the natural food from the maternal breast.

And again, if the infant is born of a consumptive parent, and a healthy and vigorous wet nurse has been provided, weaning should most certainly be deferred beyond the usual time, even beyond eighteen months; carefully watching, however, that neither nurse or child suffer from its continuance.

The mode. — It should be effected gradually. From the sixth month most children are fed twice or oftener in the four and twenty hours; the infant is, in fact, therefore, from this time in the progress of weaning; that is to say, its natural diet is partly changed for an artificial one, so that when the time for *complete weaning* arrives, it will be easily accomplished, without suffering to the mother, or much denial to the child.

It is, however, of the greatest importance *to regulate the quantity and quality of the food at*

this time. If too much food is given (and this is the great danger), the stomach will be overloaded; the digestive powers destroyed; and, if the child is not carried off suddenly by convulsions, its bowels will become obstinately disordered; it will fall away from not being nourished, and perhaps eventually become a sacrifice to the over-anxious desire of the parent, and its friends, to promote its welfare.

The kind of food, and mode of administering it, is detailed in the next section, on “Artificial Feeding.”

SECT. IX. — ARTIFICIAL FEEDING.

EXTREME delicacy of constitution; diseased condition of the frame; defective secretion of milk, and other causes, may forbid the mother to suckle her child; and unless she can perform this office with safety to herself and benefit to her infant, she ought not to attempt it. In this case a young and healthy wet nurse is the best substitute; but even this resource is not always attainable. Under these circumstances the

child must be brought up on an artificial diet — “by hand,” as it is popularly called.

To accomplish this with success requires the most careful attention on the part of the parent, and at all times is attended with risk to the life of the child; for although some children thus reared live and are strong, these are exceptions to the general rule, artificial feeding being in most instances unsuccessful.

The kind of artificial food. — It should be as like the breast milk as possible. This is obtained by a mixture of cow's milk, water, and loaf sugar, in the following proportions: —

Fresh cow's milk, two thirds;
Water, or thin barley water, one third;
Loaf sugar, a sufficient quantity to sweeten.

This is the best diet that can be used for the first six months; after which some farinaceous food may be combined.

In early infancy mothers are too much in the habit of giving thick gruel, panada, biscuit food, and such matters, thinking that a diet of a lighter and thinner kind will not nourish. This is a mistake; for these preparations are much

too solid; they overload the stomach, and cause indigestion, flatulence, and griping. These create a necessity for purgative medicines and carminatives, which again weaken digestion, and, by unnatural irritation, perpetuate the evils which render them necessary. Thus many infants are kept in a continual round of repletion, indigestion, and purging, with the administration of cordials and narcotics, who, if their diet were in quantity and quality suited to their digestive powers, would need no aid from physic or physicians.

In preparing this diet, it is highly important to obtain pure milk, not previously skimmed, or mixed with water; and in warm weather just taken from the cow. It should not be mixed with the water and sugar until wanted, and not more made than will be taken by the child at the time, for it must be prepared fresh at every meal. It is best not to heat the milk over the fire, but let the water be in a boiling state when mixed with it, and thus given to the infant tepid or lukewarm.

As the infant advances in age, the proportion of milk may be gradually increased; this is

necessary *after the second month*. But there must be no change in the diet itself if the health of the child is good, and its appearance perceptibly improving. Nothing is more absurd than the notion, that in early life children require a variety of food; only one kind of food is prepared by nature, and it is impossible to transgress this law without marked injury.

After the sixth month, or as soon as the child has got any teeth, solid farinaceous matter boiled in water, beaten through a sieve, and mixed with a small quantity of milk, may be employed. Or tops and bottoms, steeped in hot water, with the addition of fresh milk and loaf sugar to sweeten; and now, for the first time, the child may be fed with a spoon.

When the large or grinding teeth have appeared, the same food may be continued; but need not be pressed through a sieve, the child having now an apparatus for grinding it. Beef tea and chicken broth may occasionally be added; and, as an introduction to the use of a more completely animal diet, a portion, now and then, of a soft boiled egg.

Solid animal food must not be given until the

whole of the first set of teeth are complete. It should be plainly roasted or boiled, and may be given hot or cold; but food warmed up again should never be allowed to a child. It should be of the lightest quality, small in quantity, and given on alternate days only, and even then its effects must be watched, for all changes in the regimen of children should be gradual. It is erroneous to suppose that the more animal food a delicate and weakly child takes, the more it is strengthened: it only adds to its debility; and it will be found that those children who have but a moderate proportion of animal food enjoy the greatest proportion of health and strength.

A great error exists in the minds of some parents upon this subject. They give their children animal food too early, and in too great a quantity. The system, as a consequence, becomes excited, nutrition is impeded, and disease produced, ultimately manifesting itself in scrofula, disease in the abdomen, head, or chest: the first seeds of consumption are frequently laid in this way. A child so indulged will eat heartily enough, but he remains thin notwithstanding, has frequent fever, and a de-

ranged condition of the bowels. In such a child, too, it will be found that the ordinary diseases of infancy, scarlet fever, measles, &c., will be attended with a great and unusual degree of constitutional disturbance; that it will not bear such active treatment, or so quickly rally from the illness.

As the child advances in age *the best beverage is water*. The practice of giving wine, or any stimulant, to a healthy child, is highly reprehensible; it ought never to be given but medicinally. In infancy and childhood the circulation is rapid and easily excited; and the nervous system is strongly acted upon, even by the slightest external impressions. Hence slight causes of irritation readily excite febrile and convulsive disorders. The object of the parent, therefore, is not to stimulate, but rather to abate nervous and vascular action: wine, accordingly, is detrimental to children. Children who require it as a medicine are, of course, exceptions to the foregoing general rule.

If cow's milk disagree with an infant — and this is sometimes unfortunately the case, even from its birth — ass's milk, diluted with one third its quantity of water, may be given as a

substitute. Sometimes the mother's breast, and every description of milk is rejected by the child, in which case recourse must be had to weak mutton broth or beef tea, clear and free from fat, mixed with an equal quantity of farinaceous food, carefully passed through a sieve before it is poured into the sucking-bottle.

The mode of administering artificial food before the sixth month. — There are two ways — by the spoon, and by the nursing-bottle. The first ought never to be employed at this period, inasmuch as the power of digestion in infants is very weak, and their food is designed by nature to be taken very slowly into the stomach, being procured from the breast by the act of sucking, in which act a great quantity of saliva is secreted, and, being poured into the mouth, mixes with the milk, and is swallowed with it. This process of nature, then, should be emulated as far as possible; and food (for this purpose) should be imbibed by suction from a nursing-bottle: it is thus obtained slowly, and the suction employed secures the mixture of a due quantity of saliva, which has a highly important influence on digestion.

Too great care cannot be taken to keep the bottle perfectly sweet. For this purpose there should always be two in the nursery, to be used alternately; and, if any food remain after a meal, it must be emptied out. The bottle always to be scalded out after use. The bottle itself is too well known to need description: it may be well, however, to say a word about the teat. If the artificial or prepared cow's teat is made use of, it should be so attached to the bottle that its extremity does not extend beyond its apex more than half or three quarters of an inch; for if it projects more than this, the child will get the sides of the teat so firmly pressed together between its gums, that there will be no channel for the milk to flow through. Many ladies prefer using soft wash-leather instead of the teat, which is firmly attached to the end of the bottle by thread, and a small opening made at the extremity for the milk to pass through. This is a good substitute; but a fresh piece of leather must be made use of daily, otherwise the food will be tainted, and the child's bowels deranged. The most cleanly and convenient apparatus is a cork nipple, upon

the plan of M. Darbo, of Paris, fixed in the sucking-bottle.* The cork being of a particularly fine texture, is supple and elastic, yielding to the infant's lips while sucking, and is much more durable than the teats ordinarily used. Whatever kind of bottle or teat is used, however, it must never be forgotten that cleanliness is absolutely essential to the success of this plan of rearing children.

The quantity of food to be given at each meal.—This must be regulated by the age of the child and its digestive power. A little experience will soon enable a careful and observing mother to determine this point. As the child grows older, the quantity of course must be increased. The chief error in rearing the young is *over-feeding*; and a most serious one it is; but which may be easily avoided by the parent pursuing a systematic plan with regard to the hours of feeding, and then only yielding to the indications of appetite, and administering the food slowly, in small quantities at a time. This is the only way effectually to prevent the colic and bowel

* This is sold by Weiss and Son, 62. Strand.

complaints, and the irritable condition of the nervous system, so common in infancy, and secure to the infant healthy nutrition, and consequent strength of constitution. As has been well observed, "Nature never intended the infant's stomach to be converted into a receptacle for laxatives, carminatives, antacids, stimulants, and astringents; and when these become necessary, we may rest assured that there is something faulty in our management, however perfect it may seem to ourselves."

The frequency of giving food. — This must be determined, as a general rule, by allowing such an interval between each meal as will insure the digestion of the previous quantity, and this may be fixed at about every three or four hours. If this rule is departed from, and the child receive a fresh supply of food every hour or so, time will not be given for the digestion of the previous quantity, and as a consequence of this process being interrupted, the food passing on into the bowel undigested, will there ferment and become sour; will inevitably produce colic and purging, and in no way contribute to the nourishment of the child.

The posture of the child when fed is important. It must not receive its meals lying; the head should be raised on the nurse's arm; the most natural position, and one in which there will be no danger of the food going the wrong way, as it is called. After each meal the little one should be put in its cot, or repose on its mother's knee, for at least half an hour. This is essential for the process of digestion, as exercise is important at other times for the promotion of health.

The kind of diet most suitable under the different complaints to which infants are liable. Artificial food, from mismanagement and other causes, will now and then disagree with the infant. The stomach and bowels are thus deranged, and medicine is resorted to; and again and again the same thing occurs.

This is wrong, and but too frequently productive of serious and lasting mischief. *Alteration of diet*, rather than the exhibition of medicine, should, under these circumstances, be relied on for remedying the evil. Calomel, and such like remedies, "the little powders of the nursery," ought not to be given on every trivial

occasion. More mischief has been effected, and more positive disease produced, by the indiscriminate use of the above powerful drug, either alone or in combination with other drastic purgatives, than would be credited. Purgative medicines ought at all times to be exhibited with caution to an infant, for so delicate and susceptible is the structure of its alimentary canal, that disease is but too frequently caused by that which was resorted to in the first instance *as a remedy*. The bowels should always be kept free; but then it must be by the mildest and least irritating means.

It is a very desirable thing, then, to correct the disordered conditions of the digestive organs of an infant, if possible, without medicine; and much may be done by changing the nature, and sometimes by simply diminishing the quantity, of food.

A diarrhœa or looseness of the bowels may frequently be checked by giving, as the diet, sago thoroughly boiled in very weak beef-tea, with the addition of a little milk. Or the same purpose is frequently to be answered by two thirds of arrow-root with one third of milk.

Costiveness of the bowels may frequently be removed by changing the food to tops and bottoms steeped in hot water, and a small quantity of milk added, or prepared barley, mixed in warm water and unboiled milk.

Flatulence and griping generally arise from an undue quantity of food, which passing undigested into the bowels, they are thus irritated and disturbed. This may be cured by abstinence alone.

The same state of things may be caused by the food not being prepared fresh at every meal; or even from the nursing bottle or vessel in which the food is given not having been perfectly clean. In this case weak chicken broth, or beef-tea freed from fat, and thickened with soft boiled rice or arrow-root, may be given.

CHAPTER IX.

HINTS FOR THE MANAGEMENT OF HEALTH
DURING INFANCY.

SECT. I. — SLEEP.

FOR three or four weeks after birth the infant sleeps, more or less, day and night, only waking to satisfy the demands of hunger; at the expiration of this time, however, each interval of wakefulness grows longer, so that it sleeps less frequently, but for longer periods at a time.

This disposition to repose in the early weeks of the infant's life must not be interfered with; but this period having expired, great care is necessary to induce regularity in its hours of sleep, otherwise too much will be taken in the day time, and restless and disturbed nights will follow. The child should be brought into the

habit of sleeping in the middle of the day, before its dinner, and for about two hours more or less. If put to rest at a later period of the day, it will invariably cause a bad night.

At first the infant should sleep with its parent. The low temperature of its body, and its small power of generating heat, render this necessary. If it should happen, however, that the child has disturbed and restless nights, it must be immediately removed to the bed and care of another female, to be brought to its mother at an early hour in the morning, for the purpose of being nursed. This is necessary for the preservation of the mother's health, which through sleepless nights would of course be soon deranged, and the infant would also suffer from the influence which such deranged health will have upon the milk.

When a month or six weeks has elapsed, the child, if healthy, may sleep alone in a cradle or cot, care being taken that it has a sufficiency of clothing, — that the room in which it is placed is sufficiently warm, viz. 60°, and that the position of the cot itself is not such as to be exposed to currents of cold air. It is essen-

tially necessary to attend to these points, since the faculty of producing heat, and consequently the power of maintaining the temperature, is less during sleep than at any other time, and therefore exposure to cold is especially injurious. It is but too frequently the case, that inflammation of some internal organ will occur under such circumstances, without the true source of the disease ever being suspected. Here, however, a frequent error must be guarded against, that of covering up the infant in its cot with too much clothing, — throwing over its face the muslin handkerchief, — and, last of all, drawing the drapery of the bed closely together. The object is to keep the infant sufficiently warm with pure air; it therefore ought to have free access to its mouth, and the atmosphere of the whole room should be kept sufficiently warm to allow the child to breathe it freely: in winter, therefore, there must always be a fire in the nursery.

SECT. II. — BATHING AND CLEANLINESS.

Too much attention cannot be paid to cleanliness ; it is essential to health.

Temperature of the water. — At first the infant should be washed daily with warm water, and a bath every night for the purpose of thoroughly cleaning the body is highly necessary. To bathe a delicate infant of a few days or even weeks old, in cold water, with a view to “harden” the constitution (as it is called), is the most effectual way to undermine its health and entail future disease. By degrees, however, the water with which it is sponged in the morning should be made tepid, the evening bath being continued warm enough to be grateful to the feelings. A few months having passed by, the temperature of the water may be gradually lowered, until cold is employed, with which it may be either sponged or even plunged into it, every morning during summer. With some children, however, there is such extreme deli-

cacy and deficient reaction, as to render this hazardous; its effects, therefore, must be carefully watched.

Drying the skin.—The surface of the skin should always be carefully and thoroughly rubbed dry with flannel. Indeed, more than dry, for the skin should be warmed and stimulated by the assiduous gentle friction made use of. For this process of washing and drying must not be done languidly, but briskly and expeditiously; and will then be found to be one of the most effectual means of strengthening the infant. It is especially necessary carefully to dry the arm-pits, groins, and nates; and if the child is very fat, it will be well to dust over those parts with hair-powder or starch: this prevents excoriations and sores, which are frequently very troublesome. Soap is only required to those parts of the body which are exposed to the reception of dirt.

Napkins.—The frequency of the discharges from the bowels and bladder requires a frequent change of napkins. A nurse cannot be too careful of this duty from the first, so that she may be enabled to discover the periods

when these discharges are about to take place, that she may not only anticipate them, but teach the child, at a very early age, to give intelligent warning of its necessities. Thus a habit of regularity with regard to these functions will be established, which will continue through life, and tend greatly to the promotion of health. As the child grows older, the system of cleanliness must in no particular be relaxed ; and it will be found the best preservative against those eruptive disorders which are so frequent and troublesome during the period of childhood.

SECT. III. — CLOTHING.

INFANTS are very susceptible of the impressions of cold ; a proper regard, therefore, to a suitable clothing of the body is imperative to their enjoyment of health. Unfortunately, an opinion is prevalent in society, that the tender child has naturally a great power of generating heat and resisting cold ; and from this popular

error have arisen the most fatal results. This opinion has been much strengthened by the insidious manner in which cold operates on the frame, the injurious effects not being always manifest during or immediately after its application, so that but too frequently the fatal result is traced to a wrong source, or the infant sinks under the action of an unknown cause.

The power of generating heat in warm-blooded animals is at its minimum at birth, and increases successively to adult age; young animals, instead of being warmer than adults, are generally a degree or two colder, and part with their heat more readily; facts which cannot be too generally known. They show how absurd must be the folly of that system of "hardening" the constitution, as it is called, which induces the parent to plunge the tender and delicate child into the cold bath at all seasons of the year, and freely expose it to the cold, cutting currents of an easterly wind, with the lightest clothing.

The principles which ought to guide a parent in clothing her infant, are as follows: —

The material and quantity of the clothes

should be such as to preserve a sufficient proportion of warmth to the body, regulated therefore by the season of the year, and the delicacy or strength of the infant's constitution. In effecting this, however, the parent must guard against the too common practice of enveloping the child in innumerable folds of warm clothing, and keeping it constantly confined to very hot and close rooms; thus running into the opposite extreme to that to which I have just alluded; for nothing tends so much to enfeeble the constitution, to induce disease, and render the skin highly susceptible of the impressions of cold; and thus produce those very ailments which it is the chief intention to guard against.

In their make they should be so arranged as to put no restrictions to the free movements of all parts of the child's body; and so loose and easy as to permit the insensible perspiration to have a free exit, instead of being confined to and absorbed by the clothes, and held in contact with the skin, till it gives rise to irritation.

In their quality they should be such as not to irritate the delicate skin of the child. In infancy, therefore, flannel is rather too rough;

but is desirable as the child grows older, as it gives a gentle stimulus to the skin, and maintains health.

In its construction the dress should be so simple as to admit of being quickly put on, since dressing is irksome to the infant, causing it to cry, and exciting as much mental irritation as it is capable of feeling. Pins also should be wholly dispensed with, their use being hazardous through the carelessness of nurses, and even through the ordinary movements of the infant itself.

The clothing must be changed daily. It is eminently conducive to good health that a complete change of dress should be made every day. If this is not done, washing will, in a great measure, fail in its object, especially in ensuring freedom from skin diseases.

SECT. IV. — AIR AND EXERCISE.

THE respiration of a pure air is at all times, and under all circumstances, indispensable to the health of the infant. The nursery, there-

fore, should be large, well ventilated, in an elevated part of the house ; and so situated as to admit a free supply both of air and light. For the same reasons, the room in which the infant sleeps should be large, and the air frequently renewed ; for nothing is so prejudicial to its health as sleeping in an impure and heated atmosphere. The practice, therefore, of drawing thick curtains closely round the bed is highly pernicious ; they only answer a useful purpose when they defend the infant from any draught or current of cold air.

The proper time for taking the infant into the open air must, of course, be determined by the season of the year, and the state of the weather. Sir James Clark observes, that “ a delicate infant, born late in the autumn, will not generally derive advantage from being carried into the open air, in this climate, till the succeeding spring ; and if the rooms in which he is kept are large, often changed, and well ventilated, he will not suffer from the confinement, while he will, most probably, escape catarrhal affections, which are so often the consequence of the injudicious exposure of infants

to a cold and humid atmosphere." If, however, the child is strong and healthy, no opportunity should be lost of taking it into the open air at stated periods, experience daily proving that it has the most invigorating and vivifying influence upon the system. Regard, however, must always be had to the state of the weather ; and to a damp condition of the atmosphere the infant should never be exposed, as it is one of the most powerful exciting causes of consumptive disease. The nurse-maid, too, should not be allowed to loiter and linger about, thus exposing the infant unnecessarily, and for an undue length of time : this is generally the source of all the evils which accrue from taking the babe into the open air.

Exercise, also, like air, is essentially important to the health of the infant. Its first exercise, of course, will be in the nurse's arms. After a month or two, when it begins to sleep less during the day, it will delight to roll and kick about on the sofa : it will thus use its limbs freely ; and, with the carrying out into the air, is all the exercise it requires at this period.

SECT. V. — APERIENT MEDICINE.

THE only purgative medicines that can be given with safety to an infant, without medical sanction, are castor oil, manna, rhubarb, and magnesia.

1. CALOMEL.

The mischievous effects of the indiscriminate use of calomel, medical men are daily called upon to witness. It is impossible for an unprofessional person to determine from the character of the alvine secretions whether calomel is necessary or not; and it cannot be too generally known, that the effect of this medicine upon the evacuations is always to make them appear unnatural. From an ignorance of this fact, CALOMEL *is often repeated again and again to relieve that very condition which it has itself produced, causing, but too frequently, a degree of irritation in the delicate lining membrane of the bowel, which it may be very difficult for a medical man to remove, and perhaps a source of misery*

to the child as long as it lives. Its frequent exhibition has also another evil attending it; for as Mr. Bell observes, in his work on the teeth, "the immoderate use of mercury in early infancy, produces, more perhaps than any similar cause, that universal tendency to decay, which in many instances destroys almost every tooth at an early age." *As a domestic nursery medicine, therefore, calomel will be excluded by every prudent mother.*

It may be useful to mention, for the information of a young mother, that the bowels of an infant in health should be opened from two to four times in the twenty-four hours, and that the motion should be fluid, of a lightish yellow colour, free from any fetid or acid smell, and destitute of lumps or white curdy matter; and that it should be passed without pain, or any considerable quantity of wind.

A parent is only justified in giving aperient medicine, when any deviation from these conditions exists, and only then, when what may be called healthy costiveness is present, viz., either the stools less frequent than they ought to be, or lumpy and partially solid.

2. CASTOR OIL.

This is one of the mildest aperients, prompt in its action, and effective in clearing out the contents of the bowels; it is a medicine, therefore, particularly applicable to infants.

During teething there is generally much torpor of the bowels; here, then, castor oil is a very appropriate and useful artificial means of increasing the frequency of the alvine discharges.

The proper dose for an infant is from half a drachm to a drachm or two: it must be fresh cold-drawn castor oil, and may be blended with a little moist sugar; or, if the stomach is unusually delicate, the oil may be made into an emulsion with some aromatic water, by the intervention of the yolk of an egg and a little syrup of roses combined with it. The following proportions make an elegant little mixture, of which a dessert spoonful may be repeated every hour until it operate: castor oil, six drachms; the yolk of an egg, syrup of roses, two drachms; mix well, and add dill water, two ounces.

3. MANNA.

This also may be given with impunity to the youngest infant; it is sweet to the taste, and mild in its operation. It should be exhibited in doses of one to two drachms in a little warm milk, or if it cause flatulence in this form, in some aromatic water, a dessert spoonful of caraway seed or dill water. For children above two years, it must always be given together with some other aperient.

4. MAGNESIA AND RHUBARB.

These medicines are most frequently given in the nursery combined, and are more effective when thus united, than when given separately. The following form in a costive and flatulent state of the bowels will be found useful; a tea spoonful may be given every three or four hours until the desired effect is obtained: —

Powdered rhubarb, half a drachm ;
Carbonate of magnesia, two scruples ;
Compound spirit of ammonia, twenty drops ;
Dill water, two ounces ;
Simple syrup, two drachms.

When the infant throws up the nurse's *milk* it is generally *curdled*, a fact which leads the inexperienced mother to infer that the child is suffering from acidity; and to counteract the supposed evil, *magnesia* is given again and again. This is a useless and pernicious practice; for curdling or coagulation of the milk always takes place in the stomach, and is produced by the gastric juice, and is so far from being a morbid process, that milk cannot be properly digested without it.

5. THE LAVEMENT.

This is an excellent nursery remedy, when the bowels are obstinately costive. It may be then employed as a substitute for medicine, a protracted and frequent use of which (even of the mildest aperients) is apt to injure the digestive functions, and to give rise to some degree of intestinal irritation.

The simplest form of an aperient enema, is a quarter of a pint of warm water, or barley water, with a table spoonful of brown sugar; or, if it be desirable to increase its strength, a dessert spoonful of castor oil may be added.

The mode of administering an injection deserves particular attention, as injury might be caused by its being performed in a careless or unskilful manner. A gum elastic pipe should be always used instead of the hard, ivory tube. Having smeared this over with lard, and placed the infant on its left side with its knees bent up in the lap of the nurse, it is to be passed a couple of inches into the bowel, in a direction not parallel to the axis of the body, but rather inclined to the left. The latter circumstance should never be neglected, for if not attended to, there will be difficulty in administering the injection. The fluid must then be propelled very gradually, or it will be instantly rejected; on the whole being thrown up (the pipe carefully and slowly withdrawn), the child must be kept quietly reposing on its nurse's lap, and in the same posture, for some little time.

6. THE APERIENT LINIMENT.

A liniment to be rubbed on the stomach is another resource in cases of habitual costiveness, and will frequently be attended with great

success, when repeated purgatives have been resisted.

Olive or castor oil may be used for this purpose; they must be warmed and rubbed over the abdomen every day, for five or ten minutes. Perhaps the best form of liniment that can be made use of is the following: —

Compound soap liniment, one ounce;

Compound tincture of aloes, half an ounce.

SECT. VI. — OPIATES.

THIS class of medicine is often kept in the nursery, in the forms of laudanum, syrup of white poppies, Dalby's carminative, and Godfrey's cordial.

The object with which they are generally given is to allay pain by producing sleep; they are, therefore, *remedies of great convenience to the nurse*; and I am sorry to add that, so exhibited, they are *but too often fatal to the little patient*.

In the hands of the physician, there is no medicine the administration of which requires

greater caution and judgment than opiates, both from the susceptibility of infants to their narcotic influence, and their varying capability of bearing it; the danger, therefore, with which their use is fraught in the hands of a nurse, should for ever exclude them from the list of domestic nursery medicines.

Dalby's carminative and Godfrey's cordial are, perhaps, more frequently used than any other forms; and some striking cases, illustrative of the fatal results of exhibiting them indiscriminately and without medical sanction, are on record. The late Dr. Clark, in his Commentaries, mentions a case which he saw, where "*forty drops of Dalby's carminative destroyed an infant.*" Dr. Merriman gives the following in a note in Underwood, on the Diseases of Children:—

"A woman, living near Fitzroy-square, thinking her child not quite well, gave it a dose of Godfrey's cordial, which she purchased at a chemist's in the neighbourhood: in a very short time after taking it, the child fell into convulsions, and soon died. In less than a month, the child of another woman in the same house was found to be ill with disordered bowels. The first woman, not at all suspecting

that the Godfrey's cordial had produced the convulsions in her infant, persuaded her friend to give the same medicine to her child. A dose from the same bottle was given, and this child was likewise attacked almost immediately with convulsions, and also died."

Convulsions and epilepsy, without such fatal results as the foregoing, are not uncommon as the effect of a single dose of an opiate given unadvisedly ; and by their continued and habitual use (and the form of syrup of poppies is but too often administered by an indiscreet and lazy nurse, unknown by the parent), a low, irritative, febrile state is produced, gradually followed by loss of flesh, the countenance becoming pallid, sallow, and sunken, the eyes red and swollen, and the expression stupid and heavy, and the powers of the constitution at last becoming completely undermined. Such an object is to be seen daily among the poorer classes ; the miniature of a sickly aged person.

SECT. VII. — LEECHING.

DIFFICULTY sometimes arises in putting a stop to the bleeding from leech-bites; a matter of considerable importance in the case of a delicate infant. The following measures may be resorted to for this purpose : —

1. Expose the surface of the part to the external air, so that a coagulum of blood may form at the orifice, this simple mode will frequently arrest it.

2. If this fail, make compression upon the part; this is one of the most effectual means of restraining hemorrhage. It is to be effected by taking a piece of lint folded three or four thicknesses, and the size of the finger nail, to be steadily pressed upon the open orifice with the point of the finger until the blood has ceased to flow. The pledget of lint, however, must not be removed for some hours afterwards, or the bleeding will break out afresh.

3. If the compression fails in stopping the bleeding, or from the situation of the leech-

bites it cannot be adopted because there is no firm point of resistance upon which to make pressure, the part may be dusted with starch or gum arabic powder; or, if this is of no avail, the wound may be touched with lunar caustic.

If none of these measures are successful, the assistance of the medical attendant must be obtained, and if firm pressure be made upon the part, no serious loss of blood can ensue before his arrival.

Leeches should never be resorted to by a parent for any of the diseases of infancy without medical direction.

SECT. VIII. — BLISTERS.

A BLISTER should never be applied for any infantile disease, except when ordered by a medical man, as its injudicious use might greatly aggravate the complaint.

There are also *one or two precautions* in reference to the *mode of the application* of a blister, which it is always right for a parent to

attend to. From the great irritability of the skin, it should never be allowed to remain on longer than from two to four hours. At the expiration of this time the surface will usually become red and inflamed; and, if the blister is removed, and the part dressed with fresh spermaceti ointment, spread on lint, or with a soft bread and water poultice, a full blister will soon be raised. The little patient is thus saved much suffering, as well as a very troublesome sore prevented. A piece of tissue or silver paper, interposed between the blister and the skin, will answer the same purpose; the blister will act well, and the evils before alluded to will be prevented.

After a blister has been two or three hours applied, its edge should be carefully raised, to ascertain the effect produced; and if the surface be much inflamed, more particularly if little points of vesication are present, it should be removed, and the above directions adopted.

SECT. IX. — THE WARM-BATH.

THE warm-bath is a very common nursery remedy, and its use but too frequently abused. Judiciously prescribed it is one of the most valuable remedial agents we possess; but although powerful for good, when misapplied, it is equally powerful for mischief. For instance, in active inflammatory affections, the use of the warm-bath would greatly aggravate the disease; and yet, for an infant with active inflammation of the respiratory organs, it is continually resorted to.

The temperature of a warm-bath for an infant not more than twelve months old, should never exceed 98° F., and should not be below 90°; a thermometer should always be used, for a parent can never safely trust her own sensations.

The time which it may be proper for the infant to remain in the bath must depend upon circumstances; generally from ten to fifteen minutes will be the period prescribed.

Unless the bath is ordered for the feet only, the child's body ought to be immersed up to the shoulders or neck, otherwise that part of the body which is out of the bath (the shoulders, arms, and chest), exposed to the cooler temperature of the air, will be chilled.

When the infant is taken out of the bath, the general surface must be carefully rubbed dry, particularly the feet, and the warmth of the body kept up, by immediately afterwards putting the child into its cot.

SECT. X. — TEETHING.

TEETHING is a natural process. It is too frequently, however, rendered a painful and difficult one, by errors in the management of the regimen and health of the infant, previous to the coming of the teeth, and during the process itself.

Thus, chiefly in consequence of injudicious management, it is made the most critical period of childhood. Not that I believe the extent of

mortality fairly traceable to it, is by any means so great as has been stated; for it is rated as high as one-sixth of all the children who undergo it. Still, no one doubts that first dentition is frequently a period of great danger to the infant. It therefore becomes a very important question to an anxious and affectionate mother, how the dangers and difficulties of teething can in any degree be diminished, or if possible altogether prevented. A few hints upon this subject may be useful.

The manner in which the first set of teeth appear. — The first set of teeth, or milk-teeth as they are called, are twenty in number; they usually appear in pairs, and those of the lower jaw generally precede the corresponding ones of the upper. The first of the milk-teeth is generally cut about the sixth or seventh month, and the last of the set at various periods from the twentieth to the thirtieth months. Thus the whole period occupied by the first dentition may be estimated at from a year and a half, to two years. The process varies, however, in different individuals, both as to its whole duration, and as to the periods and order in

which the teeth make their appearance. It is unnecessary, however, to add more upon this point.

1. *Management of the infant when teething is without difficulty.*— In the child which has been properly, that is, naturally fed, upon the milk of its mother alone, the symptoms attending teething will be of the mildest kind, and the management of the infant most simple and easy.

The symptoms of natural dentition, then, are an increased flow of saliva, with swelling and heat of the gums, and occasionally flushing of the cheeks. The child frequently thrusts its fingers, or any thing within its grasp, into its mouth. Its thirst is increased, and it takes the breast more frequently, though, from the tender state of the gums, for shorter periods than usual. It is fretful and restless, and sudden fits of crying and occasional starting from sleep, with a slight tendency to vomiting and even looseness of the bowels, are not uncommon. Many of these symptoms often precede the appearance of the tooth by several weeks, and indicate that what is called “breeding the

teeth," is going on. In such cases the symptoms disappear in a few days, to recur again when the tooth approaches the surface of the gum.

The management of the infant in this case is very simple, and seldom calls for the interference of the medical attendant. The child ought to be much in the open air, and well exercised. The bowels kept freely open with castor oil, the cold sponging employed daily, and the surface of the body rubbed dry with as rough a flannel as the delicate skin of the child will bear, friction being very useful. The breast should be given often, but not long at a time; the thirst will thus be allayed, the gums kept moist, and relaxed, and their irritation soothed, without the stomach being overloaded. The mother must carefully attend, at this time, to her own health and diet, and avoid all stimulant food or drinks.

From the moment dentition begins, pressure on the gums seems to be agreeable to the child, by numbing the sensibility and dulling the pain. For this purpose coral is usually employed, or a piece of orris-root, or scraped liquorice-root; a flat ivory ring, however, is far

safer and better, for there is no danger of its being thrust into the eyes or nose. Gentle friction of the gums, by the finger of the nurse, is pleasing to the infant; and, as it seems to have some effect in allaying irritation, may be frequently used. In France, and in this country also, it is very much the practice to dip the liquorice-root, and other substances, into honey, powdered sugar-candy, &c.; and in Germany, a small bag, containing a mixture of sugar and spices, is given to the infant to suck, whenever it is fretful and uneasy during teething. The constant use, however, of sweet and stimulating ingredients, must do injury to the stomach, and renders their employment very objectionable.

2. *The management of the infant in difficult teething.* — In the child which has been partly or altogether brought up by hand, the process of dentition will be attended with more or less difficulty, and not unfrequently with danger.

The symptoms of difficult dentition are of a much more aggravated description than those which attend the former case; and it is right that a mother should, to a certain extent, be acquainted with their character, that she may

early request that medical aid, which, if judiciously applied, will mitigate, and generally quickly remove them.

Difficult dentition will be attended with painful inflammation and swelling of the gum, which is hotter, of a deeper red than natural, and intolerant of the slightest pressure. There is often great determination of blood to the head, which a mother may recognise, by the cheeks being red, hot, and swollen; the eyes red, irritable, and watery; and the saliva running from the mouth profusely. The fever is great, and the thirst extreme. The child is at one time restless and irritable, and at another heavy and oppressed: the sleep will be broken, and the infant frequently awake suddenly and in alarm from its short slumbers.

Such are the chief symptoms of difficult teething; and as they are induced by the painful tension of the gum, it would seem that the most rational mode of attempting their relief is by freely lancing the swollen part. Great prejudices, however, exist in the minds of some mothers against this operation. They

think it gives great pain, and if the tooth is not very near, makes it coming through the gum, subsequently, the more difficult. With regard to the first objection, the lancet is carried through the gum so quickly, that this is hardly possible; and the fact that the infant will often smile in your face after it is done, although previously crying from pain, is sufficient corroborative evidence that it is not a very painful operation. In reference to the second, that the scar which ensues opposes, by its hardness, the subsequent progress of the tooth, it is quite groundless; for cicatrices, like all other new formed parts, are much more easily absorbed than the original structure. Of the practical utility and perfect safety of this operation, we have ample proof in its daily performance with impunity, and in the instant relief which it often affords to all the symptoms.

Mere scarifying the gums is sometimes all that is required, and will afford great relief. This operation, therefore, should not be opposed by the mother. She, at the same time, should be acquainted with its precise object, lest the

speedy return of the symptoms, and the non-appearance of the expected tooth, might tend to bring the operation of lancing the gums into disrepute.

It is the practice with some nurses, to administer narcotics to quiet infants while teething; it is not only objectionable, but, from the uncertain effects of sedatives upon infants, a very dangerous practice, and they ought never to be given, except at the suggestion of a medical man. It is far better, if the child is restless at night, to have it frequently taken out of its cot, and carried about in an airy room; for the cool air, and change of posture, will do much to allay the feverishness and restlessness of the child.

Convulsions are sometimes excited by the irritation of difficult dentition; a source of great alarm to the parent. Relief will be afforded by immersing the feet and legs of the infant in water as warm as can be borne, and at the same time applying, over the head and temples, a piece of flannel wet with cold water.

The parental management of the infant then, and by which, much of the pain and diffi-

culty of teething may be removed or alleviated, consists in a proper attention to cold sponging, air, exercise, food, and bowels; for, by duly regulating these, the system of the child will be less disposed to diseased action, though the local symptoms, such as swelling, redness, and inflammation of the gums, be considerable.

With regard to food, if a child is teething with difficulty, it should always have its quantity diminished. If it is being fed, as well as nursed at the breast, at the time, the former should be immediately withheld; if it is being fed alone, the only kind of food that should be allowed is milk and water.

The bowels must be carefully watched, that they may not become confined; it being necessary that they should be gently relaxed at this time. The sponging, air, and exercise, must be carefully attended to, as already suggested.

To the state of the mouth, however, it is an important part of the parent's duty to pay especial attention; and, by so doing, she will save her child much suffering. The mother should carefully inspect the condition of the mouth from time to time, and should she dis-

cover a swollen gum, she should immediately have it attended to, and not wait for constitutional symptoms to appear, before she employs proper aid for her child. For this purpose she should make herself familiar with the appearances of the gum under distension and inflammation; a matter of no difficulty, accompanied, as this condition usually is, by a profuse secretion of saliva, heat of mouth, and at a time when the age of the child justifies the supposition that it is about to cut its first tooth, or if it have some teeth, that others are about to appear.

From these few hints, it must have been seen how much the sufferings from teething may be mitigated by judicious management. That, if the parent is able to support her infant upon the breast alone, teething is comparatively an easy process, and unattended with danger; the mother thus reaping a delightful reward for all the anxieties and privations nursing necessarily involves.

That the child brought up partially, or entirely by hand, will always pass through dentition with more or less of pain and diffi-

culty ; but that even here, if the diet has been properly regulated, much less suffering and inconvenience will arise, than when less attention has been paid to it.

And, lastly, that when dentition is difficult, how highly important it is to call in proper aid at an early period, and to carry out fully the directions of the medical attendant, allowing no foolish prejudices to interfere with his prescriptions and management.

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