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THE

NURSE MOTHER.

A MANUAL

FOR THE GUIDANCE OF

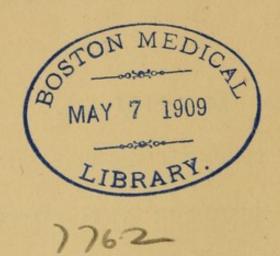
MONTHLY NURSES AND MOTHERS;

COMPRISING INSTRUCTIONS IN REGARD TO PREGNANCY AND
PREPARATION FOR CHILD-BIRTH; WITH MINUTE
DIRECTIONS AS TO CARE DURING CONFINEMENT, AND FOR THE MANAGEMENT AND FEEDING
OF INFANTS.

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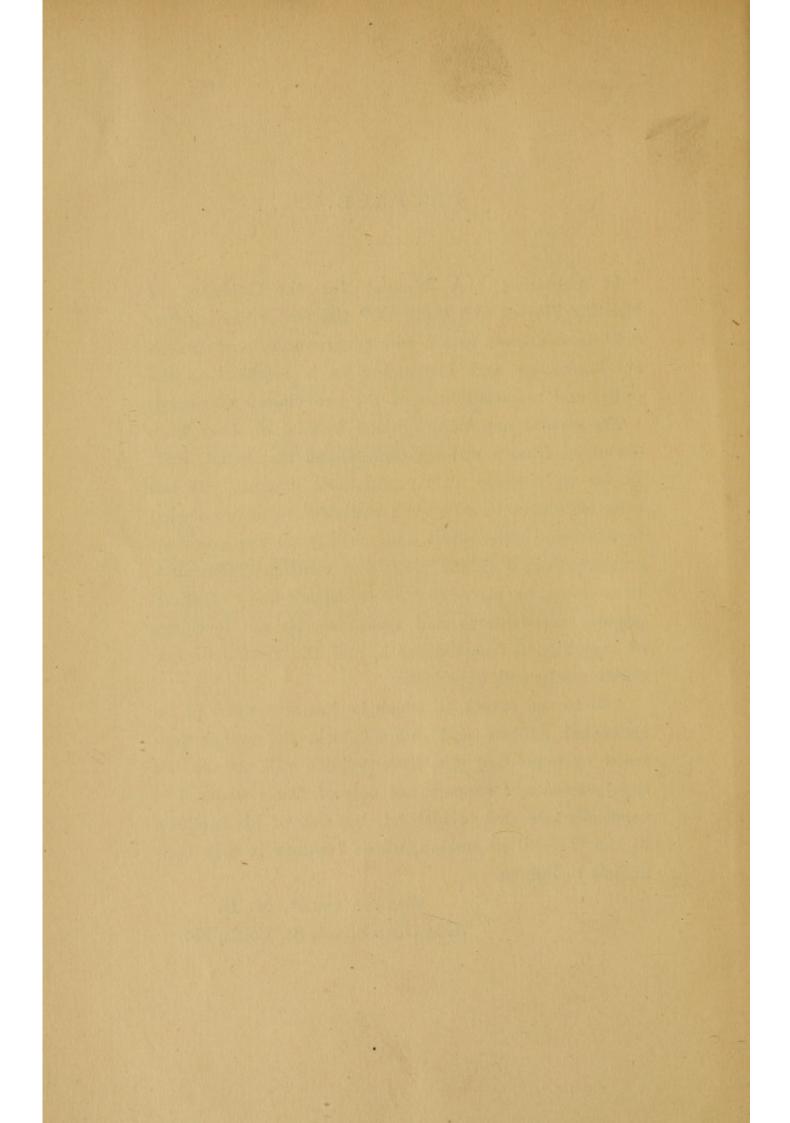
PREFACE.

In preparing "A Manual for the Guidance of Monthly Nurses and Mothers," the writer has endeavored to condense into a few plain words, such practical knowledge and instruction as is essential to the duties and responsibilities of the two classes addressed.

The several important subjects treated of, have been discussed from a strictly professional standpoint, and, as far as possible, in a professional manner. It has been his object to offer such explanations as are needed to convince both nurses and mothers of the propriety and importance of the views and measures inculcated. In so doing, he has attempted to replace many injurious popular superstitions and traditions, by the teachings of enlightened common sense, and the results of scientific study and experience.

And to the extent to which he has succeeded in his somewhat delicate and difficult task, the author ventures to hope that this little volume will receive the indorsement and support, not only of those whom it is especially intended to instruct, but also of his brethren in the medical profession, whose burdens it may contribute to lighten.

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CONTENTS.

CHAPTER I.	
INTRODUCTORY. — The general qualifications and re-	
quirements of Nurses—7-12. Sensitive physical	
and mental condition of the Pregnant Female—	
12-14. Reciprocal relations between Nurse.	
Patient and Physician	14-19
CHAPTER II.	
PREGNANCY Symptoms and Signs of -20-22. Long-	
ings-22. "Mother's Marks"-22-24. Quick-	
ening, or "Life"-27-30. Sex of Child, indi-	
cations of before birth—30. Twins—30. Com-	
plications and Disorders of Ducomen and Ducom	
plications and Disorders of Pregnancy; Drop-	
sical Swellings, Varicose Veins, etc., their sig-	
nificance—31-33. Rules for Reckoning the Pe-	
riod of Pregnancy	33-35
CHAPTER III.	
PREPARATIONS FOR LABOR Exercise, Diet, Mental	
Health—36-37. Attention to Bowels—37; Nip-	
ples—37-39. Selection of a Lying-in Chamber	
-39. The Bed, its preparation—39-41. Symp-	
tome indicating the Approach of Labor 11.12	
toms indicating the Approach of Labor—41-43.	
The "Bag of Waters," what its breaking indi-	
cates—43. Articles needed during Labor—43-44.	
The Binder, how made-44-46. The Dress,	
how arranged during Labor	46
CHAPTER IV.	
LABOR - Knowledge which every Nurse should Pos-	
sess-47. The Stages of-47-48. The After-	
birth, what it is-48. Labor Pains, their char-	
acter and significance-48-49. Conduct and	
Position of Female during Labor-49-52. Rup-	
turing the "Waters"—52. How to "Take a	
Pain;" aids in so doing—52-55. Presentations,	
How they may Modify Labor—55-58. Falling	
of the Cord—58-59. The length and Character	
of Natural Labor-59-60. Retarding Circum-	
stances—60-62. The use and advantages of In-	
struments in certain cases—62. Administration	
of Chloroform and Ether—63-65. Birth of the	
Child—65. The Third Stage, a Critical Period	
for the Mother—66. Hemorrhage, how guarded	
against	66-68

CHAPTER V.

MANAGEMENT OF THE LYING-IN WOMAN. -Attention to, immediately after Labor-69-71. Nourishment-71-73. Milk as an Article of Diet-73-75. Attention to the Bladder-75-77; Bowels-77. How to give an Enema-77-80. The "Flow" or "Discharge," attentions incident to-80-81. Washing out the Vagina-81-84. "Milk Fever" -84. The Secretion of Milk-84-87. Retracted Nipples, how managed-88-89. Application of Child to the Breast-89-91. Directions Drawing the Breasts-91-94. Breast Pumps, method of application—94. Sore Breasts, how to manage them—95-98. Cracked, or Chapped Nipples—98-99. Rising Breast—99-101. Weed -101-104. Care of Breasts when Baby is not Nursed-104. Milk Leg-105. The Period of "Getting up"

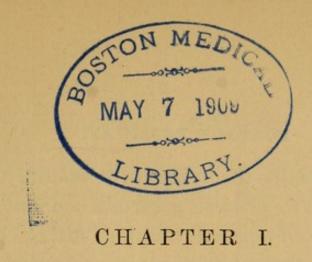
106

CHAPTER VI.

ACCIDENTS AND EMERGENCIES.-Importance of Coolness and Competency on part of Nurse-107. Duties of Nurse during Artificial Delivery-197-109. When the Child is Born during Absence of Physician—110-111. Attentions required by Mother and Child-111. How to Tie and Separate the Cord-111-112. What to be done in case of Flooding-112-114. How to Revive an apparently Still-born Child-115-116. Puerperal Convulsions-116. Introduction of the Catheter, directions for......117-118

CHAPTER VII.

Management of the Child. — How to Wash—119-121 The "Baby Basket," what it should contain -121-123. Dressing the Navel-123. Dressing the Baby-123-125. When Premature or Weak -125-126. Shape of Head in New-born Children-126. Early Feeding and Dosing, remarks on -127-128. Importance of Early Application to the Breast-129-130. Baths and Cleanliness Management of Navel-131-133. **—**130**–**131. Infantile Disorders, their significance and treatment—133-139. Nursing and Feeding of Child, rules governing-140-146. Artificial



INTRODUCTORY.

Whoever follows the calling commonly known as "Monthly Nurse," assumes a grave responsibility, and such duties should not be undertaken by any one without due consideration and preparation. For although the nurse has to act a subordinate part under the general superintendence of the attending physician, her duties are of the greatest importance, and require much care, watchfulness and delicacy. is no profession open to women which presents a wider field for noble usefulness, than that of ministering to the wants of her sisters and their helpless babes, at a time when, of all others, they are in need of the greatest care and tender sympathy. To fulfil these offices efficiently and acceptably, requires a combination of intelligence and virtue of which no true woman need feel ashamed. Indeed, the time has come in the progress of refinement and civilization, when the

nurse, especially the lying-in or monthly nurse, is expected to possess a certain amount of intelligence and special training, fitting her for the responsible duties of her vocation. The effect of this will be to banish from the sick room with the present generation, much of the ignorance and superstition which has hitherto been patronized by the public and tolerated by physicians.

Many very excellent and well-meaning persons, who have had large experience as monthly nurses, fail to give entire satisfaction, for the simple reason that they are ignorant on points of vital importance They have no knowledge, except what they have picked up here and there, and even this is mixed up with so many absurd maxims and superstitions, handed down by "old grannies," that their usefulness is greatly impaired. So true is this, that all classes, from the highest to the lowest, are more or less influenced by traditions and superstitions in regard to medicine and sickness, utterly unworthy of an enlightened age. Especially is this the case in all matters pertaining to pregnancy and childbirth, concerning which, popular ideas have undergone but little improvement during the past two thousand years.

Many nurses are not so "wise in their own conceit," however, but that they would gladly avail themselves of an opportunity to gain more information concerning their various and responsible duties, provided they could have access to a volume of instruction adapted to their wants, containing plain and intelligible reasons for many things which they are called upon to do, as well as for abstaining from many others which they are warned not to do. It is intended that the following chapters shall contain such instructions and explanations as will materially aid all those who are conscientiously seeking knowledge in this most important branch of woman's work. The object of the author is to elevate the nurse, by imparting satisfactory information concerning all that it is essential for her to know and to do in her capacity as such. And while this little book is not designed to prepare any one for the practice of midwifery, it is hoped that a careful perusal of its pages will increase the mutual respect of nurse and physician for each other. This desirable end can only be attained after a thorough understanding of their respective duties and responsibilities. A few plain words on this point,

therefore, will be appreciated by all sensible readers.

In every efficient and well-disciplined army there is one head—a general—who directs all important movements. This general has under him subordinate officers whose duty it is to carry out his commands; and, in war, disobedience on the part of the latter is punished by dismissal or death. This illustrates the relations which should exist between parties in a sick room. The physician is the officer in command; the nurse is his lieutenant, whose duty it is to see that his general directions are intelligently executed. On the other hand, it is equally the duty of the patient to obey all orders so long as she is under the care of a doctor, else her life, or that of her child, may pay the forfeit. It is the duty of the attending physician to look after the welfare of the lying-in woman and her infant during the period of confinement; he is responsible to the patient and to her friends for the general conduct of the case. No physician is safe in assuming such a responsibility, however, unless he has under him a reliable nurse, who will faithfully carry out his directions, and who is sufficiently intelligent and observing to make a full and satisfactory report of all that has transpired during his absence. In order to do this, it is essential that the nurse should know what to observe—what is natural, and what is unnatural, in the various stages of confinement—all of which points will be mentioned in detail in their appropriate places.

It has been said that some women are naturally born nurses, and to a great extent this is true, for in order to be a really first-class nurse, an individual must possess certain natural traits of character, which no amount of training can supply. The mere manual of nursing may be acquired and performed unexceptionably, and yet the manners, temper and general disposition may be so unfortunate as to render their possessor totally unfit for such service. Those natural gifts which are most prized in a nurse may be summed up in a few words: she should possess intelligence - that kind of intelligence which carries with it good judgment and discretion. She must have the good sense to adapt herself to surrounding circumstances - what the world calls tact—remembering that no two women feel and act alike at the approach of, or during labor. While one is cheerful and courageous,

the other will be melancholy, and full of the most dismal forebodings, and disposed to place an evil interpretation upon every sign and symptom. One will be self-willed, hard to please, petulant and troublesome; another will be fainthearted and credulous, ready to listen to all the injudicious suggestions of thoughtless but well meaning friends. A good, sensible nurse will take in all this at a glance, and so shape her conduct and words as to gain the confidence and good will of her charge, and thus obtain control over her. The woman who does not know how to do this by the force of her own character and good sense, will never make an acceptable nurse, no matter how accomplished she may otherwise be.

The conduct of the nurse is a matter of supreme importance, not only as a passport to her own success, but to the well-being and satisfaction of all with whom she comes in contact. Her influence for good or ill with a nervous, susceptible female, at the critical period of confinement, is very great, hence she should be guarded in her own conversation, and as far as possible see to it that others are likewise so. The lying-in room is too frequently made the

theatre for detailing horrible accounts of terribly hard, or even fatal labors, which those present have encountered in their experience. On some patients this kind of talk would have no effect, while with others it might result very unfavorably. On the other hand, an occasional word of encouragement, together with cheerful and diverting conversation, frequently has a wonderful influence for good.

The time once was when physicians, nurses, and every one around a poor suffering woman in labor, were allowed, or took the liberty of being decidedly free in their conversation. The occasion seemed to offer an opportunity for, or in some way suggest, vulgar thoughts and smutty jokes; nurses were almost universally given to this coarse habit. Happily, these disgraceful performances are not as popular as formerly, and it is to be hoped that they will become more and more discountenanced, until they are heard of only among the degraded and low. Many nurses are as refined and pure women as can be found anywhere, and it is de sirable that the number of such should be increased. There is certainly no reason why this should not be the case, and the writer will

feel rewarded for his labor, if, through his efforts, this end can be attained.

Next to the physician, the nurse is the most important attendant upon the lying-in chamber. Loving friends may gather around, but it is upon the physician and nurse that the laboring woman must rely for the safety of herself and child. Next to the physician, the nurse should hold the confidence of the patient and her family, and she should strive to prove herself worthy of this trust by her judicious demeanor and faithfulness in all respects. When the physician leaves the house, additional responsibility falls upon the nurse; before taking his departure, the former ought to give explicit directions as to what is to be done in his absence, which she should be careful to observe and carry out, and be able to make a satisfactory report on his return. Should anything occur during the absence of the physician, rendering his presence necessary, the nurse is expected to be sufficiently watchful and informed to be able to discover it promptly, so that no time need be lost in obtaining assistance. This should be done in as quiet and calm manner as possible, for fear of creating alarm and nervousness upon the part of the patient and her friends.

It should be remembered that there are sometimes many ways of doing the same thing, and hence, that different physicians have various methods of managing lying-in women and their infants. Their prescriptions and modes of management, while differing materially, may, in the end, produce the same result. Some nurses, who have had considerable experience, are occasionally so indiscreet as openly to condemn certain procedures, either because they are not familiar with them, or because they fancy the practice of some other physician better. Even though the motive may be good, such conduct is very wrong, and every really reliable nurse will always strive against making any comments calculated to excite the distrust of the sick, or bring the physician under whom she is serving into unfavorable comparison with others. She should be all the more willing to do this, as such matters belong exclusively to the physician, and he is alone responsible for his medicines and his methods. It is her duty simply to see that these are administered according to directions, and whatever comments she may make, should be addressed to the medical attendant privately. The fact is, that the more real knowledge of her business a nurse possesses, the less apt will she be to step outside of her own special duties, for she will thus better understand and appreciate all that is being done.

There is another subject to which the attention of the nurse is particularly directed, for the reason that it is one of the greatest importance, and involves the life in her charge. Lying-in women are subject to a disease known as child-bed, or puerperal fever, which is always dangerous and frequently fatal. This fever is highly contagious, and it is easily carried by physicians or nurses from one patient to another. The poison of puerperal fever clings to the hands and clothing of those who have come in contact with the discharges of a patient suffering from this disease with wonderful tenacity, and since the nurse is obliged to handle soiled napkins and other things saturated with such material, she is, of all other persons, the most to be dreaded by a newly delivered female. Instances where this deadly contagion has been carried from one person to another, are appallingly numerous, and can be vouched for by every well-informed physician. No nurse, therefore, should go directly from a patient of this kind to take charge of a fresh case of confinement, whatever the inducement, but should spend at least a week or ten days at home before resuming her calling. During this time her soiled clothing should all be washed in boiling water, or disinfected, and her hands ought to be cleansed daily with carbolic soap. Indeed, it would be a good plan in all cases for nurses to scrub their hands thoroughly with some disinfectant, before taking charge of a new case; a rule of this kind would save many precious lives.

It is very essential that every nurse should familiarize herself with the diet proper for a sick patient. She should not only be a judge of cooking when done by others, but she ought to possess practical knowledge sufficient to enable her to direct others, or, if necessary, with her own hands prepare any little meal for which a sick lady may express a relish. It is impossible for any one to know too much concerning what is useful, and the principles of cookery should be understood by every educated, practical woman. The sad lack of this knowledge in all classes of American females, is the foundation of no inconsiderable proportion of the worries of life. So true is this, that when a physician

orders so simple a dish as beef tea, which is done almost daily, he has, in a great many instances, to give directions how to make it. It will be a happy day for physicians, as well as for the sick, when those professing to be skilled nurses will so understand the details of their business, as to command a feeling of security in the minds of those who employ them,—when the physician can go away satisfied that he has left his patient in faithful and competent hands.

Since the management of the new-born child is largely committed to the nurse, it is of the utmost importance that she should thoroughly understand her duties in regard to it. nurses act as though they considered the baby their especial property, over which they assume to exercise exclusive control. Such persons nearly always entertain fixed and peculiar notions in regard to these matters, and are disposed to resent any suggestion of the doctor as an encroachment upon their rights. This idea, however, is not only unjust and erroneous, but it frequently leads to unpleasant and dangerous complications. The truth is that the physician is always willing, and even anxious, to entrust that she will be discreet in its treatment; for every doctor knows that if a baby is properly managed it will, in a majority of instances, require no special attention at his hands. A large proportion of the ills and troubles of infants is the result of mistakes in taking care of them at the start. It will be the object of one of the ensuing chapters to call attention to some of the common errors in the management of babies, while, at the same time, a few simple directions will be laid down, whereby these may be avoided.

CHAPTER II

PREGNANCY.

The period of pregnancy in a woman is that time which elapses between conception and the birth of the child. Inasmuch as monthly nurses are frequently consulted in regard to the signs and symptoms incident to this condition, it is desirable that they should have intelligent ideas on the subject, lest they may give expression to opinions calculated to lead to serious misapprehensions and blunders. There are many popular beliefs in regard to the significance of certain of these signs and symptoms, which have no real foundation in fact, and it is high time they were corrected.

As soon as a woman conceives, she is liable to certain strange feelings which are symptoms of her condition. These vary, however, in different individuals, and in the early months of pregnancy, none of them are absolutely reliable.

Some women experience peculiar nervous sensations, with an occasional sense of faintness, or dizziness, from the very moment of conception, but generally the first symptom which attracts attention is the stoppage of the menses, or monthly sickness. In a healthy person, who has always been regular, this is a very suspicious circumstance; but as other causes are capable of suppressing this flow, its absence is not a certain indication. On the other hand, some women have been known to menstruate during the first few months of pregnancy, and, in certain rare instances, during the whole of that period.

Commencing with the early weeks of pregnancy, most females snffer more or less with nausea, coming on suddenly, and without any apparent cause, usually in the morning on first rising from bed. This feeling frequently passes off when breakfast has been eaten, or that meal may be vomited up, after which no inconvenience is experienced until the next morning, or, possibly, for several days. Sometimes this "morning sickness," as it is called, becomes so continuous, and is accompanied with such frequent vomiting, as to seriously impair the health of the sufferer. These cases should always be in

charge of a physician. While such symptoms usually subside of their own accord between the fourth and fifth month, they have been known to continue throughout pregnancy.

Not unfrequently there is in addition to nausea, or in the place of it, a tendency to "water at the mouth;" this is simply an oversecretion of saliva, which occasionally flows from the mouth in large quantities. At such times there may be present a disagreeable metallic taste, and nearly always a fickle or perverted appetite. The patient loathes certain articles of food which she has usually relished, while at the same time there may be a craving for special dishes, some of which may have been unpalatable before conception. These are known as "longings," and there is a popular belief that the child is frequently influenced by such strong feelings on the part of the mother, resulting in what is known as "mother's marks." Hence the idea, so generally entertained, that the best way to prevent certain marks, as of raspberries, strawberries, etc., is to promptly gratify all such whims. In regard to this, it may be stated that when it is practicable, it is well enough to allow pregnant females, in a reasonable way, to follow the promptings of their appetites, but there is no good ground for the belief that ordinary marks, such as have been mentioned, are ever produced in this way. No doubt many instances can be cited where certain marks seemed to have been thus caused, but examples proving the contrary are so overwhelmingly frequent that it will not do to trust to such evidence.

It may as well be stated here, (though not strictly appertaining to the matter in hand) that the subject of marks and deformities in new born children is one of the most difficult problems with which medical men have to deal, and concerning which there is a great difference of opinion. It is probable that profound impressions on the mother's mind, coming suddenly in the shape of a shock, such as intense fright or disgust at the sight of certain objects, may affect the development of the child in the womb. How this is produced, is too deep a question for discussion here, and the less nurses and doctors talk to their patients about these things, the better, since such allusions are calculated to excite needless apprehension. On general principles, the prudent course is to avoid, as far as possible, frightening or disgusting a pregnant woman not so much for fear of marking her unborn child, as that it may, and frequently does, produce miscarriage.

During pregnancy, the entire force and energy of the mother's system seems to be taken up in forming the new being within her womb, hence other organs frequently neglect to perform their work properly; this is notably the case with the stomach, for which reason females while in this condition often suffer from dyspepsia. Not only is the appetite poor or capricious, but there is frequently an inability to digest what food is taken, and the result is sometimes a diarrhea, but more often a "sour stomach," accompanied with acid eructations and heart-burn,—the latter is a very common and distressing symptom. These troubles, however, if slight, are usually relieved by ordinary domestic remedies, but when severe, should be dealt with by the physician.

Among the early signs of pregnancy, perceptible especially to those familiar with the female, is a change of expression in the countenance. This begins to become apparent about the second or third month, and is much more markedly

perceptible as pregnancy advances. It is difficult to say, in all cases, just what this change is, but it is generally easily detected by an experienced eye. The complexion usually becomes paler and less clear, while the face grows apparently longer and thinner, - the latter being particularly noticeable around the eyes, the lashes of which frequently fall out. There is not unfrequently a fatigued or sad expression of countenance. Some women lose weight during the time they are carrying their children; others grow thinner during the first half of pregnancy, but rapidly pick up flesh after the period of nausea has passed. Still another class, with a natural proneness to take on fat, grow very stout. The latter, although looking healthy and strong, generally have a more tedious time with their first children than women who are sinewy and lean. People generally express surprise at this, and cannot understand why a thick-set, robust female should have a harder time in labor than her weaker and more slender neighbor. There are two reasons for this: first, low, "chunky" women often have much narrower hips - that is, the bones through which the child has to pass, are closer together than they seem to

be in one so fleshy; second, the bony passage between the hips is to some extent taken up with superfluous fat, which retards the progress of labor. It should be stated, however, that many low, fleshy persons have easy labors, even with large children, so that there can be no fixed rule on this subject.

During the early months, the pregnant female notices a change in her breasts,—they gradually enlarge and become firmer; the nipple is sensitive and grows darker, and there is a decidedly deeper color in the ring around it. In brunettes, this ring assumes a dark brown hue. At this time the blue veins under the skin of the breasts become quite distinct, and frequently a milky fluid can be squeezed from the nipple. When this occurs in a woman who has never before borne children, it is an indication of pregnancy, but if she has once nursed a child, such a sign has little or no value, since milk is retained in the breast for a long period.

About this time there is also an increased mucous discharge from the *vagina*, or *private* parts, which may occasion uneasiness; such a discharge, if not excessive, is natural under the circumstances. Should it be very considerable,

or become tinged with matter or blood, the family physician had better be consulted.

During the first month the womb falls a little lower than usual, in consequence of its increased weight, so that the abdomen is, if anything, smaller than before conception. In consequence of this slight falling of the womb, the bladder sometimes becomes pressed upon, so that there is a disposition to pass water more frequently than ordinarily. The womb does not rise above the rim of the hip-bones or pelvis until about the middle of pregnancy, or four and a half months. About this time the first sensations of movement in the child, known as "quickening," take place. Although one-half of the full period has now passed, the womb is comparatively small, but from this on, it enlarges rapidly, and the abdomen begins to swell.

Some persons entertain the opinion that the child has no life in it before the period of quickening. This is a convenient argument for those women who, in order to avoid the inconvenience of a family, have abortions produced on themselves. But there never was a more erroneous impression, for so soon as conception occurs, the child is as much alive as a seed which is planted

in the ground; it is not only alive, but it grows and moves, before quickening is felt by the mother. The child is surrounded in the womb by a very thin membranous bag filled with a clear watery fluid, in which it floats during the earlier months, and the reason why the mother does not feel motion sooner, is because the child is too feeble and small to make its movements felt. It is, however, just as much alive before this as it is afterwards, and the sin of destroying it at this stage of its existence, is as great as at any future period of its life. The sack containing water, surrounding the child, here spoken of, is ruptured during labor, and when that subject is reached, will be again alluded to.

After the fifth month, the womb mounts up and distends the abdomen, so that the navel begins to pout outwards about the sixth month, and finally at the end of eight and a half months, it has reached the pit of the stomach, or to the lower end of the breast-bone. At this time many complain of a sense of fullness, and not unfrequently suffer with coughing, from upward pressure of the womb upon the stomach and lungs. Such is the strain upon the skin and walls of the belly, that peculiar whitish cracks

and seams, resembling old scars, show themselves ever after a woman has carried a child to full term.

During the two weeks immediately preceding confinement, it is not uncommon for the sense of upward fullness of the abdomen to subside somewhat; this is caused by an actual sinking down of the child into the neck of the womb, which is now beginning to stretch and prepare itself for labor. There is now an increased feeling of pressure in the lower parts, frequent desire to pass water, and more or less pains in the back, hips and legs.

There are various other signs and symptoms of pregnancy, which will not be described, for the reason that it requires an educated physician to detect them, and to decide as to their value. Suffice it to say, that no one of the signs or symptoms which have been spoken of is a sure proof of pregnancy, except quickening, or motion, and even this is a matter concerning which wise heads have been deceived. When there is motion, together with a distinct sound of the beating of the child's heart, which can be heard as early as between the fifth and sixth month, there can be no doubt as to the nature of the case.

Immediately before labor, physicians sometimes able to make a pretty correct guess as to the sex of the child by the character of its heart-beats; outside of this, (which requires a good deal of experience) there is no sure way of judging or predicting what the sex will prove to be. Many, and some very excellent nurses, profess to form conclusions on this point by the peculiar symptoms experienced during pregnancy, or by the manner in which the woman "carries her child," that is, by the shape of the abdomen. But this is entirely dependent upon the position of the child, which may vary with either sex, and may not be precisely alike in any two pregnancies; consequently there is absolutely nothing in these circumstances upon which any person would be justified in forming an opinion. Those persons, therefore, who rest their predictions on such signs as these, simply evince their ignorance, and nothing else. It is true that a physician can sometimes tell by a minute examination of the abdomen of the mother, what part of the child will present, or be born first, and possibly, whether there are twins. but no one should be foolish enough to predict the sex on any such indication.

There are certain symptoms that occasionally show themselves during the last months of pregnancy, the import of which should be understood by every monthly nurse, for the reason that they sometimes signify danger, and no nurse should fail, when she has an opportunity, to have the physician consulted. The symptoms alluded to are swelling of the feet and legs, with unnatural puffiness about the face and hands. Some swelling of the feet and limbs, produced by pressure of the enlarged womb upon the veins which run up from the lower extremities, is not necessarily a dangerous symptom, for it is more or less present in nearly all cases before confinement. The same cause, likewise produces in many persons piles, or hemorrhoids, and in others enlarged, or varicose veins of the legs; these are inconveniences, devoid for the most part of peril. When however, it comes to the knowledge of the nurse that a lady whom she expects soon to wait on, has considerable swelling of the lower limbs, and perhaps of the private parts, or of the face—especially if this occurs in a first pregnancy, and is accompanied with headache, or any disorder of vision—she should lose no time

in urging that the physician be called. inexperienced young women in their first pregnancy, hearing it said that swollen feet, etc., are commonly present in their condition, allow such things to run on without notifying the doctor until it is too late, and finally, during or about the time of labor, they are apt to be seized with convulsions—puerperal convulsions, as they called—which are exceedingly danger-Let it be understood that every case of swelling of the feet is not necessarily one for apprehension, but when all the symptoms which have been mentioned fall together, it is very desirable that medical aid should be invoked at once. Neglect to do this, has in many instances, been followed by serious and fatal consequences.

As already mentioned in the introductory chapter, the nurse should exercise great discretion and tact whenever she discovers anything of sufficient importance to have the physician summoned. It would be imprudent, of course, to state her fears too broadly, either to the patient or the family. The old proverb, "a wise head makes a still tongue," is very applicable to such cases, and the better the

nurse understands her business, the more watchful will she be to look out for dangers, and the prompter to give the alarm, in a quiet way, to the doctor, who is the only person competent to deal with such grave questions.

In order to make her engagements satisfactorily, it is very essential that a nurse should know how to properly reckon the period of pregnancy. Almost every married female professes to know how to do this, and yet many make mistakes in their *count*, much to the inconvenience of doctors, nurses and every one else interested.

In the human female, conception usually takes place within a few days after menstruation; it may occur before, or midway between the periods, but most commonly within ten days thereafter. The duration of pregnancy is from 270 to 280 days, which is equal to nine calendar or ten lunar months. Women, like many of the lower animals, vary in the length of time they carry their young; some going considerably over the period named, while others fall short of it. When a woman conceives shortly after menstruation, she usually "misses" her next, and so on until she has passed over nine periods;

she is then almost sure to be taken in labor about the time when she would have had her tenth period, had she not been pregnant. Counting back to her last menstruation, this would make 280 days, or ten "moons" of 28 days each. With persons who are generally regular, and who keep a record of their monthly sickness, this is a very safe way to calculate the time of labor. Inasmuch, however, as conception may not take place for some days after menstruation, some allowance should be made for this in reckoning the period of pregnancy; hence a very common method is to count back three months and add seven days. For example, suppose menstruation ceases on the 10th of July; counting back three months and adding seven days would make it April 17th when labor might be expected. Still another method is to count nine months forward, from the day on which menstruation ceases and add seven days.

Sometimes, in spite of all calculations and precautions, mistakes may occur in making a count, for, as already stated, some women menstruate after conception, while others may conceive midway between their periods, or, when she is not menstruating at all, as during the

time she is suckling a child. Instances of this latter kind are by no means uncommon, and may lead to much confusion in making any calculations as to the probable advent of confinement.

CHAPTER III.

PREPARATION FOR LABOR.

The best preparation for labor on the part of a pregnant female, is for her to observe all the ordinary laws of health. As far as circumstances will permit, moderate and wholesome exercise should be taken, up to the last moment. While gratifying reasonable demands of the appetite, excesses in this particular should be especially guarded against towards the close of The patient's mind should also be as free as possible from undue excitement, and when the nurse finds that there is unusual depression, she should do all in her power to induce a more cheerful and hopeful disposition. There is an idea with many, that daily baths and application of oil to the external parts during the last few weeks, tend greatly to facilitate labor. such things may do no harm, there is no reason to believe that they accomplish much real good;

mental and physical health is worth all the inunctions and salves combined.

Being informed as to the probable time when her services will be needed, the nurse should hold herself in readiness to obey the summons promptly. If she be already in the house several days before labor sets in, she should see that all needful preparations are made for the event. When the physician who is to attend to the case has not been consulted, it would be well to remind the patient that she ought not to permit her bowels to remain constipated at this time, as an empty condition of the lower bowel very much facilitates the birth; when this is neglected until active pains set in, it is often times too late to effectually and conveniently remedy the evil. For the same reason it is always a good rule to see that a female empties her bladder before being put permanently to bed in labor.

In all cases, but especially in first pregnancies, something should be done to harden the nipples, to prevent their cracking and becoming sore during the first efforts of the child at nursing. A neglect of this precaution frequently causes great inconvenience and suffering—some-

times leading to that much dreaded complication, rising breast. When the physician is engaged in time, as he always should be, he usually prescribes some simple lotion for the nipples which tends to prevent this difficulty. Nothing is better for this purpose than a little whisky and alum, tincture of myrrh, port wine, or ordinary alchohol with a little tannin added; either one of these may be applied with a bit of sponge or rag twice a day during the last month.

There is a remarkable difference in the nipples of women; some are small and flat, amounting in fact to no nipple at all, while others are large and prominent. In small, flat, pointed nipples, which do not rise above the general surface of the breast, the skin is usually smooth and less liable to crack than in those that are large and prominent, with broad, blunt ends. In the latter variety the surface is rough, and cut up into natural fissures resembling a mulberry or raspberry; these are very prone to become terder, and in young mothers should be watched carefully. When the nipples are excessively short and flat, great difficulty is sometimes experienced in getting the child to

suck. The remedies for this state of things will be given hereafter, and the subject is only alluded to here to warn against active measures, such as sucking, the use of purips, etc., for the purpose of drawing the nipple out before confinement. These should never be resorted to at this time, unless under special directions of a physician, since they are calculated to bring on premature labor. Some recommend the wearing of nipple-shields during the last few weeks, for the same purpose, but even these, if attended with inconvenience, had better be dispensed with until after confinement.

The room in which confinement takes place should be chosen with a view to its ventilation and quietness. Many are so situated however, that they cannot command all the arrangements desirable under such circumstances, hence the discreet nurse will do well only to look out for essentials, and not lay too much stress on trivial matters. Some are disposed to attach a great deal of importance to the style of bed, and, if it be double, to the particular side to be occupied by the patient, etc.; these, although matters of choice, are not absolutely important, and should depend somewhat on the shape and

general arrangement of the room. When it can be avoided, the bed should not stand in a corner; when practicable, the patient should be on the right-hand side, but if this is not convenient, it is quite immaterial which side of the bed the patient occupies, since the physician should be able to perform his part as well with one hand as the other. When it can be procured conveniently, it is desirable that delivery take place on a single bed (not a lounge), since such an arrangement allows of easy access to the patient from either side. After the labor is over and the patient's clothing etc., is arranged, she can be gently lifted into her permanent bed.

Whatever bed is used, whether double or single, the patient should lie upon a comfortably firm mattress, upon which certain special articles are arranged to receive the discharges and protect the bedding. These preparations are very simple, and will now be described. A doubled cotton comfort or bedquilt is first placed over the mattress, on the side to be occupied by the patient; on top of this comes the sheet. Immediately over the sheet is placed a piece of impervious material, such as oil or rubber

cloth, about four feet square, in such a position that it will reach from the lower edge of the ribs down even with the knees; allowance being made for the position of the patient, who should lie low enough in bed for her feet to press firmly against the foot-board. Over this is smoothly spread three or four thicknesses of an old comfort or bedquilt—overlapping the oil-cloth in every direction—and confined at the edges by safety-pins. The patient lies immediately on this dressing, which receives all the discharges, and is intended to be removed after labor, and substituted by other similarly folded soft cotton material.

When the patient occupies a special bed during labor, and is afterwards transferred to another, it is better, (though not essential) to have two pieces of oil-cloth; the second piece is placed, together with a similar dressing to that already described, on the permanent bed, so as to guard that against accidents.

The materials for the arrangements described, should all be collected together, and ready for use before labor commences. The indications of the approach of this event are generally well marked, though this is by no means invariably

the case, as some females are taken sick suddenly, and without any warning. Generally, there is towards the last, in addition to the sense of settling down of the womb, already alluded to, an occasional "drawing" sensation, accompanied with more or less pain in the lower part of the abdomen, and felt at intervals, more particularly at night. These are preliminary pains, and are caused by moderate contractions of the womb (which is simply a large muscular bag), and they indicate that this organ is getting ready for the work before it, that is,—the expulsion of the child. When these drawing sensations are experienced, especially when the patient is lying down, the womb can be distinctly felt gradually to contract and harden under moderate pressure by the hand laid upon the abdomen; this hardness passes away as the pain subsides. Many inexperienced persons imagine that these are actual labor pains, and hurry a messenger for a doctor, but they prove to be simply premonitory, and may be felt as early as a month before labor sets in. One of the surest indications of the approach of labor, is a decided increase of a peculiar discharge from the external parts, resembling the white of egg; this usually becomes tinged with blood as the first true pains get fairly under way.

Sometimes the "bag of waters," previously alluded to as surrounding the child, bursts suddenly, before any considerable pain is felt; when this occurs the patient is startled by a sudden rush of water from the external parts. Such discharge always indicates that labor is close at hand; generally active and decided pains follow quickly, and although this is not invariably the case, labor is scarcely ever deferred over a few hours. The waters, however, do not usually break away at this early period, and it is rather unfortunate for this to occur, since their retention until labor is somewhat advanced, materially assists in pressing the mouth of the womb open, which has always to be accomplished before the body of the child makes any actual progress.

The nurse should see to it that every thing needful for both mother and child are where she can conveniently lay her hands upon them, thus avoiding confusion and unnecessary explanation at a time the mother is either suffering or exhausted. Cold and hot water should be

at hand; a supply of ice should always be in the house at such times, as it is one of the best remedies in case of hemorrhage, and when this occurs there is no time to be lost in sending off for it. A wash-bowl and towels should be in the room, also a little lard, or what is better, a small crock of vaseline; the nurse should also provide a sharp pair of scissors, and a piece of narrow tape, or coarse darning cotton, two feet long, for tying the cord.

Most women lay great stress on the application of a binder after labor; they consider it indispensable to the preservation of their figures. The nurse will therefore do well to see that a proper one is provided. An ordinary bolster cover, or some such contrivance is generally employed for this purpose, and when applied a folded towel is placed over the lower portion of the abdomen as a compress to the womb. Many, however, prefer to manufacture a special bandage for the occasion out of stout muslin, cut bias, about one and a quarter or one and a half yards in length, and varying in width from twelve to eighteen inches, according to the size of the individual. It should be narrow above, wider below, and gored in such a manner as to fit the figure and come down snugly over the hips. It may here be stated, however, that the merits of binders, as preservatives of the figure, are greatly exaggerated in the popular estimation. Frequent pregnancies always relax the walls of the abdomen, and no binder, however artistically made and applied, will prevent this. The reason why one lady protrudes more than another is, generally, that she has a thicker deposit of fat on her person. Moreover, such protrusion always grows more apparent with age, and in proportion to the number of pregnancies and size of the children. The natural tendency of all women, who have borne many children, and who grow fleshy, is to become full in the abdomen, and physicians and nurses are frequently unjustly blamed for what no art can avert. A snugly fitting bandage is a great comfort after labor, and this is probably its chief advantage, while on the other hand when drawn too tightly, with a view to violently compressing the figure, it often works great harm, by forcing the womb down into the relaxed parts below, thus predisposing it to permanent displacement. physicians never use a binder, and their patients suffer no ill effects in consequence.

In putting a lady to bed, every contingency should be anticipated with a view to neatness and dispatch; hence some provision ought to be made to save her garments, as far as possible, from being soiled. During labor it is well for the patient to wear only a chemise and a short gown; these should be carefully and smoothly rolled up to a level of the shoulder blades—thus coming above the temporary dressing of the bed. The lower portion of the person can in the meantime be protected by a petticoat secured at the waist,—the latter to be removed after the birth of the child. When the patient has been carefully sponged off after labor, and the binder adjusted, her chemise and gown may be pulled down, and if, as is ordinarily the case when such precautions have been taken, they have escaped being soiled by the discharges, no further change of clothing will be rendered necessary. When a lady has been much prostrated by an exhausting labor, this is a point well worth looking after and securing, if possible.

CHAPTER IV.

LABOR.

Although the lying-in woman is under the immediate care of the attending physician during labor, there are many things which it is essential for the nurse to know, and to do, during this critical period. Knowledge always imparts confidence, and no nurse can perform her part as assistant to the physician with efficiency and composure, unless she fully understands, first, the nature of those processes which we call labor, and second, the difference between natural and unnatural labor.

Labor is divided into three stages, each one differing materially from the others, and each marked by the accomplishment of certain distinct results. The first stage commences at the beginning of true pains, and ends with complete opening of the mouth of the womb. When this is accomplished, the pains change in character,

and the child commences to descend through the hip-bones, or *pelvis*, towards the external parts; this is the *second* stage, and it ends with the birth of the child. The *third* stage consists in the expulsion of the *after-birth*. This latter is a large saucer-shaped, fleshy mass, through which the child draws its nourishment from the mother prior to birth. It is adherent by its flat surface to the inner wall of the womb, and is connected with the child by the *cord* at the *navel*.

When the first stage of labor commences, the child is completely within the womb, the mouth of which is closed. The pains experienced during this stage consist simply in contractions of the muscular wall of the womb, and by which the mouth of this organ is gradually stretched open and pulled over the presenting part of the child. They are usually slight at first, and return at long intervals, but gradually become more and more severe and closer together, until the suffering is intense. These are sometimes called "grinding" pains, and are particularly hard to bear, not only on account of their peculiarity, but for the reason that they do not seem to the patient to be effecting much; she is prone to become impatient, and make frequent complaints

to the doctor and nurse that her pains are doing her no good. And right here, many nurses and others make a mistake, in urging patients to bear down and "help themselves." This is very bad advice, because no voluntary straining effort can effect anything at this stage of labor, and when indulged in, only tends to discourage and exhaust the sufferer. It must be understood that the contractions of the womb, like the beating of the heart, are not controlled by the will. Instead of urging the patient at this time to bear down, thus wasting her strength, it should be explained to her that the pains are only dilating the mouth of the womb, which must be fully open before the child can pass out, and any perceptible progress be made. In the meantime she should be cheered by assurances that with patience and courage everything will come around all right. It is not a good plan, however, for the nurse to make too many fair promises as to the probable duration of labor, until she learns privately from the doctor the real state of facts; a sensible nurse will always take her cue from the physician in this respect.

During the early part of labor it is not necessary for a lady to go to bed; she can use her own pleasure as to whether she will lie, sit, or walk the floor, and, if it suits her, or affords her any comfort, she can with propriety alternate between all of these positions. The usual obstetric position, in this country, is on the back, though some few prefer to have the patient lie on her left side with her back near the edge of the bed; in either case, the head and shoulders should be somewhat elevated.

It is not an uncommon thing when the doctor arrives during the first stage of labor, to find the patient in bed, and Barrounded by a large gathering of female friends, one of whom may be sitting on each side holding to, or pulling at her hands whenever a pain comes on. This is injudicious, for the reason that the time has not yet arrived when pulling at the hands can in any way aid in the expulsion of the child, and such a procedure only wears the patient out, and makes her arms unnecessarily sore. The proper time for this is during the second, or bearing down stage, presently to be described. During the first stage a female can do with her hands as she pleases; she ought at any rate to have free use of them if she so desires. Some are silly enough to believe that it is injurious to extend the arms above the head; that this in some way influences the position of the child,—it is hardly necessary to say that this is one of the many superstitions in regard to this subject which has no truth in it.

In the course of the first stage of labor, it is not uncommon for patients to be affected with fits of slight shivering, or spells of sudden sick stomach and vomiting. Inexperienced bystanders sometimes misunderstand these symptoms, and attach to them an unfavorable significance. But the nurse should know that they are generally temporary, and rather favorable than otherwise—since they generally indicate that the case is making good progress. There is an old saying, which is usually true, that a sick labor is an easy and quick labor.

It is not well to have a crowd in the room at such times, as it creates inconvenience, and tends to render the air less pure, which increases the depression of the laboring woman, rendering her less capable of going through with the trial before her. Besides the nurse and physician, one or two intimate female friends or relatives, is the utmost limit to the number of persons who should be admitted to the lying-in chamber. This is a matter in which friends and neighbors

should exercise discreet delicacy, and while manifesting their sympathy and interest in a proper way, they should on no account intrude themselves, unless specially invited.

The presence of the husband is a question to be decided by the wishes of the wife; some wives like their husbands constantly at their side; others, prefer that he should remain in another room. Unless his presence is particularly desired, the latter course is preferable, for the reason that he can do no good, and his sympathies and anxiety not unfrequently alarm and demoralize the wife.

When the mouth of the womb is fully dilated, the second stage of labor begins. If the bag of waters has not ruptured before, it generally occurs at this time. Occasionally the sack containing the waters is so tough that the doctor has to rupture it with his finger-nail, or the tip of some sharp instrument, such as a piece of goose-quill or common tooth-pick. This little operation is perfectly simple and painless, and not at all to be dreaded. At the commencement of the second stage of labor, the mouth of the womb is fully open, and the presenting part of the child begins to pass out of this organ, and to descend through

the lower passage of the mother. There is now a marked change in the character of the pains; from being sharp and grinding, causing the patient to cry out, they become bearing down, and are accompanied with a straining effort. patient does not need to be told when this stage arrives, this being a natural process, her own feelings will prompt her to bear down, and thus aid the womb in its expulsive efforts. She may now be encouraged to do this, and told how to properly take her pains, as it is called. The right way to take a pain is for the patient, when she feels one coming on, to draw in a full breath, brace her feet well against the foot of the bed, and compressing her jaws and lips together, bear down or strain steadily and firmly. As the pain passes off, the breath is suddenly expelled, and is followed usually by a complaint of pain. These efforts are rendered more efficient by allowing the patient to grasp a coil of sheet or cord, attached to the foot of the bed, or by pulling on to the hands of some one sitting on each side near the knees. In very strong pains, women will sometimes pull so vigorously with their arms as to raise themselves up to a halfsitting posture, and actually turn purple in the face, but if the pain is unusually hard and prolonged, there is a cry of suffering and a fresh breath taken, which always relaxes the effort, and renders the suffering more bearable. This is a fortunate provision of nature under such circumstances, and physicians frequently resort to this device for interrupting pains that are too severe, by encouraging some outcry. But the fact that the expulsive forces are thus mitigated, shows the importance of the female avoiding making too much complaint, or interrupting her pains by unnecessary conversation. Labor is frequently retarded in this way, whereas if the sufferer only understood the importance of helping herself in the manner described, she would get through much sooner.

During the intervals of pain, especially in the second stage of labor, the patient should be encouraged to improve the opportunity for rest as far as possible, by keeping quiet, and desisting from idle comments, thus regaining her breath and strength for another effort. The intervals between pains are usually of quite regular duration, though they become shorter as labor progresses, so that the patient has less time for rest than in the beginning. Labor pains vary, how-

ever, in different women, and in the same women during different labors; as a rule, a "good pain" should last from a third to half a minute, or even longer, and return after an interval of from two to five minutes; sometimes they come on with only a minute intervening.

Not unfrequently, and especially when the child's head is the lowermost or presenting part, the patient complains bitterly of sudden cramps in her legs, or of a severe pain in the hips; these peculiar pains, which may come on without warning, and distinct from the ordinary suffering of labor, are caused by the pinching of nerves between the head of the child and the bony passages of the mother. They generally pass off as the head is moved down by the next pain, but sometimes the agony is so great that the physician is compelled to apply forceps to complete delivery, and thus put an end to her intolerable anguish.

A perfectly natural labor is one which is completed by the powers of nature. In order for delivery to be thus effected, the child must come down, or "present," in certain ways. There are several positions of the child, which though entirely different, may still admit of delivery with-

out the necessity of help from the physician, while there are others in which the child cannot possibly be born until the position is either corrected, or artificial delivery resorted to.

By far the most common presentation is the head, usually the back of the head; this is the most favorable position for the safety of both mother and child. When thus presenting, it is usual, if the labor be at all tedious, for the presenting surface of the scalp of the child to appear swollen and puffy; this corresponds to, and is caused by the partially dilated mouth of the womb, and is brought about in a manner which can be best illustrated by pressing the palm of the hand over a hole in a board; that portion of its surface which corresponds to the hole will present a swollen, puffy appearance. This condition is temporary, and gradually subsides in the course of a day or two.

Sometimes the *face* presents, and when the doctor sees the patient in time, this is generally a favorable presentation, though the child is liable to be born with an ugly, bruised appearance about the eyes; this is brought about in the same way, and is similar to the swelling already spoken of as appearing on the back of

the head, when that part is born first, and, like it, soon passes off, leaving the child sound and well. These things are mentioned, because some persons have blamed the physician for the blood-shot condition of the eyes of children thus born, imagining it in some way due to bungling on his part, but an intelligent nurse ought at least to know that such a state of things is natural in face presentations, whenever the labor has been at all prolonged.

There are certain peculiar positions of the head which are unnatural, and may require some operative procedure on the part of the physician to correct them; but as the scope of this book does not contemplate a full and minute discussion of all these matters, they will not be further noticed. These questions all belong exclusively to the doctor, and it is the part of the nurse simply to render such aid as he may require of her; she is not responsible for what is done, and should be careful to avoid expressing opinions as to the propriety of any measures that may be resorted to for the salvation of either mother or child.

Next to the head, the most frequent presentation of the child is the opposite end, that is to say, the breach, or lower limbs; the latter

may present in various ways,—for instance, one foot may come down through the external parts, the other limb being doubled up by the side of the body, or both feet and both knees may present. Generally, when this end comes first, the breach or the buttock is the presenting In many of these presentations the part. chances of delivery are favorable for the mother, but not so good for the life of the child, which is frequently still-born—being suffocated before the head (which is the largest part of its body) can be extricated. Such an accident cannot aiways be avoided, and may occur in the most skillful hands,—a fact that every competent nurse ought to know.

Occasionally, instead of the head, or the breach, coming down first, the child occupies an unnatural or crossed position; in which case a shoulder, an arm, or any part of its side may present. Under such circumstances it is almost impossible for delivery to take place, unless the physician previously performs the operation of turning.

Any of the foregoing presentations, but more especially those of the feet and breach, may be complicated with a *falling down* of the *cord*

in front of the child, so that it is caught between the latter's body and the passages of the mother. Since the life of the child, before birth, depends upon free circulation of blood in the cord, which connects it with the system of the mother, it can be readily understood that *prolapse*, or falling down of this part is a very serious matter, so far as the child is concerned, and requires prompt and decided action at the hands of the physician, and even in spite of all precautions, it frequently perishes under such circumstances.

A labor may be in all respects natural as regards the presentation, and yet various circumstances may exist calculated to retard it. Some women go through easily and quickly, while others invariably have what they call a "hard time." As might reasonably be expected, most difficulty is experienced in first labors, for the reason that the parts are less disposed to yield than in those who have already borne children. Every nurse should have an idea of the length of ordinary labor, and no one can be correctly informed on this subject, who does not know that the time thus occupied may vary considerably within the bounds of perfect safety. Friends of a lying-in woman frequently become unnec-

essarily anxious, when they find that labor is somewhat tedious, or prolonged, and evince their anxiety by plying the doctor with questions concerning the probable result. This is quite natural under such trying circumstances, and he makes such replies as are calculated to repress unnecessary fears. His efforts in this direction, however, may be rendered futile, by injudicious remarks or actions on the part of the nurse, who by her inexperience, or ignorance of the true situation, may needlessly increase the apprehension of the patient and her friends. But if she has a tolerably correct general knowledge in regard to these matters, she will conduct herself with a degree of composure and confidence which is calculated, not only to strengthen the physician's hands, but to keep up the flagging courage of the sick woman.

When there is no bony contraction, or other obstacle obstructing the course of birth, the latter can only be delayed through inefficiency of the pains, or by an unyielding condition of the soft parts. This may occur in either the first or second stage, and sometimes in both. Great delay may take place during the first stage owing to slowness and difficulty in dilating

the mouth of the womb; the time required to accomplish this may vary from a few hours to an entire day, or even longer. So long as the bag of waters has not ruptured, there is usually no occasion for anxiety on this point, because the doctor, when he thinks it necessary, can give a dose of quieting medicine and allow his patient a little rest, after which she rouses up and the labor usually progresses to a favorable termination. The average duration of the first stage of labor is, with those who have already had children, from three to five hours; in first labors this period usually lasts several hours longer.

Delay in the second stage may be due (in the absence of any mechanical obstruction) to inefficiency of pains, rigidity or tightness of the external parts, or to large size of the child. With first children it lasts on an average nearly twice as long as with subsequent births; and is, as a rule, from one-half to one-fourth shorter than the first stage, or even less. It is not desirable that this stage should be too rapid, since there is danger of rupturing the mother; on the other hand it will not admit of as much delay as during the early stage, and before the waters have come

away. Hence, the medical attendant frequently feels called upon to terminate labor, in the interest both of the mother and child, by applying forceps; and when such a necessity arises it is the duty of the nurse to render assistance with a calm demeanor, avoiding a display of trepidation and excitement, which has done much to give persons a most unnecessary dread of the mere mention of such a thing as an "instrument" in the lying-in room. The practice of midwifery is now far in advance of what it formerly was, and the public generally, especially nurses and lying-in women, should be taught to know that in competent and judicious hands, the forceps, so far from being an object of dread, should be regarded as the surest and safest agency for cutting short the agony of an unavailing labor. Happily, it is not necessary to use instruments very often, but certain it is that many a life has been sacrificed by delay in resorting to them, -a delay too frequently based upon ignorance and prejudice. Persons should not employ a physician unless they are willing to be guided by his advice, and in such cases, he is the only proper person to assume the responsibility of deciding what is best to be done.

In many cases the medical attendant may deem it advisable to administer chloroform or ether, for the purpose either of relaxing the parts, and thus hastening labor, or of mitigating pain. These agents should always be given with the greatest caution, and their use commenced by the doctor in person, and continued under his immediate supervision. Inasmuch, however, as he has to look after the progress of the labor, he cannot always continue the administration with his own hands, in which event this duty usually devolves upon the nurse; it is important, therefore, that she should duly appreciate her responsibilities and know how to meet them. Chloroform is more frequently used in labor cases than ether, and being far the more powerful agent of the two, it requires much less quantity and the more care and watchfulness. Chloroform is usually inhaled from an ordinary pocket handkerchief, or table napkin, simply folded, or pinned into a funnel shape. inhalation is always to be commenced gradually, only 20 or 30 drops being poured into the napkin at first, which latter should be held over the patient's mouth and nose in such a manner that she can get some air while breathing the chloroallowed to take a whiff or two, and then it is withdrawn for a while, or perhaps until the approach of the next pain, when the same procedure is gone through with again. When chloroform is given in the first stage of labor, very little is required at the outset of each pain, but as labor progresses, and the second stage advances—the physician being assured that it is well borne—the quantity and duration of inhalation may be slightly and gradually increased. In the meantime the patient becomes more and more under the accumulated influence, until finally with the last and worst pains, her sensibilities are quite benumbed.

The idea, in labor cases, is not to render the patient absolutely unconscious, as in surgical operations, but simply to blunt the keen anguish of her suffering. This is one of the main reasons why, out of the thousands of cases in which they are employed, we scarcely ever hear of fatal accidents with either chloroform or ether in midwifery practice.

Ether is administered in the same manner as chloroform, only that more is required. In either case a close watch should be kept upon the countenance and breathing; should the latter become irregular, or suspended, the napkin must be removed instantly.

When the child is born the nurse should be ready with strings for tying, and scissors for cutting the cord. Many persons act at this time as though they considered this a most urgent matter, and are in the greatest hurry to thrust these things into the doctor's hands. This, however, is unnecessary, indeed it is better to wait, at least until the child cries out lustily, before the cord is tied. Many prefer, and with good reason, to allow some minutes to elapse before the cord is severed, in as much as the child continues for some little time after it comes into the world, to draw blood from the after-birth, which is still retained in the womb. In the meantime the physician places the baby in a safe and comfortable position, where it is neither exposed to cold nor to strangulation by the discharges. When the cord is finally cut, the nurse receives the child and carefully wraps it in a soft flannel shawl, which has been warmed by the fire, in order to protect the little stranger from shock by the cold air.

The child having been turned over to the nurse, the physician looks after the mother, this being an important time with her, and one requiring more watchfulness than at any other period of labor. There is a popular notion that as soon as the baby is born the trouble is all over, and friends are prone to rush in and offer their congratulations. Such a course is injudicious, in as much as it is calculated to excite the patient at a time when, of all others, she needs perfect repose and calmness. Many a poor woman has gone safely through labor, only to have her real troubles begin at the birth of the child; the physician never forgets this, and the nurse should bear it in mind also, and see that too many are not admitted into the room, for the patient has yet to be conducted through the third stage of labor, which consists in delivery of the after-birth. This cannot be accomplished by a voluntary effort on the part of the patient, but by contractions of the womb, similar to those that expelled the child; it is thus squeezed down upon until it is finally thrown off, with a little help from the doctor. Unless this contraction takes place there is risk of serious hemorrhage, or flooding, as it is sometimes

termed,—an accident always to be avoided if possible. In order to secure this end, the physician generally gives a full dose of ergot just as the child is being expelled, the effect of which is to act powerfully on the womb and cause it to contract firmly. When this is the case, secondary pains usually come on in from ten to twenty minutes, and with a little aid from the physician, the after-birth usually comes away without difficulty. In the mean time the nurse has at hand a chamber, or some other suitable receptacle, into which it is placed until it can be disposed of.

After delivery of the after-birth, the womb should still remain firmly contracted, and can be readily felt by the hand low down in the front portion of the abdomen, as a firm round body about the size of an orange. The physician is always pleased to find this condition of things, as this contracted state of the womb is a security against flooding. Many nurses are in too great hurry to apply a binder after the after-birth comes away, but there is no occasion for haste in so doing, for the prudent physician will linger in the room for from thirty minutes to an hour after this event, in order to see that everything

is going on all right. During this time he will frequently apply his hand to the abdomen and feel the womb, to ascertain whether it remains properly contracted. The binder should never therefore be applied until the doctor is fully satisfied on this point. In the mean time the nurse can place some additional covering over the patient, who is disposed to become chilly after labor, and remove the soiled cloths that have become wet with the discharges, substituting similar articles that are warm and dry. A napkin is also warmed and folded, and placed over the external parts, to protect the bedding from further discharge. After this is done, and by the time the baby has been washed, dressed, and made comfortable, the mother will generally have recovered sufficiently from the immediate effects of labor to admit of further care.

CHAPTER V.

MANAGEMENT OF THE LYING-IN WOMAN.

Every woman should be permitted to enjoy at least an hour's repose of mind and body after labor, before she is disturbed to make any changes in her own clothing, or that of the bed, unless it be to remove the wet and disagreeable cloth containing the discharges. At the end of this time, the nurse may carefully sponge the external parts with warm water, afterwards annointing them with sweet oil, cold cream, or vaseline; the last is by far the best for this purpose, for besides being remarkably soothing and healing, it is not prone to become rancid, as is the case with other oily substances. All temporary, soiled garments should be carefully removed, without effort on the part of the patient, and the bed made thoroughly clean and comfortable; if she occupies a temporary bed, she may now be gently lifted into another, which has been prepared for her. In making this transfer, no female, however strong and well she may feel, ought to be permitted to stand or walk, since such exertion, under the circumstances, is always hazardous. A fresh warm napkin is placed between the thighs, in such a manner as to catch all the discharges; this should be examined by the nurse from time to time in order to ascertain the amount of bleeding. A cup of milk, or some other light nourishment, may be taken if desired, and the room being darkened and made quiet, the patient should be encouraged to take a few hours' sleep.

The physician, before taking his departure, will direct what medicine, if any, is to be given in his absence, and the nurse should be certain to understand clearly the circumstances under which each and every dose is to be administered. Many physicians are in the habit of leaving a small vial of extract of ergot, with directions how to use it in case of sudden hemorrhage; and if after-pains, as they are termed, are severe, he may think it necessary to prescribe something especially for them. Such pains are much more prone to occur in women who have borne a number of children. The reason for this is, that in

first labors, the womb after becoming empty, contracts down more closely, and thus squeezes out the blood more completely than it does after having been distended by a number of pregnancies; hence, in the latter class, small clots are apt to be retained, which excite contractions and pain. The best way to prevent after pains, therefore, is to procure the most perfect contraction possible after labor; this is another reason for giving ergot, and for watching the condition of the womb for some little time after delivery of the after-Many persons have an idea that ergot increases after-pains, but instead of so doing, it is the surest of all preventives, if given in proper doses. In some cases, however, no precaution can entirely ward off this troublesome and distressing symptom, which is generally aggravated by placing the child to the breast. They commonly pass off by the second or third day, and sometimes sooner, if in the meantime the clots which give rise to them are discharged.

The diet of the lying-in woman is a matter of great importance, since it is easy to err in either extreme—of giving too much, or allowing too little. In all these matters the nurse should be guided by the views and directions of the physi-

cian in charge; yet, it is proper to say, that the old-fashioned practice of feeding such patients on the thinnest slops, is fast falling into disrepute. After thoroughly testing this question, physicians of the best experience have become convinced that harm, rather than good, results from starving women after the exhaustion of labor. The energies of the system, having been taxed to their utmost, require to be nourished and built up by such aliment as can be readily digested. Solid food should, on this account, be sparingly indulged in for a day or so, but there is no reason why the patient should not be allowed a cupful of beef-tea, plain soup, or milk, combined with toast or other light bread, at intervals of a few hours. On the second day, a soft-boiled egg, if relished, is exceedingly strengthening and easily digested, and is better for this purpose, than to rely on the stimulating effects of wines or other liquors. It is not necessary in this connection to name over a complete list of such things as the lying-in woman may take with impunity and benefit; all that is desirable is for the nurse to remember that either extreme in feeding her patient is bad, and that she may be injured by getting too little nourishment, as well as by having her stomach overloaded with indigestible substances. After milk has been fully established in the breasts, and if the patient seems well, she may gradually return to her ordinary diet.

A few words may be added here in regard to milk as an article of diet for the sick. There is a wide-spread popular prejudice against this fluid, based upon the assumption that it is "feverish," or, in other words, that it in some way excites and increases fever. Many most excellent physicians have fallen into disrepute with patients and their friends, through this strange delusion; for it is a delusion, founded on no fact or reason whatsoever. It is remarkable that so many otherwise intelligent persons, should be influenced by an idea so utterly contrary to all reason, for it is only necessary to recall what milk is, and to be assured that it is from a healthy and well-fed cow, to perceive that it is of all things, the most suitable diet in just such cases as many people fear to give it. It is essentially nature's food; constructed with a view to its easy digestion and assimilation, it is more readily converted into blood than any article of diet which we possess. And being intended

originally for the young of animals, it is composed of the blandest and most innocent materials, in such proportion and combination as is best calculated to impart strength and nutrition. Ordinary fresh cow's milk is composed of about 87 per cent. of water, nearly 5 per cent. of cura, about three per cent. of butter, and nearly 5 per cent of sugar. All these ingredients are required to build up and nourish the calf, and exist in exactly the proportion suitable to its delicate young stomach. The component elements of milk are such as are drawn from both animal tissue (flesh) and vegetables; and with a little lime water, to prevent its curdling too rapidly, it is, as a rule, the most suitable of all other articles of food for a sick and exhausted person. There is nothing about it which is peculiar, or which is different from the elements of most other ordinary diet; certainly nothing calculated to excite feverishness, and no one need fear to partake of it on this account. Should a lying-in woman at any time express a fancy for a glass of milk therefore, there is no good reason why it should be withheld, for nothing could be simpler or more innocent. The only objection to a free use of milk under such circumstances, is the fact that it tends to promote a fuller secretion in the breasts than some other articles of diet, and in this way may, in certain cases, distend them to a disagreeable extent, and beyond the needs of the child.

It is important that the nurse should observe closely the passages from the patient's bowels and bladder, so that correct and satisfactory answers can be made to inquiries of the physician when he comes. Within a few hours after delivery, the patient ought to make an attempt to pass her water. It is a good rule not to allow a recently delivered woman to assume an upright or sitting posture, for while such an imprudence might be followed by no inconvenience, it is a risk which no one should run. In the first few days, therefore, all discharges from both bowels and bladder had better be passed in the recumbent position, and into a bedpan, with which every lying-in woman should be provided.

The passage of urine immediately after labor, is frequently attended with great difficulty; especially is this the case after severe labors, or where instruments have been applied. There are several causes for this, but they are usually

temporary, and pass off in a few hours or days. In nearly all cases the urethra or canal, leading from the bladder, through which the urine flows, is swollen and tender from pressure; in some cases these parts are partially paralyzed, thus rendering the discharge of water difficult, or even impossible. Under such circumstances, the swollen and bruised surfaces should be thoroughly anointed with vaseline or sweet oil, and the patient be encouraged to take her time, and deliberately renew the attempt at urination. Many women fail to accomplish anything on a bed-pan from sheer nervousness; if such a person is placed comfortably over the pan and left to herself for a few minutes, the novelty of the situation subsides, and with a sense of self-possession, will generally come success in evacuating the bladder. Failing in these devices, a large, soft sponge may be squeezed out of hot water, and placed over the external parts; this frequently has the desired effect, but in case it also fails, the physician should he informed of the facts on the occasion of his next visit. account should such retention of urine be permitted to continue over twelve or eighteen hours, without being brought to the knowledge of the

doctor, for it may become necessary to draw it off with a catheter,—an operation which is very simple and affords great relief.

When labor finds the bowels empty, which is always desirable, it is not necessary that they be disturbed during the first day after delivery. If they are not spontaneously and fully moved by the second or third day, the physician usually prescribes some such simple cathartic, or opening medicine, as he may prefer. In olden times, every lady took a dose of castor oil for this purpose, and although its efficacy has not yet been improved upon, many modern palates rebel against it.

Sometimes, for good reasons, the physician prefers that his patient's bowels should be opened by an enema, or injection. In such cases he will direct what to use, — some employ plain warm water, others soap-suds, salt and water, etc. Few persons know how to give an injection, hence the frequent failure to obtain any satisfactory result from them; a word of instruction on this point, therefore, will not be amiss. The old-fashioned metallic syringe has fortunately gone out of use, and the rubber-bulb instrument is now almost universally employed, and should be

found in every family. In giving an enema the patient should lie upon her side, with the hips near the edge of the bed, the knees being bent, and the limbs somewhat drawn up. The liquid to be injected should be milk-warm, and contained in a bowl or other suitable vessel, which is held or placed upon a table or chair near the bedside. After seeing that the syringe works well, by sucking up and discharging several bulbsfull of the injection, and that the instrument is completely filled, the nozzle is well oiled and introduced two inches, or a little more, into the opening of the bowel. This should be done very gently, and by directing the tip of the nozzle first inward and then somewhat backwards: in this way the instrument slips in very readily and without pain. When this is done, the syringe should be discharged very gradually, and with an interval of a few seconds between each pressure of the hand upon the bulb. As the injection progresses, the intervals of discharge, and the pressure, should be considerably prolonged; in this way the bowel is not suddenly distended, taken by surprise as it were, causing, as it always does when this is the case, a disposition to premature expulsion of the injected fluid, but

the injection gradually glides high up into the intestine, without occasioning uneasiness or distress, and mixes with and softens its contents in such a manner as to secure a thorough evacuation. By giving an enema thus slowly and by gentle degrees, it is remarkable how much fluid can be thrown into the bowel, and a patient will sometimes tolerate several quarts, whereas when the syringe is worked rapidly, she is unable to retain a pint. In the former case, the bowels are generally completely relieved, while in the latter, the small quantity of fluid simply passes off unstained. Remember, therefore, that in order to render an injection successful, it should be in large quantity, and given so gently and slowly that the patient is scarcely sensible of what is being done.

Every nurse should familiarize herself with the construction of a syringe, so that she can remedy any slight defect; these instruments are frequently thrown aside as worthless, when the only trouble is the clogging of one of the valves from accumulated filth or rust, which is readily removed. Always, after a syringe has been used, it should be thoroughly cleansed by passing a quantity of clear water through it, after which,

it should be hung up with the nozzle downwards, so that it can drain and dry.

After labor, there is a "flow," "discharge," or "waste," from the vagina, the character and quantity of which should be closely watched. This is pretty free, and consists almost entirely of pure blood during the first few days after delivery; the quantity varies with different women, some habitually losing considerable, while others pass very little. It is not uncommon to find upon the napkin small masses of clotted blood, varying in size from that of a small marble to a hen's egg, or even larger; these are always observed in greater abundance when after-pains have been severe, and their discharge is accompanied with a sense of relief. After three or four days, the discharge, while still red, grows less, and assumes a more watery consistency; still later, it turns of a greenish yellow hue. It has a peculiarly disagreeable, and quite characteristic odor. In some the flow becomes very scant by the tenth day, while with others, it persists for a week or so longer.

So long as the discharge continues, and especially during the first week, the utmost care

should be taken to promote cleanliness. The bed clothes must be changed whenever soiled, and sufficiently often to keep them clean and pure; the same rule to be observed in regard to the folded cloth under the hips. The external parts of the patient should be thoroughly washed with castile or carbolic soap and warm water at least once a day, and, so long as the soreness exists, they may be anointed, after washing, with vaseline.

In most cases, it is also desirable that the vagina be washed out by the injection of simple warm water, or water to which the physician may order some disinfectant added. Such injections should be made over a bed-pan once or twice daily, and, in some cases even oftener; they should always be given with the utmost gentleness and caution—the long nozzle of the syringe being used, and carefully introduced backwards and downwards. In using the ordinary bulb instrument, it is customary with some physicians to have the central hole in the nozzle plugged up, and even with this precaution, the liquid must be thrown in very gradually and gently. The nurse ought to make it an invariable rule, before giving a vaginal injection, to see that all

air is excluded from the syringe; the only effectual way to do this, is to alternately fill and empty the instrument while both ends are under water; this process should be kept up as long as any air bubbles escape.

In some instances the doctor deems it necessary to wash out the cavity of the womb; this operation should always be performed under his immediate supervision. In washing out the cavity of the womb, as well as for the ordinary vaginal injection, many employ a fountain syringe. This consists simply of a funnel or rubber bag, capable of holding a quart or more, with a ring attached, by which it is hung to the wall, or some object above the patient's body. An ordinary gum tube, from four to six feet long, connects the bottom of the funnel with the nozzle, and through which the fluid is discharged by its own gravity—the flow being regulated by a clamp on the tube. With this instrument, care must also be taken to see that the air has been removed from the tubing before using.

The napkin ought to be frequently inspected during the first day after delivery, in order to ascertain the amount of bleeding, and when this is excessive, the attention of the doctor should be called to it at once. Nurses cannot well change the napkins of lying-in patients too frequently, and in doing so the soiled ones should be taken to some place outside of the apartment. The decomposing character of the discharges, aggravated by the steaming warmth of the patient's body, renders these changes necessary, otherwise the atmosphere of the room particularly that about the bed, becomes highly vitiated, injurious and disagreeable. The writer has frequently heard a distinguished physician, now dead, remark that he could tell whether a nurse understood her business, by the odor of the lying-in chamber; the nurse may not always be wholly responsible for this, but undoubtedly there is much truth in the remark. Ordinarily, the napkin should be changed every two hours during the first day; every three hours during the second; every four hours on the third and fourth; from four to two being required each day thereafter until all discharge ceases. Cir cumstances may, however, require more frequent changes; when the flow is unusually free, or is of a dark, coffee-ground appearance, with foul odor, the napkins should be removed often and without regard to rules. .

Various causes such as fever, unusual and sudden mental excitement, imprudence in diet, etc., may operate to change the quantity and quality of the discharge. It may in this way be suddenly suspended, or increased, and in either case, it is important that the attention of the physician be directed to this or any other irregularity.

The breasts should receive constant care and attention, especially in first confinements, and in those cases where the death or feebleness of the child prevents them from being naturally and properly drawn. The nurse being always on hand, is expected to look after such details, and should be able to act efficiently and intelligently in all that she does, since these are matters of great importance to the welfare both of the mother and child. For the first twentyfour hours after labor, the breasts rarely participate in any marked change from the condition already described as taking place during pregnancy. Generally by the end of the third day the secretion of milk sets in with peculiar and well-defined symptoms; these usually begin with slight shooting pains in the breasts, followed by a sensation of increased heat and fullness. At the same time the patient complains of a decided increase of weight in these organs, which sometimes renders it inconvenient and painful to turn in bed. The increased neat and distention of the breasts is readily perceived on applying the hand to their surface, and if there is not a very thick layer of fat, it is easy to feel the nodulated and enlarged milk tubes beneath the skin. Accompanying these changes, there is nearly always more or less constitutional disturbance on the part of the patient, who suffers occasionally from slight shivering or chilliness, alternating with hot flushes. The skin shows an actual fever in some cases, while in others there is no other disturbance than a slight headache.

The foregoing group of symptoms constitute what is known as "milk fever," or "third day fever," and, when they are present, the lying-in woman is more or less nervous, and readily upset by things which the day before would have exercised no such influence; the crying of the child worries her, and too much company or improper food may prove injurious. During this period, therefore, it is important that the nurse should guard her patient well, and see to it that she is subjected to no unnecessary excitement or

disturbance. When there is no complication, and the breasts are properly managed, these symptoms generally subside in from one to two days.

It should be understood that the milk does not always come in the prompt and regular manner just described; in some women it makes its appearance before the third day, while in others its complete establishment is delayed for several days, or even a week or two longer. This latter circumstance is a matter of too much importance to be passed over lightly, since it has now become a common thing for young mothers to jump to the conclusion that they cannot supply milk sufficient for their children, simply because their breasts do not happen to be filled to overflowing within three or four days after labor. Nurses are too prone to fall into these erroneous ideas, and encourage them, especially if the baby is cross, much to the detriment and injustice of both mother and child. In this way, many a well-meaning and inexperienced mother is misled, and induced to abandon the hope of nourishing her offspring from her own bosom - a privilege which every true woman should regard as the most sacred of earthly pleasures.

Hasty conclusions should not be accepted with reference to the inability of an otherwise healthy mother to nourish her child, for it often happens that some temporary complication connected with her peculiar condition, offers an impediment to a full supply of milk for the time being, but when these have been sought for and remedied, the secretion may proceed satisfactorily. The causes for this temporary scantiness of milk are frequently obscure, and nurses and friends should not be too ready to offer reasons or remedies. There is a prevalent idea that wine, ale, beer, etc., are peculiarly efficacious in such cases, and these are sometimes smuggled into the lying-in room in the doctor's absence; but such drinks should never be indulged in for the first month, without permission from the physician, since they are capable, at times, of great harm. The reason for this is, that highly stimulating food or drink frequently tends to aggravate the derangements upon which the failure of milk chiefly depends.

Of course, there are instances where the breasts, in spite of all that can be done, fail to furnish milk of adequate quantity or quality; but these are not so numerous as many suppose.

So soon after labor as the female has had a little repose, the child must be put to the breast, the effect of which is to remove a certain amount of fluid from the milk ducts, and at the same time this is the most efficient method by which a retracted nipple is drawn out, or elongated. Another effect is to act sympathetically upon the womb, producing contraction of that organ; it is in this way that nursing increases after-pains, and that it sometimes relieves a tendency to flooding. If the nipple is too short, or flat, for the child to take hold, it may be drawn out by the gentle suction of a breast-pump, or what is better, by filling an ordinary quart bottle with hot water, and allowing the liquid to remain until the bottle is well heated, after which it is poured off and the mouth of the bottle immediately placed against the breast, inclosing the nipple. bottle is held steadily in this position until it cools, the latter process being aided, if desired, by wrapping its body with a cloth wrung out of cold water. The effect of the cooling is to contense the inclosed air, and create a partial vacuum within the bottle, thus causing the nipple to be firmly sucked up within its neck; when this state of things has been maintained for some

minutes, and the bottle is removed, the nipple will be found considerably elongated, and standing out prominently, in which condition the child is enabled to take it into its mouth and nurse. This procedure may have to be repeated a number of times on each breast, until the nipples assume a more permanent shape, and the child gains greater confidence and experience.

The advantage of this bottle arrangement is that it acts steadily and gently. It is most important to bear in mind that gentleness and steadiness should characterize all efforts made either with a view of drawing out the nipples, or of emptying the breasts. It is a great error to suppose that any considerable milk can be drawn from the breasts by the force of suction alone; it is rather expelled by contractions of the milk tubes themselves, under a direct stimulus imparted to the nipples by contact with the child's mouth. The milk is, in like manner, sometimes thrown off under the influence of emotion, for it is well known that thoughts of her child frequently cause that peculiar sensation known as the "draught" in the breasts of the mother, at which time they pour out their con-This sensation is nearly always expetents.

rienced after the child has either held the nipple in its mouth for a few moments, or has repeatedly rubbed its nose and mouth over it; at this moment the milk spurts out in a number of fine jets, not only from the nipple nursed, but also from the other.

Close observation of the infant when applied to the breat, reveals strong analogies between its behavior and many other familiar young animals, and shows a decided instinct which is in harmony with the workings of nature. young of all animals first excite the breasts to throw off the milk, before contenting themselves with simply sucking. This is strikingly illustrated in a brood of little pigs; they begin nursing by persistently kneading or rubbing the mother's breasts with their noses, until after a few moments, milk jets forth, when they immediately seize the nipple and suck steadily. The conduct of a young baby is very similar; it seldom seizes the nipple at the start, but rubs its mouth and nose over it by moving its head from side to side for a few moments, and then suddenly seizes it with the mouth and commences to suck. These facts are of great practical moment, and are frequently lost sight of in the applicashould teach us to follow nature, and exercise patience, giving the child a little time to go through with its instinctive manœuvres, rather than attempt to compel it to suck by persistently forcing the nipple into its mouth. This is a mistake often committed, and nearly always results in failure, for the child is irritated into a fret, and the mother is needlessly discouraged and rendered nervous. Many a young mother has been thrown into a fever, by too frequent and injudicious efforts to force her baby to nurse, whereas, the whole difficulty can generally be avoided, by going about it quietly and in the right way.

A thorough understanding of the principles governing the nature of the secretion and flow of milk in women, will obviate many of the errors and difficulties incident to this subject. Every nurse should understand that strong and spasmodic efforts at suction, such as are often practiced by inexperienced persons when they attempt with their own mouths to draw the breasts, always fail, and are moreover extremely painful and irritating, if often repeated. The reason for this is plain; the milk ducts passing through the nip-

ple are closed or constricted by the force employed, so that it is physically impossible for the breast to empty itself. Under these circumstances, the contractile efforts of the canals holding the milk, not only prove futile, but such stimulation causes increased and painful disten- . tion, which if not relieved, may lead to serious consequences. The same considerations hold good in régard to breast-pumps, many of these instruments being so constructed as to exert a very powerful suction force, and when ignorantly applied, prove not only useless, but most danger-The best breast-pump is that which in its action most nearly resembles the mouth of the Nothing answers this purpose better than the mouth of the nurse, or some other person, applied in the manner indicated.

Although nine out of ten persons fail in an attempt to draw milk, nothing is easier, if they go about it properly, and any one can successfully draw a breast who knows how to smoke a cigar, or suck lemonade through a straw. The nipple is simply taken and held lightly for a few moments between the lips; it should not be sucked at first, but is merely touched or rubbed with the tongue, and when it has been thus stim-

ulated for about half a minute, the breast may be grasped in the hands as though it were a large orange, and, with the gentlest pressure, slight suction is commenced, when distinct jets of milk will immediately be felt to strike the tongue. As soon as the mouth is filled, the fluid is spit out, the lips reapplied, and suction resumed, the hands in the meantime making slight pressure from without. When any portion of the breast is hard, or lumpy, special pressure is made in this particular spot, when, very soon, as the milk flows, it will be found softened and reduced. By thus shifting the position of the hands, special pressure may be made over successive portions of the breast, until every part is relieved. In order to accomplish this, it is not necessary to keep up the effort for any considerable length of time, or to attempt to evacuate all the milk; all that is desired is temporary relief, and a few mouthfuls will generally suffice for this purpose.

Next to the human mouth, the most efficient breast-pump is a large, vigorous puppy, from two to three weeks old; these little fellows understand their business perfectly, and go about it in a thoroughly scientific manner. Their forepaws should be inclosed in mittens to prevent scratching by the claws; this is better than to hold the feet in the hands since they instinctively make use of them for the purpose of gently kneading and exciting the breast to throw off its contents.

No artificial breast-pump which does not work on the principle here laid down, is efficient, or free from danger. Physicians have their preferences, and while these should be respected by the nurse, she must never forget that powerful suction is neither necessary nor safe. A pump exercising slight suction, aided by gentle pressure under the hands of the nurse, as already described, will always be found to answer the purpose without risk of irritating or inflaming the breast.

When the breasts are distended, it is always well to apply the child to both, so that equal relief is afforded each, and when the baby nurses neither breast, the same rule should be observed in applying any form of breast-pump, for the reason that the drawing of one breast increases the distention of the other. Prior to the full establishment of milk, it is unnecessary to apply the child to the breast very frequently, but after these organs are filled, they should be nursed as

regularly as practicable, not however, oftener than every second hour, provided the child is healthy and strong. When the baby is too feeble to nurse, or if the secretion of milk is so abundant as to occasion discomfort, notwithstanding that it is put regularly to the breast, the surplus may be drawn off by some of the methods already alluded to.

There are several painful affections of the breast, liable to occur within the first weeks after confinement, the nature of which every nurse should understand. Several of these are, by the public generally, loosely designated by the term "weed," an expression which is not always proper, for the reason that such troubles are frequently distinct in character, and require different management. In order to avoid serious complications growing out of the establishment of milk and the earlier stages of nursing, every unusual symptom connected with the breasts should be observed closely, and judiciously dealt with in the beginning, for this is, of all others, a case where the old adage holds good, that "an ounce of prevention is worth a pound of cure." This is especially important in first confinements, and, as the nurse is always present,

and consequently the first to be informed of such troubles, she should be prepared to exercise intelligent judgment and skill in dealing with them; indeed, it is in such matters as these, that she has an opportunity of asserting her superiority to one who is ignorant or meddlesome.

It has already been pointed out, that the first appearance of milk is usually accompanied with more or less throbbing, or darting pains, together with a sense of heat and distention in the breasts. When, however, these organs have been properly drawn, and the secretion thus prevented from accumulating, this stage of discomfort is usually of short duration, and passes off without accident; neither is that general disturbance known as milk-fever, as common or pronounced under the modern management of patients as was formerly the case. A great deal of the inconvenience complained of at this time is the result of the unusual activity in the breasts, and to their sudden distention; but this is a natural process, and under judicious management, can generally be kept within the bounds of health. All that is necessary to be done, in addition to keeping the breasts drawn, is for the nurse to very gently rub them with sweet oil, or

vaseline, to which the physician may add some anodyne, if he deems it necessary. These frictions should be made along the course of the milk ducts, that is, from the outer border of the breasts toward the nipple; the rubbing to be continued with great gentleness for ten or fifteen minutes, and repeated every few hours. There is never occasion for violent handling of the breasts; too severe or prolonged rubbing, always increases congestion, and aggravates rather than mitigates the difficulty. When lumps are discovered, slight pressure may be made over these particular localities, while the nurse applies her mouth, or a pump, to the nipple in the manner already described; in the meantime, the breasts are to be kept cool, rather than hot. In all cases when any application is made to the breasts, unless specifically interdicted by the physician, it should be carefully removed with warm water and soap before the child is allowed to nurse is a good rule, also, during the first week or so, to completely wipe off all moisture from the nipple with a soft cloth or sponge immediately after each time of nursing.

Frequently, when the breasts are large, and are attended with a sense of painful weight in turn-

ing, much comfort is often experienced by a support, in the shape of a sling, or bandage, around the neck, crossing in front of the chest, and passing alternately under each breast, after the manner of a figure eight.

Sore nipples, are a common, and sometimes one of the most distressing, complications of confinement. More or less tenderness of the nipple is usual with all young mothers in first confinements, and there are some who pass through a frightful ordeal of suffering with the birth of every child, and, as already stated when describing the varieties in shape and size of the nipple, some are much more prone to become cracked or chapped than others, hence the importance of applying remedies calculated to toughen these parts, as one of the preparations for labor. Whenever the nurse observes signs of this occurrence, unusual care should be taken to prevent it, and on no account ought such a state of things be allowed to run on without the physician's attention being directed thereto. Besides this variety of sore, the nipple may lose a portion of the skin covering it, thus becoming raw and sensitive; not unfrequently these sore spots, if neglected, degenerate into obstinate and highly

irritable ulcers. Under such circumstances, nursing becomes very painful, and in some instances impossible. In this way the breasts are liable to become over-filled, thus aggravating the trouble; there is also danger of the inflammation extending from the outer surface of the nipple along the milk tubes to the interior of the breasts. These affections, though apparently slight, may give rise to serious consequences, and being sometimes difficult to cure, the nurse should always be guided by the advice of the medical attendant, and see that his directions are faithfully carried out. The devices for protecting and healing sore nipples are numerous, some physicians preferring one, some another; they all, however, have three objects in view: first, to shield the nipple as far as possible from further irritation; second, to relieve pain; third, to heal the sore as quickly as possible.

Abscess, or "rising breast," may be due to various causes; to any agency, in fact, calculated to produce inflammation in the breast. These may, for convenience, be divided into (1) Internal (originating within the substance of the breast, or in the system of the mother); and (2) External.

The most common internal causes of inflammation and abscess may be summed up as follows: a peculiar epidemic influence affecting the system through the atmosphere; an unhealthy state of the blood; emotional, or nervous disturbances; a want of development in the milk tubes, rendering them incapable of accommodating the sudden secretion (apt to occur in very young mothers); stricture of milk tubes from previous injury or inflammation, (hence persons who have once suffered from rising breast, are more prone than others to trouble in subsequent confinements); over-distention and clogging of ducts from accumulation of milk.

The prominent external causes are: sore nipples; exposure to cold; ineffectual and forcible suction; bruises, either from rough handling, or accident.

It will be perceived on glancing over the causes of rising breast, as thus classified, that the misfortune cannot always be prevented by any amount of skill, either on the part of the physician, or nurse. Some of them may, indeed, even operate to produce abscess b-fore confinement. There are occasionally seasons when a tendency to sore breasts seems to prevail as a kind of epi-

demic, and when abscesses and other drawbacks to lying-in women occur with unusual frequency. But whether arising from causes that are preventable or not, a threatened abscess in a nursing female is a matter, too painful and serious, for any prudent nurse to assume the responsibility of depending on her own resources in the way of treatment. In such cases, the attending physician should direct everything, and even his utmost skill will sometimes prove unavailing. A watchful and experienced nurse can, however, do much to obviate many of the causes which have been enumerated, by following the rules already laid down for taking care of the breasts.

There is an affection of the breast to which certain women are peculiarly liable upon the slightest provocation, and which resembles very closely the beginning of inflammation and abscess, inasmuch as it is accompanied with pain and general fever; yet the history of these cases generally indicates a much less degree of local disturbance than is required to produce abscess. This is true weed, and should be distinguished from the natural excitement, both local and general, incident to the first secretion of milk on the one hand, and from those more profound and per-

sistent disturbances which lead to a "rising" on the other. And yet, it is important to remember that one, or both of these conditions, may be associated with weed, either as cause or effect, for this affection sometimes painfully complicates the establishment of milk, or, if neglected, there is danger of its resulting in abscess. Weed has certain characteristics which are peculiar; it most frequently comes on suddenly and without apparent cause, and while usually ascribed to "catching cold" in the breast from slight exposure to a draught of air, it is probably also due to other causes, such as malaria, poverty of the blood, anxiety, distress, and other emotional · disturbances, including a neuralgic tendency, for there is doubtless a neuralgic element in the pain that accompanies it.

The attack frequently commences with a chill, or nervous shivering, succeeded by a smart fever, or by shivers and hot flushes alternately. The patient is unduly irritable, and is readily excited by trivial matters; not unfrequently there is hysterical weeping, with expressions of anxiety and depression. These symptoms are associated with some pain and tenderness along the course of certain milk tubes, sometimes in both, but

generally in one breast, and most frequently on its outer side, running in the direction of a line drawn from the nipple to the arm-pit. The entire breast is hotter than natural, and if not covered by much fat, the eye can often detect reddened streaks along the line of tenderness, beneath which there can sometimes be observed a slight hardness of the milk ducts. Weed may occur at any period of nursing, but is mostly met with during the first month.

As already remarked, weed may appear as suddenly as toothache, and is frequently relieved almost as quickly. It seldom goes beyond a severe congestion, with neuralgia in the milk tubes implicated, and a hot hop poultice, or some similar application, together with such soothing or anodyne medicine as the physician may select, will ordinarily give speedy relief; there usually remains a slight soreness, which subsides in a few days. In all such cases, the nurse should see that the affected breast is kept properly emptied; there is no reason why the child may not be put to it as usual. It is a good plan whenever the baby is nursing, to exercise gentle pressure over the painful portions of the breast, as this aids materially in preventing a clogging or distention of the congested ducts.

In certain rare instances mothers are unable to nurse their infants, owing to a peculiar nervous sensitiveness of the nipples. In these cases, the pain is frequently excruciating, and, with nothing to indicate any special cause, it being of a purely neuralgic character.

When, on account of the death of the child, or for other reasons, nursing is dispensed with, it becomes necessary to dry up the milk as quickly and with as little pain as possible. In these cases the physician usually prescribes such internal and external medicines as he deems advisable, and he should specifically direct the nurse in reference to what is to be done with the breasts. If these become very painful, hard and lumpy, gentle frictions with warm oil, directed from the base of the breast towards the nipple in such a manner as to cause a few drops of milk to run out - will generally afford relief. Under such circumstances the breasts should not be drawn, unless absolutely necessary, and then, as sparingly as possible. This is a mistake, frequently committed by nurses, and others, who are too much given to drawing the breasts as a mere matter of routine, and thus, by too frequent and copious draughts, the secretion is kept up long after it would otherwise have subsided.

There are several other very important affections to which the lying-in woman is subject, but as they are of a nature requiring to be dealt with only by the doctor, they need not be discussed in this connection. One of these troubles will be mentioned however, merely for the purpose of correcting a very general and erroneous popular belief in regard to it. Allusion is made to what is known among nurses as "milk leg; the idea being that this peculiar disease is in some way connected with a settling of milk in the limb. This notion probably originated from two facts: first, that the constitutional disturbance incident to this condition, tends to reduce the quantity of fluid in the breasts, and second, the white and swollen appearance of the leg favored the idea that a part of the milk had been transferred from the breasts to the affected limb. This theory, however, has no scientific basis, the trouble being caused by a peculiar state of the blood, resulting in a temporary plugging up of certain blood-vessels leading from the leg, thus interfering with the circulation in the part; hence the swelling, and the white glistening appearance. This is a matter for the physician to deal with as he thinks best.

In regard to "getting up" from confinement, no absolute rule can be laid down; these matters ought always to be governed by common sense and sound judgment, applied to each particular case. For example, one female may feel in every way better and stronger in one week after delivery, than another will do at the end of a fortnight. As a rule, it is not well for such patients to exert themselves, or leave their beds too early; it is far better to remain in the recumbent position several days longer than absolutely necessary, than to make the mistake of getting up prematurely. Such imprudences have doubtless often laid the foundation of troubles that have lasted a lifetime. When everything goes on favorably, she may be propped up, or shifted on to a lounge at the end of a week; the patient can sit up in a chair for a brief period in from eight to fourteen days, and walk, or take a short drive, in from three weeks to a month. In all cases where there is any serious complication, such as feverishness, or lingering soreness about the abdomen, the nurse should permit no license in this regard without the full knowledge and consent of the physician.

CHAPTER VI.

ACCIDENTS AND EMERGENCIES.

Circumstances may arise in which the nurse is expected to lend a helping hand to the physician, or in the absence of the latter, it is desirable that she should know what to do in case of certain accidents and emergencies. In the face of sudden danger, such as may befall a lying-in female, friends and bystanders are frequently unfitted for rendering efficient aid, owing to inexperience, confusion, or fright, so that it devolves on the nurse to act with coolness and discretion. Nothing is more disheartening to a sick woman and her friends, than to notice that the nurse is disconcerted or frightened, because they naturally regard her as more competent and experienced than others present, and look to her for encouragement and help, in the absence of the doctor.

In most of the ordinary operations incident to

the lying-in chamber, such as application of forceps, turning, etc., the nurse should not only be ready to render assistance, but she must know what her part is, and how to perform it. In this country, the usual position for the woman during instrumental delivery, is upon the back, as in ordinary labor. The position of the patient as regards the bed, however, is changed; she should be placed-crosswise the latter, her head elevated on a moderate sized pillow, while the hips are brought close to the edge of the bed, and the feet are supported by chairs placed on each side. A bowl of warm water for warming the instruments should be provided, also a little lard, sweet oil, or vaseline for anointing them, and while the doctor is getting ready, the nurse securely pins a sheet around his waist, in such a manner that it falls down in front like a long apron over his feet and knees, thus protecting them from becoming soiled by the discharges. It is also well to place a folded sheet under the hips of the patient, partly for the purpose of elevating them, and also for the protection of the bedding; an oil-cloth or piece of carpet is likewise placed underneath on the floor, for its protection. A third chair is placed immediately in front of the patient, in which the physician seats himself during the operation, while the nurse stands upon one side holding a knee, and another assistant faces her on the opposite side holding the other knee. During the delivery, the assistants should see to it that the limbs are kept well bent, firmly supported and widely separated, so as to allow the physician every facility for his work.

In cases of *turning*, the same preparations are necessary, inasmuch as the patient occupies the same position across the bed. It is for this reason that a very narrow bed, or common lounge, is not suitable for all the emergencies of labor.

In all such procedures many physicians prefer to employ chloroform, or ether, in which event, and in the absence of a second physician, it may devolve on the nurse to administer one of these agents, which she will do under the general directions already laid down. In these cases, it is desirable to carry the insensibility a little further than in ordinary labor, but under no circumstances should the napkin be held over the mouth when the breathing becomes interrupted or difficult.

While difficulties may arise in which the nurse

is powerless to act, there are nevertheless certain emergencies calling for prompt action, and wherein much can be accomplished while the physician is being summoned to the house. Some of the more common of these contingencies will now be briefly alluded to, but with the understanding that what is here recommended should be performed by the nurse only in cases of necessity, where the physician is absent and while he is being called, which should invariably be done.

It sometimes happens that labor comes on suddenly, and the child is born before the medical attendant can be summoned, or the birth may unexpectedly occur during his temporary absence. Under such circumstances, it is usual for the whole family to be thrown into a grand state of consternation, as though some great calamity had befallen it. If the nurse understands her business however, and remains cool and collected, such occurrence need create no great alarm, for generally speaking, there is little to be done to secure the safety of both mother and child. When the child cries out lustily, it should be placed a little to one side in such a position as to prevent suffocation or stran-

gulation by the discharges, and there it may rest, care being taken to protect it from cold. There is no necessity for great hurry in separating it from the mother by cutting the cord; on the contrary, as already stated in a previous chapter, it is better to wait awhile.

Having thus temporarily disposed of the child, the nurse should seat herself by the patient's side, and place her hand upon the lower part of the abdomen, in order to see that the womb is properly contracting down upon the after-birth. When such contraction is taking place, she can readily feel the firm body of the womb, about the size of an infant's head, just below the navel. This body should be grasped by the outspread fingers, and held with moderate firmness, for while this can be done, there is little risk of hemorrhage, and the patient may be encouraged and assured of this fact.

If, after waiting fifteen or twenty minutes, the presence of the physician cannot be secured, the nurse may proceed to tie and separate the cord; this is done by applying a ligature of narrow tape or coarse darning cotton, once or twice doubled, tightly around the cord three finger's breadth from the child's body. A second liga-

ture is placed two or three inches beyond, on the mother's side, and the cord carefully cut between the two with a sharp, strong pair of scissors.

By this time the patient who has been resting quietly after the expulsion of the child, will probably begin to complain of fresh pains, which signify that the womb is making an effort to throw off the after-birth. This may be aided by making pretty firm pressure in a downward direction, with the hand grasping the womb through the abdominal wall; by continuing this. pressure for some little while, the after-birth will generally be expelled, but should these manipulations fail, the nurse had better content herself with watching the patient closely, and await the arrival of the doctor. It would be highly imprudent for her to employ force in the delivery of this body, such as attempting to grasp it with the hand through the vagina, or pulling at the cord, unless it be found partially protruding from the mother's external parts, in which case its removal is a very simple matter.

In the event of sudden and severe flooding during the absence of the physician, no time should be lost in securing his presence, and in

case that cannot be done, the nearest competent physician should be called in. In the meantime the nurse ought not to be idle, but should coolly and promptly do all in her power to staunch the flow. This can only be done by inducing firm contraction of the womb, for the bleeding indicates that this organ has become relaxed. of the most important steps in this direction is to induce, as far as possible, a state of tranquility. in the mind of the patient, by reassuring her, and clearing the room of useless intruders. The pillows should at once be removed from under the head, and a good supply of fresh air admitted into the room. If the doctor has left any ergot, a teaspoonful should be given, and the binder removed with a view of ascertaining the condition of the womb. When hemorrhage is really profuse, this organ, instead of feeling like a firm ball in the lower portion of the abdomen, will be found larger and softer than it should be; possibly it may become so flabby and relaxed that its outlines can scarcely be made out on carefully kneading the abdomen with the hands. In either event, no time ought to be lost in applying cold to the abdomen, for there is nothing more prompt and efficient in these cases than the

shock of a sudden application of this kind. With this view the abdomen should be smartly and repeatedly flapped, immediately below the navel, with a cloth dipped in ice water, or a lump of ice may be rubbed over its surface. cases a few such applications will be speedily followed by a very marked contraction of the womb, as is manifest by its smaller size, firmer feel, and its situation lower down in the bottom of the abdomen. These changes in the womb always secure a partial or entire cessation of bleeding, and so long as such contractions can be maintained, the patient will be comparatively safe. The nurse however, should under such circumstances, never leave the bedside, but must keep her hand firmly upon the womb, and see that it does not relax—as it is prone to do—until the physician arrives, and relieves her of the responsibility of the case. If the bleeding proves obstinate, or, if the womb evinces a tendency to relax after having contracted, the same measures may be again resorted to, and persistently repeated until medical help is procured, when, if necessary, other and still more efficient measures may be employed.

Circumstances might arise in which the baby

is born suffocated and apparently lifeless, and yet susceptible of being revived, but where the physician is necessarily engaged in taking care of the mother. In this case, the doctor might be compelled to entrust the life of the child to the skill of the nurse, who should therefore have some knowledge of the methods necessary to excite breathing in the child. In the majority of instances, all that is needed is to dash a handful of cold water over its face, or where this fails, to flap its back once or twice with a.cold wet cloth, or better still, dip its hips first into warm and then into cold, water. But where all these prove of no avail, artificial breathing must at once be resorted to; this consists in alternate expansion and compression of the chest, thus forcing air into and out of the lungs. In order to accompiish this, all mucous in the back of the mouth and throat should be quickly removed with the finger, and while the child lies upon its back, the nurse seizes its elbows and carries them well up over the head, and then brings them quickly down to the sides of the chest, making smart pressure on the latter. These movements must be repeated every three or four seconds, and if in the meantime the child makes an effort at breathing, this will be good ground for hope, which should not be abandoned as long as there is pulsation over the heart. So soon as breathing is established, measures should be taken to promote warmth in its body, else reaction may be slow and unsatisfactory.

One of the most frightful emergencies incident to labor is puerperal convulsions; these spasms, or fits, may occur in the latter part of pregnancy, during labor, or after the child is born. In either event, the attack may come on suddenly, during the physician's absence, and from its appalling character is well calculated to send a thrill of horror through the stoutest heart. Under such circumstances, of course the thing to be done is to procure the nearest medical help, for here, time is often very precious, inasmuch as it is of the utmost importance to cut short the convulsions as quickly as possible; every new convulsion lessens the chances of ultimate recovery. In such cases the nurse can unfortunately do but little; she may however, during the spasms, place a tooth-brush handle between the patient's jaws, and hold it there until the spasm passes off, so as to protect the tongue from being bitten, which is sometimes done to a frightful extent.

In cases of necessity, every nurse should know how to introduce a catheter, and draw off the urine of a lying-in female. Physicians usually employ a metallic instrument for this purpose. and introduce it without exposing the patient, but, after labor, the swollen condition of the parts sometimes renders the introduction of the instrument, when merely guided by the touch, a painful and difficult task. There is no reason why a female nurse should not be guided by her eye in performing this operation, which is exceedingly simple, only requiring a little experience, and a correct knowledge of the location and direction of the urethra, or canal leading to the bladder. This canal is a small passage immediately in front of the vagina, and can be readily detected by the finger introduced and pressed forward against the front entrance of the latter. The orifice of the urethra can be seen immediately above the mouth of the vagina, when the lips of the external parts are pushed apart by the fingers; it is frequently surrounded by a slightly swollen elevated rim, though it may present an opposite condition, and appear somewhat depressed, owing to the swelling in its neighborhood. In any event, there should be no difficulty in finding this opening, if its locality is

borne in mind; its size is about that of an ordinary pencil. The length of the urethra in a recently delivered female is from two to three inches, and its direction slightly downwards and inwards. In cases of pressing necessity, where the presence of the physician cannot be secured, or at his request, the nurse may draw off the The best instrument for her to employ for this purpose is a fresh soft gum catheter, twelve inches long and the size of a large goose quill. The advantage of a gum instrument is that when once carefully oiled and fairly introduced, it passes into the bladder without pain, and is incapable of doing any harm. It is not necessary to pass in the catheter more than four or five inches, when the urine commences to flow, and can be received into a mug, or chamber, held between the patient's thighs. When the flow through the instrument slackens, it is a good plan to make slight pressure with the hand on the lower part of the abdomen; this causes the bladder to completely empty itself, after which the intrument is withdrawn. Few operations are more simple than this, and few are capable of affording more perfect relief in cases of retention of urine, which may be attended with intolerable suffering.

CHAPTER VII.

MANAGEMENT OF THE CHILD.

Everything being in readiness, the nurse should proceed to wash and dress the child as soon as possible after birth, provided it breathes well and is fully mature. In so doing she must be careful to select a position where there is no draught of air, and, if it be winter, near the fire, where the little stranger will suffer least from cold. It must be remembered that even in a very warm room, the child feels keenly the change of temperature from that to which it has been accustomed—a change which is seldom less than twenty, and often greater than thirty degrees, as measured by the thermometer. For this reason the water employed should be as near blood heat as possible (care being taken not to have it too hot), and the process of bathing and dressing not unnecessarily prolonged.

Before being washed, the body should be

thoroughly anointed from head to foot with warm fresh lard, or sweet oil, the effect of which is to assist in removing a peculiar white curdy material with which nearly all children are more or less covered at birth. The face is first carefully wiped off with a clean soft sponge, simply dipped in warm water, after which the child is plunged bodily into the bath—the head being held up so as to prevent strangulation. Some always employ a good article of castile or toilet soap, though this is not essential in the first bath. As soon as the child is removed from the water, it should be carefully dried with a soft towel and its body, especially about the groins and armpits, well dusted with violet powder.

Some very excellent physicians do not believe in bathing the child for the first few days. Their plan is to sponge off the face and wipe the body dry immediately after it is born, after which it is thoroughly greased with fresh lard; they use neither shirt nor belly-band, but simply pin on a disper and slip the child into a soft flannel gown. It is claimed that this secures more comfort than the old plan; that the curdy material speedily disappears from the skin, leaving it soft and clean, while the cord, which is thus left free, dries up and comes away nicely in a few days. After the cord drops off, the child is washed and dressed in the ordinary way. This method of dealing with the new-born infant is mentioned merely to show that there is no necessity for a protracted and painful scrubbing at birth, during which children become thoroughly benumbed by cold, and are liable to contract disorders that give rise to much distress.

The first clothing of the child should be very simple, and made up with a view to warmth and comfort; fashionable frills and furbelows are always in the way, and sure to irritate the tender sensitive skin. Many a little creature has been made sick by being dosed for an imaginary colic, when the real trouble was due to fretfulness occasioned by the discomfort of its clothing. Nurses cannot always regulate the fancies and vanities of fond and inexperienced mothers, but when they have an opportunity before confinement, they should not fail to look into the baby's wardrobe, and give a little wholesome advice on this subject.

Everything needed for the first dressing, should be deposited in the order in which it is required, into a particular place. The usual

receptacle for such articles is an open wicker tray, made for the purpose, and known as the "baby's basket;" and while these are sometimes fancifully arranged and provided with many things rather ornamental than useful, they are nevertheless exceedingly convenient, and should contain the following articles:

CONTENTS OF THE BABY-BASKET.

One cake of good soap, Two soft towels, One box of violet powder, with puff,

One diaper, One jar of vaseline,

One bandage, or belly-band,

One paper of plain pins, One shirt,

One diaper-pin, One petticoat,

One box small safety-pins,

One frock or slip, One bib,

One bunch of narrow tape, One flannel shawl.

A piece of old linen for the navel,

The foregoing comprises a list of such things as are usually needed at the first dressing. Caps are scarcely ever worn at the present day, and if the nurse looks after the baby's feet and keeps them warm, there is no necessity for socks, though this is a matter of taste. Everything that goes on an infant's body should be free from starch or ruffles; many of the articles used for

the first few days should be selected with a special view to their plainness and unirritating character. The first bandage should consist of a simple strip of flannel, from four to six inches wide and from twelve to eighteen in length; it is better without hems. The first diapers used may be pieces of soft old muslin, which can be thrown away when soiled by the peculiar blackish discharges that pass from the bowels soon after birth.

Dressing the baby. After the cailed has been carefully dried and dusted with powder, the first thing in order is to dress the navel. For this purpose an old soft piece of linen, six or eight inches square, is twice folded into a square, and a small bit of the folded corner snipped off with the scissors; when the cloth is again spread out, this leaves a small opening in the centre, through which the stump of the cord is passed. Before doing this, however, the edges of the hole should be well anointed with vaseline; this renders the dressing less irritating, and is better and simpler than is the old plan of scorching the rag. The nurse ought to make it an invariable rule, before dressing the cord, to examine its cut extremity and ascertain whether there is any oozing of blood; when this is the case, the physician's attention should be directed to the fact, that he may tie an extra ligature around it, half an inch back of the first. Having assured herself that there is no bleeding, the nurse passes the cord through the opening and smoothly folds the cloth over it, after which it is laid over to the left side, in which position This should be it is secured by the bandage. wide enough to reach from the hips nearly to the armpits and sufficiently long to pass snugly, but not not too tightly, once and a half around the body, lapping in such a manner as to protect the abdomen; it is secured by three safety-pins. The diaper, or napkin, is next put on, then comes the shirt, petticoat and slip or frock, in the order named; afterwards the bib or apron is adjusted in front, and over the whole is wrapped a light warm shawl or piece of flannel. If the child's feet appear cold, an extra piece of flannel may be warmed over the fire and put around them.

To wash and dress a new-born child quickly and well, requires a degree of dexterity which can only be acquired by practice—a matter in which some nurses greatly excel others.

The articles enumerated, comprise the ordinary

infant's dress in this country. Where only one petticoat is employed, its skirt should be flannel; sometimes two are worn, one of wool and the other of linen or cotton. This method of dressing might, however, be greatly simplified; instead of a shirt, it would be far preferable if mothers! would make up a few soft flannel gowns, high in the neck and with long sleeves, to be worn next to the skin, and over which is to be put the frock or slip. These could be held in place and made to clasp the child's figure nicely, if so desired, by wearing over them in front a three-cornered bib (to catch the discharges from the mouth), one corner being tucked in under the chin and secured by a safety-pin, while the base is pinned below, and secured behind by tapes attached to This arrangement is simpler, and each corner. secures more warmth and greater comfort, than the tedious and almost useless adjustment of a sleeveless cambric shirt, while it dispenses with both shirt and petticoat, until the child is old enough to go out, after which, these articles may be substituted for the flannel gown if desired.

Should the child be decidedly premature and consequently extremely feeble, great care should be exercised in handling it; its clothing should be of the simplest kind, (sometimes the physician directs it to be wrapped in warm cotton batting or wool,) and every pains taken to secure a continuous and uniform warmth.

In the slow and painful process by which the child's head is forced down through the bony passages of the mother, it is frequently pressed out of shape, causing it to appear unnaturally long and narrow. This is always the case when the back of the head "presents," and if the child is large and the labor correspondingly tedious; indeed a good deal of the delay in such cases is due to the gradual "moulding" of the soft bones of the head, by which they are adapted to the narrow bony canal through which it passes. Such a condition seldom signifies any danger to the child, and usually passes off in a short time, the soft and pliant bones soon resuming their natural shape. This subject is mentioned for the reason that some nurses, of the more ignorant class, are accustomed to claim great credit to themselves for their peculiar skill in "shaping the head," as they term it; whereby they profess through certain mysterious manipulations, to restore this part to its natural proportions. This, however, is a piece of meddlesomeness which had better be omitted, since nature soon corrects all this in her own way.

The child being dressed, it should be put in a cradle or bed, being laid on its side and warmly covered with several folds of a shawl or light blanket-the quantity of course depending on the season of the year. It is a bad plan for the nurse to allow the baby to sleep upon her lap, for a habit of this kind soon spoils an otherwise good child; if it is accustomed from the beginning to falling asleep in its bed, it will seldom give much trouble and will not require to be walked and trotted around the room, to the inconvenience and annovance of all concerned. It is very important to start right with a young child, and to avoid doing anything calculated to teach it bad habits, or to make it uncomfortable either by improper food or medicine. When a baby is healthy, and free from discomfort, it naturally spends the first few weeks of its life in sleep. It is absurd to suppose that a young child will fret and cry night after night from sheer "badness," as is often asserted, and when this is the case, it is pretty good evidence that all is not right with it; yet the nurse should be very certain that she finds out the real cause before proceeding to administer remedies.

Although the physician sometimes deems it necessary to give a dose of medicine to the young baby, it may be laid down as a general rule that no medicine should be administered unless there is clearly a good reason for it. There is a prevalent and very injurious custom among nurses of the present day of making the child swallow something as soon as it is dressed; these doses (some of them most horrible and nauseous) are given as a matter of course, and with the idea that they serve a good purpose either in clearing out the throat, or the bowels. In this way the delicate stomach is deranged by being filled with salt and water, sugar and water, coal-oil, goose grease, or some other abominable stuff, well calculated to make a grown person Such indiscriminate dosing is altogether unnecessary, and nearly always tends to lay the foundation for future trouble. This is a gross interference with nature which no nurse would be guilty of if she understood her business, for in rine cases out of ten such things serve no other purpose than to act as a ferment in the stomach, creating indigestion and colic.

When the baby is dressed and snugly tucked away in its bed, the nurse has an opportunity to

look after the mother, and make her comfortable. Should it cry a little, no matter, this will not hurt it, on the contrary this effort has the effect of expanding the lungs and clearing out the throat; if let alone it will soon quiet down and fall asleep, probably not to awake for several hours. The idea that children are liable to break a blood vessel, or produce a rupture at the navel, by crying, has little or no foundation in fact.

After the mother has had a little repose, the baby should be put to the breast; this proves not only beneficial to her, for reasons already given, but the first fluid drawn from the breast is nature's medicine for the child, and even in small quantity, acts far better than any artificial preparation. It possesses slight purgative qualities, and secures the thorough evacuation of a peculiar dark looking material with which the bowels are loaded at birth, while the act of sucking and swallowing best removes any troublesome mucous that may be collected in the throat. Here then is a beautiful provision of nature. whereby the first secretion drawn from the mother's breast, acts in the double capacity of food and medicine, thus providing in an acceptable form all that the child needs.

A sensible, well informed nurse, will readily appreciate the importance of leaving the baby to nature, and of compelling it to swallow nothing but what it obtains in the natural way from its mother, knowing that if both are healthy, this will be amply sufficient for its wants. It is a sad fact that a majority of the deaths among young children are the result of mismanagement and well-meaning ignorance, rather than disease. When the child is allowed nothing but the mother's breast, it will usually be observed that its bowels and bladder are freely evacuated within the first day after birth. Should this not occur, it will be quite time enough to debate the propriety of giving remediés. It frequently happens that perfectly healthy children pass no water for the first twenty-four hours, but with the secretion of the mother's milk, the urine is established. If, at the end of a day, there is no movement of the bowels, the attending physician would do well to examine and see whether the opening of the bowel is natural, for in certain rare instances this is found defective, or entirely closed, necessitating a surgical operation.

The napkins, or diapers, should always be promptly changed as soon as they become wet or soiled; a neglect to do this will speedily produce chafing and uneasiness. In changing the napkins, the child must be wiped thoroughly clean and dry after which its groins, and in fact all its parts, should be well powdered. When the bowels are moved it should be cleansed with warm water and soap. Whenever there is any redness, or indication of commencing irritation, the application of a little vaseline with the finger, proves a good protection; this should, however, be carefully washed off when the next bath is given, after which it may be renewed, if necessary.

All young children should be bathed once a day in warm water, with soap. The bath is usually given in the morning, but when the child is disposed to be restless or fretful towards night, it is sometimes well to change the hour of bathing, inasmuch as children generally sleep better after a bath, which seems to exercise a soothing effect upon them. Under such circumstances, an evening bath is occasionally found to have a good influence in promoting a quiet night's rest, thus enabling the mother to obtain her needed repose.

The cord generally separates from the child in

from three to five days; when this has occurred, the navel should be very gently cleansed with a soft wet sponge, and a piece of linen or muslin, . smeared with cold cream, fresh mutton suet, or vaseline, is laid upon it. This is held in place by a small soft compress, over which the bandage is snugly pinned; the same dressing to be repeated daily, until the stump has healed. When the navel is properly attended to, the point of attachment of the cord usually heals over in a few days. This is not invariably the case however, for sometimes there is seen a rounded raw knob in the centre, which is very slow in skinning over, and if proper cleanliness is not observed, or if irritating applications are made, which is sometimes unfortunately done without consulting the physician, very troublesome consequences may ensue. The proper plan is for the nurse, when she finds the navel does not heal promptly, or presents any unusual appearance, to call the doctor's attention to it, when he will most likely prescribe something to dry it up. In some cases, in spite of all remedies, the navel continues raw for a long period, but in time, and under judicious management, these generally come around all right.

Babies frequently have pouting of the navel when crying coughing, or straining, and under the impression that this is a dangerous symptom, predisposing to rupture, many nurses are in the habit of applying hard compresses, such as coins and other like things, to prevent it. Such appliances are seldom necessary, and should never be resorted to, unless directed by the physician. All that is necessary is the soft dressing already described, which is held in place by the bandage, snugly, but not too tightly, pinned around the body. A pouting navel is a great bugbear with many persons, but it generally leads to nothing dangerous, being most frequent in feeble, badly nourished children, and simply shows that the muscles of the abdomen are not fully developed. So soon as the child grows and gets a little stronger, it almost always disappears without treatment. A very large proportion of children belonging to certain races have protruding navels (for instance the negro), yet they all outgrow it, and after reaching maturity are as free from such deformity as other people.

It is not uncommon for the breasts of infants of either sex to present a swollen and hardened appearance within a few days after birth. Under

such circumstances it is possible to press out a few drops of whitish fluid, which some take to be genuine milk, and they imagine that it is very important to squeeze the breasts frequently. This, however, should never be done, since it does more harm than good, producing much unnecessary pain, and often sets up serious inflammation. Such swelling, if let alone, subsides of its own accord in a few days; it is probably the result, in most instances, of irritation and rubbing by the child's clothing; all that is necessary therefore, in ordinary cases, is to protect the breasts from friction. This is best accomplished by placing over each breast a soft piece of fine linen, about the size of a half dollar, upon which a little fresh mutton suet, or cold cream has been smeared; these may be confined in their places by small strips of court-plaster.

There are several other affections to which the young child is subject, calculated to give inexperienced mothers uneasiness. One of the most common of these, and which is sometimes mistaken for measles or scarlet fever, is an eruption upon the skin, known by nurses as "red-gum." It makes its appearance a few days after birth, and presents a number of small red pimples over

the face and body. They may be caused simply by contact of the child's tender skin with the air, by the irritation of its clothing and overheating, or possibly by improper food. It usually runs a short course and gets well of itself.

Within a few days after birth, it is not uncommon to notice, when the baby's skin is examined under a strong light, a yellowish tinge resembling jaundice. This peculiarity does not necessarily indicate anything wrong, nor does it call for any special treatment, since it passes off usually within a fortnight.

Young babies are also liable to an affection of the mouth, which consists of white curdy flakes covering the lining of the jaws, gum and tongue; this is known as the thrush, and is best prevented by paying attention to cleanliness within the mouth, by carefully swabbing it out frequently with a soft clean rag rolled around the finger and dipped in cold water. In this way all curdled remnants of milk are thoroughly removed after each time of sucking, which tends to keep the parts healthy. When thrush is fully established, it should be checked by adding a pinch of powdered borax to the water employed for

washing the mouth. In bad cases, especially where the food is improper, or the child's digestion has been deranged, the irritation of thrush seems to spread down the throat and throughout the bowels, finally producing a chafed or scalded appearance around the lower opening of the bowel. Under such circumstances, the physician should take the case in hand.

A cold in the head, or *snuffles*, stopping up the nostrils and compelling the child to breathe through the mouth, will frequently prevent it from taking the breast, for it no sooner closes its mouth upon the nipple than a feeling of suffocation comes on, causing it to let go. This occurs at every effort at suction, and as the baby naturally frets from worry and disappointment, many interpret these acts as evidences of serious illness. A little intelligent observation and experience, however, will soon teach a nurse, or mother, to understand this and many other signs and symptoms connected with the conduct of the child.

To distinguish between the cry of pain, and that of hunger, or passion, is not always an easy matter; though it is astonishing how much can be learned by closely studying the actions and complaints of young children. Such knowledge can be much more accurately gained by a physician than by a nurse, for the reason that he, by reason of his profession, is informed on many points, and can note many symptoms, of which she is necessarily ignorant. Many persons conclude that the baby has colic whenever it cries, and proceed forthwith to fill its stomach with some one of the innumerable teas used for this complaint. The more vehemently the little helpless creature resents such treatment, the more certain his kind-hearted tormentors are that they are right, and consequently the dose is repeated, with the result, after awhile, of making it really sick.

The cry of a child with colic is never a continuous yell, or scream, but it is rather a constrained cry and fretfulness by turns; during the intervals it will frequently take the breast and suck vigorously, when it again draws itself up, drops the nipple and utters a cry of pain, which is often commenced, or terminated by a peculiar whimpering, or whining sound, that to an experienced ear is as plain in its meaning as spoken language can make it. Colic is only one of many symptoms of indigestion, and will

nearly always be found associated with other indications of intestinal derangements such as lumpy, sour-smelling stools, together with the occasional presence of slime in the discharges. Under such circumstances, the abdomen is more or less puffed up with wind, which frequently passes audibly from the bowels. All these symptoms depend, in a majority of instances, on the improper quantity or quality of something which the child has swallowed, either in the shape of food, or medicine. The way to prevent and cure colic, therefore, is to look for the cause of the trouble, and get rid of it; this may require a dose of purgative medicine, or some change in the manner of feeding. It is becoming a very common practice to give children whisky, or brandy, under such circumstances, and while these may quiet them for the time being, they frequently aggravate the digestive disorders upon which the disease depends.

During the first month most infants have from three to six evacuations daily from the bowels, the number depending somewhat on the quantity and frequency of its meals. Very many babies throw off any surplus milk which they may take into their stomachs; this is natural, and is not a sign of sickness, as many young mothers suppose, but is a good omen, since it shows that the supply of nourishment is ample, and it is also an indication of strength — that the child is strong enough, through a happy provision of nature, to get rid of the superfluous portion of its food. It is a fact worth observing, that feeble, delicate children, do not usually "throw up" any milk, and hence it is retained, and the stomach being unable to digest it all, the remainder passes as curds into the bowels, causing more frequent and unhealthy discharges. The number and quantity of passages will also depend, and for similar reasons, on the supply of milk; and if this be very abundant and free, and if the baby is nursed at short intervals, its evacuations will be correspondingly copious and close together. Whenever the baby seems thriving and contented, there is no good ground for interference, even though the bowels are moved a dozen or more times a day. On the other hand, it should not be considered as necessarily constipated, if it is apparently well, and only has a single free passage each day. The only rule to go by, is to observe the behavior of the child, and see whether it suffers from griping, or straining, or presents any other indications of sickness.

The feeding of the child, is a very important consideration, and one on which most nurses and mothers require a great deal of caution and instruction, for here the physician has to contend with deeply-rooted prejudices and notions, which are hard to correct. As before stated, a great mistake is generally made as soon as the child is dressed, in giving it something to swallow. This should never be done, since it needs nothing, and is better off without it; for, as already remarked, there is, from the moment of birth, a fluid in the breast which possesses all the qualities of medicine and nourishment that nature requires. When the baby is born, its bowels are filled with an enormous quantity of dark greenish material, which ought to be discharged, before food is introduced; hence the wisdom of Providence, in imbuing the first draughts from the breasts with purgative properties, by which the intestines are thoroughly cleared out before the active secretion of milk begins. In the meantime, the child does not suffer for food, as is generally supposed. It is a common thing for parents and nurses to exclaim, "Oh, doctor, the baby will starve, if it has to wait for the milk to come!" And without stopping to inquire why nature should have

apparently forgotten to provide for the human race during this period of "waiting," they proceed to remedy the defect by some artificial food, which almost invariably makes the child sick, and starts it on a career of fretfulness and colic that may last for months, and thus seriously retard the recovery of the mother.

If a baby is healthy and fully mature, it does not require a drop of nourishment, except what it gets from its mother, during the first three days. At first sight, this may seem incredible, but there is a scientific reason for it which most people do not appreciate. This reason will now be stated in a few plain words, and it is hoped that all intelligent readers, who have carefully studied the preceding chapters, will be able to understand it. For if this matter is once fully comprehended, it will be plainly seen that the idea of a new-born baby requiring nourishment in its stomach, is based simply on popular ignorance.

When the child is born, the after-birth is retained for some minutes in the womb, and during this time (if the circulation in the cord is undisturbed by premature tying), this organ contracts down upon it, and presses a large

amount of extra blood through the cord into the veins of the child. The after-birth not only nourishes the child before birth, but, by a beautiful provision of nature, its contents are literally squeezed out for the infant's benefit before its final separation. This last blood, which is thus squeezed out of the after-birth, amounts to several tablespoonfuls, and is quite sufficient to meet all the wants of the child, until milk appears in the breasts of the mother. See how important it is then, that nurses should be instructed as to the reasons for not doing certain things, and, in this instance, they will understand that it is useless to feed a new-born chill-that it cannot be hungry-because bountiful nature has already started it on the journey of life with "three days' rations," in the shape of ready-made blood. This is one of the chief reasons, as has already been said, why there should be no hurry in cutting the cord at birth, and that a little time should be allowed, during which the womb makes its parting gift, so to speak, to the child, in the way of nourishment, which is intended to last it until the breasts take on their functions.

In certain instances, where the baby is exceedingly feeble, or premature, the physician may deem it necessary to make an exception to this rule in regard to feeding, and may find it advisable to give both food and stimulants to sustain the feeble spark of life. In these cases, it is also necessary, owing to the weakness of the child and its imperfect powers of suction, to let it have the breast more frequently than stronger children. Occasionally the nurse will be obliged to draw the milk with a breast-pump, and carefully feed it at short intervals with a spoon. It is not unfrequently the case, that puny, premature infants, have been thus nourished and sustained, until they have gained sufficient strength to take the breast; these always require the most tender and unremitting care.

Every consideration of propriety and policy requires that the child should be nursed by its own mother, unless there is some good reason forbidding it. As has been remarked by a late eminent physician, "The child was made for the breast, and the breast was made for the child," and hence no substitute has been devised which so perfectly agrees with it as human milk, when that is of the proper quantity and quality. The mode of applying the child to the breast, and the intervals to be observed in so doing, have

already been fully dwelt upon in speaking of the management of the breasts. And while once in two hours is there mentioned as the proper interval between the time of suckling, during the first month or six weeks, it must be understood that no absolute rule can be laid down in such cases. When the milk is slow in coming, or in insufficient quantity, the interval may sometimes be shorter; on the other hand, if the secretion is abundant, and the baby, after getting its fill, should sleep five or six hours, it is not necessary to disturb it simply for the sake of routine; when hungry, it will awake and make its wants Much can be gained by cultivating proper habits in this respect; for instance, by a little pains-taking on the part of mother and nurse, the child can be accustomed to going a longer time without the nipple at night; this secures better rest for the mother, which is important, so much so indeed, that the physician sometimes thinks it best to direct the baby fed on cow's milk at night, rather than disturb her.

When a young child is put to the breast, it should be watched closely during the first few days, in order to see whether it really sucks and swallows, or whether it simply holds the nipple

in its mouth without receiving nourishment. this way, a very correct idea can readily be formed with regard to the freedom with which the milk flows. When the nurse is satisfied that it freely swallows, she has every reason to believe, when the baby falls asleep while sucking, that it has had enough, and should immediately remove it, for no worse habit can be contracted than for a child to become accustomed to sleeping with the nipple in its mouth. Especially is this the case at night, for the effect is to tell very profoundly on the strength of the mother, which is in time undermined and depleted by this continual tugging at her breasts, while at the same time. it is apt to create indigestion with the baby, by having its stomach constantly filled by fresh accessions of milk. For the same reason, it is a bad plan to give the baby the breast every time it frets, simply for the purpose of stilling its cries; to do this, is a strong temptation to both mothers and nurses, but their own judgment and good sense should teach them better. The rule to be governed by in such cases is a plain one; the baby should only have the nipple when it is hungry, and should be allowed to to get its fill (sucking equally from both breasts), after which

it ought to be laid away to sleep, thus giving the stomach ample opportunity to dispose of its contents, and take the rest that nature requires.

In speaking of the "Management of the Lying-in Woman," allusion has already been made to the importance of regulating the diet of recently delivered females, as well for their own good, as for that of their children. It is certain that imprudence in diet, as well as mental disturbances, frequently tells very promptly and decidedly on the quality of the milk, and thus influences the health of the child. Violent emotions on the part of the mother have been known to work such profound changes in her milk, as to throw her infant into spasms. When children are nervous and cross therefore, without apparent cause, it sometimes turns out to be due to something wrong with the mother's milk; such a conclusion should never be formed, however, without good evidence.

It occasionally happens that either from retarded secretion of milk, from some permanent defect in its quality or quantity, or some other cause, the baby has to be fed artificially. In such cases it is always best to procure a healthy wet nurse with a fresh breast of milk, for, as

before remarked, no substitute answers so good a purpose as human milk, and when that cannot be procured, the food given should be as *nearly* like it as possible. Any departure from this rule will nearly always end in mischief.

Fresh, healthy, cow's milk, is the most convenient substitute, after it has been altered to make it more closely resemble human milk, which latter has naturally a different proportion of ingredients from that of the cow, goat, or other animals, whose young are accustomed to skip and play about within a few days after birth, while the infant lies quiet and helpless in its cradle. For this reason, the young calf requires more substantial food than the child, hence cow's milk possesses more solid ingredients in the shape of butter and curd, while it contains less water and sugar. In order to make cow's milk conform to human milk therefore, it is necessary to add water and sugar to it. Again, since the curd of cow's milk is much harder, forming firmer clabber than human milk, it is desirable to prevent it, as far as possible, from curdling in the child's stomach; this is accomplished by adding a little lime water to the cow's milk, which also corrects any unusual acidity.

Persons generally lay much stress upon the importance of obtaining the milk from "one cow," but this is not essential, provided the milk is good. Whenever there is any reason to believe that this is not the case, milk from some other source should be tried, until there is a certainty of a proper article.

Nurses and others frequently prepare a surplus of food for the baby, and allow what is left after feeding to remain in the bottle until it becomes slighly tainted, before it is consumed. It should be remembered that milk is the most delicate of all fluids, and is liable to partial change under the slightest provocation, hence, when it is used, it ought always to be as freshly drawn as possible, and kept in a *cool* place and in a *clean* vessel. Only such quantity should be put in the bottle as is necessary for one meal, after which it should be thoroughly cleansed.

The practice of putting a baby to bed, with a bottle of milk by its side, to be sucked through a tube at intervals during the night, is one of the greatest of follies, for the warmth of the body renders the milk unwholesome, and the child contracts the unfortunate habit of sleeping with

a nipple in its mouth—all of which is bad for it. A similarly injudicious plan, and one which should never be adopted, is the making of what is known as a "sugar-rag," or "sugar-teat," and placing it in a child's mouth, merely to quiet it. This device is a species of labor-saving machine, calculated to afford rest for the nurse, or mother, at the expense of the baby's welfare.

The writer does not know how he could better close this chapter, than by adding, for the benefit of those interested in the rearing of young children, the excellent "Rules for Management of Infants," taken from the English translation of Professor Steiner's work on "Children's Diseases." These Rules were originally published for the guidance of nurses and parents, by the Medical Staff of the Birmingham Sick Children's Hospital, England. They cover all that need be added on this subject.

I. WARMTH, CLEANLINESS, FRESH AIR.

Keep them warm; let the clothing be warm, but not tight. Wash them all over with warm water daily, wiping them thoroughly dry afterwards. Never let a wet napkin remain on for a minute. Give them plenty of fresh air; send

them out, at least for a short time, every day that the weather is fine; and, while they are out, air the room by freely opening the window.

II. NOURISHMENT WHILE THE CHILD IS UNDER SEVEN MONTHS OLD.

The mother's milk is the proper food for infants. Therefore, if the mother has plenty of milk, let her suckle her child and give it nothing else, till it is seven months old; if the mother has too little milk, still let the child have what there is; and, in addition, cow's milk and water, as directed in Rule III. Till the child is seven months old, milk of some sort must be its only food. * * * * * * * * * *

III. HOW TO BRING UP BY HAND.

If the child must be brought up by hand, it should be fed with warm sweetened milk and water out of a bottle. If the milk be genuine, add to it, at first, nearly half water; at a month old, add only one-quarter part water. In most town milk, two table-spoonfuls of boiling water to the pint will be enough; add also one table-spoonful of lime water, (unless otherwise advised,) and sweeten with white sugar. A child

a month old should have about two pints a day of milk thus prepared, [less than this under a month, and not more than half a teacupful at a time; gradually put less water, and at four or five months give the milk plain. Give the child no other nourishment whatever, except under special advice. A very large number of the children that are brought up by hand die in childhood; and this mortality is, for the most part, due to the practice of beginning too soon with gruel, corn-flour, bread, arrowroot, etc. These are not proper nourishment for children under seven months old, and should never be given to them. The bottle should draw easily. It should be very carefully washed out after every time it is used. The bottle, cork and tube should be kept separately in a bowl of clean water (containing a pinch of soda) till the next time they are needed. If the bottle is not quite clean the milk will sour, and will thus make the child ill. The "Condensed milk" is good, and may be used, if other milk cannot be got fresh.

TO MAKE LIME WATER.

Put a piece of quicklime, weighing about half a pound, into a stone jar, or any earthen vessel, and pour gently and gradually upon it about a gallon of cold water, then well shake and stir it, and let it stand through the night, when the lime will sink down to the bottom. Next morning take off the top scum, and pour the clear liquor into clean bottles, and well cork them.

IV. IMPORTANCE OF REGULAR FEEDING.

In the child should be put to the breast regularly—for the first six weeks, during the day, in general not oftener than every two hours; afterwards about every three hours. During the night it does not need to be fed so often. A child soon learns regular habits as to feeding. It is a very great mistake to give the breast to the child whenever it cries, or to let it always be sucking, particularly at night; this is bad for both mother and child. If the child is brought up by hand, it should be fed with the same regularity; never give it the bottle merely to keep it quiet. If the child is weakly, the time between the feedings must be rather less, both during the day, and during the night.

V. NOURISHMENT WHEN THE CHILD IS OVER SEVEN MONTHS OLD.

If at seven months the child is strong and healthy, and has cut a few teeth, it may now have one or two meals a day of milk slightly

thickened with good well-baked bread, Liebig's infant food, or Dr. Ridge's patent cooked food, or Chapman's entire wheat flour, or rusks, or well boiled oatmeal, etc. [Loefland's, Horlick's, and Mellin's infant's food, when judiciously given,* are also excellent.] It should still have, besides this, plenty of plain breast, or cow's milk. At ten months it may, once a day, have a little meat broth made with barley or rice, without vegetables. At from ten to twelve months, it should be taken altogether from the breast. Till the child is nearly two years old, no solid animal food should be given. Even at two years, milk should still be the chief food. Any meat should be well pounded.

VI. AVOIDANCE OF STIMULANTS.

Tea, beer, brandy and other stimulants, cheese, new bread, fruit and pastry, as also "soothing medicines," "sleeping draughts," "cordials," "teething-powders," etc., should never be given; and even ordinary medicines should, if possible, be given only after proper medical examination and advice.

^{*} Many of the so-called "Infant's Foods," extensively advertised, are unscientific in principle and highly injurious. Every mother would do well, before adopting a "food," to consult her physician, for everything depends upon judicious selection, and the preparation and mode of using; all of which should be governed by the age and condition of the child. Diet suitable for some children, may kill others.

CACHE DANGE COMMENCE OF CHAPTER Ÿ







