

A HANDBOOK
OF
OBSTETRICAL NURSING,
FOR
NURSES, STUDENTS AND MOTHERS.

COMPRISING THE COURSE OF INSTRUCTION IN OBSTETRICAL
NURSING GIVEN TO THE PUPILS OF THE TRAINING
SCHOOL FOR NURSES CONNECTED WITH THE
WOMAN'S HOSPITAL OF PHILADELPHIA.

✓ BY

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CHAPTER XI.

THE AILMENTS OF EARLY INFANCY.

Definition of infancy. It is not proposed in this chapter to take up all the ailments of infancy, for the term "infancy" comprises a time beginning with the birth of the child and lasting until the first dentition.

The obstetric nurse remains with the patient from four to six or eight weeks. During this time many deviations from the normal, healthy state may be met with in the child, and these she should be quick to observe and know how to manage.

Prematurity. One of the most important conditions of this period is "prematurity," a result of the too early birth of the child.

Viability. A premature birth is one that occurs at any time after the child is "viable," that is, capable of living after its birth. The term of viability has been set at twenty-eight weeks, or seven lunar months. Deliveries occurring previous to this time are called "miscarriages."

It may be that with improved methods of management, the period of viability may be placed at an earlier date, but this is as yet a matter for proof.*

* The French claim that by means of gavage and the couveuse,

It has generally been conceded that a child born at six lunar months cannot live, that at seven months it stands little chance, that at eight months its chances are better, and at nine still better.

The popular notion that an eight-month baby (counting the calendar months) does not stand as good a chance of living as a seven-month baby is altogether wrong. Great care is needed for premature babies. They especially need regular feeding and to be kept very warm. The skin being thin and delicate, will also require very careful attention.

Until within a few years the matter of keeping the baby sufficiently warm was exceedingly difficult to manage. The French invention of the "couveuse," or "brooder," has simplified the matter very much. It was first used in some of the French lying-in hospitals in 1881. Since then it has come into quite general use in France, being employed even in private houses. Many different forms of the apparatus now exist. The one most commonly used in France is Tarnier's invention. This has been used for some time with great satisfaction in the Woman's Hospital, of Philadelphia.

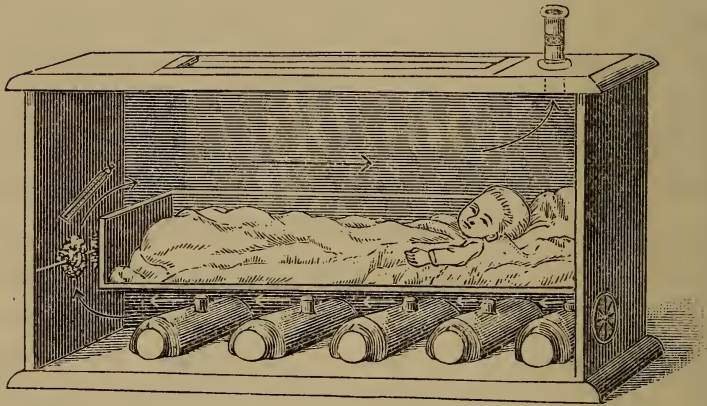
It consists of a wooden box, whose interior is divided into an upper and lower compartment.

or hatching-cradle, the actual period of viability has approached six months of intra-uterine life.

There is a space about four inches wide at one end of the upper compartment which communicates with the floor below. Here two or three large sponges on a wire stem are placed. The lid of the box at the opposite end contains a chimney, in which a helix rests on a pivot.

The upper compartment of the box is intended

FIG. 30.



Tarnier's Couveuse.

for the baby, in the lower end are several stone jars, which are to be kept filled with very hot water. At the end of the box furthest away from the open space which communicates with the chamber above, a register is fixed, which may be opened or closed at will. The air enters through the register, is heated by passing over the hot stone jars, moistened

by the wet sponges in the space between the upper and lower chambers, and finds its exit from the chimney, in which it keeps the little wheel revolving. The motion of this wheel indicates whether the circulation of air within the *couveuse* is perfect or not. A thermometer fastened to one side of the interior of the box assists in the regulation of the temperature, which should be kept at from 85° to 95° Fahr., according to the indications in each case. A frame containing a pane of glass, forms the top of the box. Through this the record of the temperature and the condition of the child can be watched.*

The following directions for the use of the *couveuse* are given by Dr. Auvard, who superintended its introduction into the Maternité, at Paris:—

Directions
for use.

To keep up an even temperature, one of the stone jars should be refilled every hour, hour and a half, or two hours.

The apparatus being more difficult to heat when it stands in a draught of air, it should be placed so as to avoid this.

Should the temperature rise too high, the cover may be slipped down a little, so as to allow of the

* Dimensions of *couveuse* for a single infant: Width, 36 centimetres; length, 65 centimetres; height, 55 centimetres. For twins, a larger case is necessary, which holds a correspondingly greater amount of hot water.

entrance of air from above, or the inferior register may be opened so as to admit a larger quantity of air. The partial closure of the register so as to admit less air, would help to raise the temperature when it tends to fall below the desired point, as also would the addition of hotter water to the jars.

The child should be placed in the upper compartment of the couveuse as in its cradle, being removed simply for nursing, its bath and toilette. When removed from the couveuse, care should be taken to have the temperature of the room sufficiently warm. Auvard sets this temperature at 61.2° . We should be inclined to require a higher temperature, as from 70° to 75° Fahr.

The length of time the child remains in a couveuse will vary from fifteen days to three weeks, a month, or even more. It should not be removed permanently until it has acquired sufficient vigor to live in the ordinary atmosphere of the apartment. To accustom the child to this atmosphere, it should, as it grows stronger, be removed for an hour at a time from the couveuse during the warmest part of the day.

It is best to continue the use of the apparatus at night for some time after the child becomes accustomed by day to removal from the couveuse, for the danger of chilling from changes in the atmosphere is greater at night.

Auvaré recommends the use of the *couveuse* in all cases where the vitality of the child is enfeebled either by external causes, as cold, or internal causes, as prematurity, congenital feebleness, cyanosis, or "blue disease," wasting, or other general maladies enfeebling to the new-born.

To overcome the difficulty in the management of this *couveuse*, owing to the necessity for the frequent removal of the hot water jars, Auvaré has devised an improvement, which is shown in Figs. 31 and 32.

A cylindrical reservoir of metal takes the place of the hot-water jars in the lower compartment of the *couveuse*. This reservoir is filled by means of a metallic funnel fastened to one end of the box and communicating with the cylinder through a metallic tube.

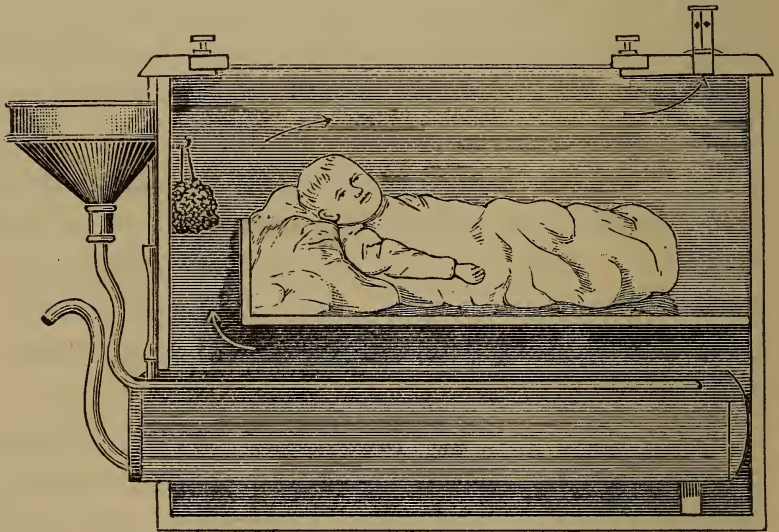
The overflow of the cylinder is provided for by a curved metallic tube at the lower part of the cylinder beneath the inlet through which the reservoir is filled.

The air enters by a register on one side of the *couveuse* instead of at the end, as in Tarnier's apparatus. The other portions of the apparatus are the same as Tarnier's.

The metallic cylinder is capable of holding ten litres of liquid (a litre is a little over a quart). To start the apparatus, about five litres of boiling

water should be poured in, after which three litres may be poured in every four hours. When ten litres are contained in the cylinder, the overflow-pipe carries off the excess. Auvard suggests having two vessels, capable of holding three litres

FIG. 31.



Auvard's Couveuse (Interior View).*

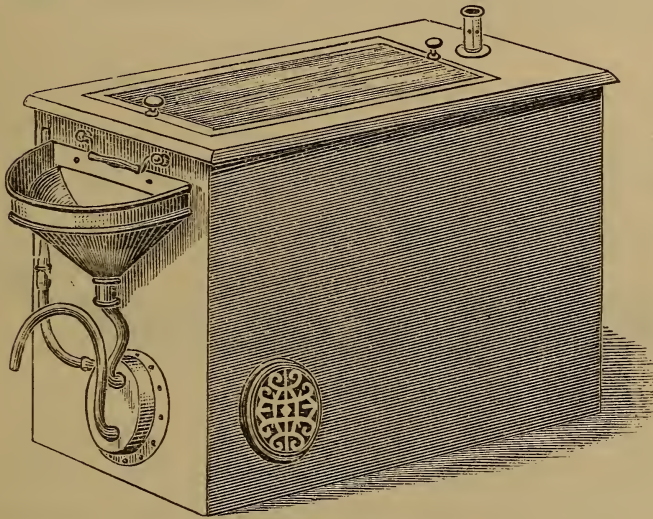
each, keeping one under the escape-pipe and the other over the fire, reheating the water in the vessel filled by the escape-pipe and having it in readiness for the next change. The two vessels may

* *Archives de Tocologie.*

be thus used alternately, and but little time consumed in the heating of the apparatus as compared with that required in the use of Tarnier's invention.

To empty the cylinder, a rubber tube is attached to the escape-pipes, by which it is made to act as a

FIG. 32.



Auvard's Couveuse (Exterior View).

siphon—a small quantity of water poured into the cylinder through the funnel being sufficient to start the liquid.

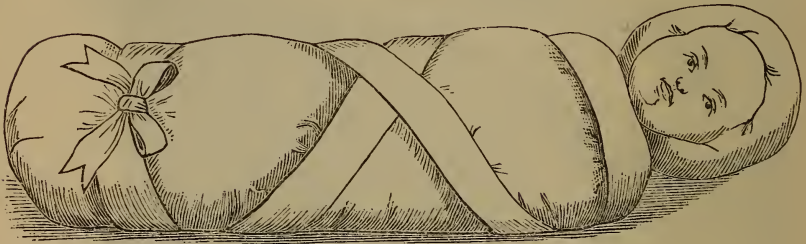
Before the couveuse was known premature babies were swaddled in cotton, in order to be kept

Cotton
swaddling.

sufficiently warm. The directions for doing this are as follows:—

Take a square baby-blanket and place it diagonally on the table or bed. Turn down one corner for four inches distance, to come up over the baby's head. Spread over this blanket a lap of raw cotton. Have the baby's napkin and binder on and a flannel undervest. Make a cap out of the cotton, fitting it over the baby's head and

FIG. 33.



Swaddled Baby.

bringing it down well under the chin. Then roll the baby up in the cotton lap. Bring the blanket around this firmly, so as to hold it; the portion of the blanket on the baby's right being brought over and tucked in on the left side, the portion on the left being correspondingly folded over toward the right. The corner of the blanket left at the feet is then folded up over the front, and the whole held in place by means of a strip of muslin bandage or

ribbon. The bandage is first applied beneath the chin, crossed under the back, again crossed in front, the ends being brought forward to fasten in a bow-knot at the feet.

The great disadvantages of this method may be seen in the restriction it gives to the movements of the child's limbs and the difficulty of determining when the child's napkin needs changing, also the frequent exposure of the child during these changes to the ordinary atmosphere.

The skin of a premature baby should be well greased after every bath, or some oil, as cotton or sweet oil, may be used, and will serve the double purpose of protecting the skin and giving nourishment by absorption. Protection of skin.

The child should be fed every hour. As it is Food. usually too weak to suck, it is safer to feed the baby with a spoon or with a dropper, to make sure of its obtaining a sufficient amount of food. From one to two teaspoonsful should be given every hour. Breast milk is, of course, the best. It may be drawn from the mother's breast and fed to the child while warm. The nurse should introduce her little finger into the child's mouth and allow the milk to trickle slowly down the finger, so as to enter the mouth drop by drop, while the child sucks the finger. Should the mother have no milk, the first week's feeding recommended by Dr. Starr,

or sterilized peptonized milk diluted two-thirds with boiled and filtered water, should be used—if no wet-nurse can be had as a substitute.

Gavage.

Should the baby drink badly and throw up a large proportion of the liquid given to it, "gavage" may have to be resorted to. The physician must authorize the nurse to carry this out, for she should never undertake it otherwise. The directions for practicing gavage, as given by Dr. Louis Starr, are as follows:—

The apparatus used is quite simple, being nothing more than a urethral catheter of red rubber (No. 14–16, French), at the open end of which a small glass funnel is adjusted. The infant upon whom gavage is to be practiced is placed on the knee, with its head slightly raised; the catheter, being wet, is introduced as far as the base of the tongue, whence, by the instinctive efforts at swallowing, it is carried as far down as the œsophagus (or gullet) and into the stomach.

The liquid food is next poured into the funnel, and by its weight soon finds its way into the stomach. After a few seconds the catheter must be removed, and here is the great point in the operation; it must be removed with a rapid motion and at once, for if it be withdrawn slowly all the food introduced will be vomited.

Mother's milk is the best for gavage, as at any

time, but other kinds of food may be used. The amount given and the number of meals will vary with the age and strength of the child. From a teaspoonful to a dessertspoonful at one time is sufficient for a very young child, given every hour. Too much food would produce indigestion. As the child grows stronger this mode of feeding may be made to alternate with nursing. Diluted sterilized milk peptonized may be used for the alternate feedings.

Colic is a very troublesome affection of infancy. Colic. It corresponds to the dyspepsia of grown people, and indicates that the food is either improper in quality or quantity. A colicky cry is a sudden, sharp cry, the baby drawing up its feet and legs at the same time. The feet are generally cold, and one indication for treatment is to warm them; warm socks or woolen stockings should be worn, or hot bottles applied to them.

The abdomen should also be kept warm by the application of heated flannels, or a spice poultice wrung out in hot whiskey, or a flaxseed poultice, and kept applied until the baby gets relief. Counter-irritation and warmth.

To make a spice plaster, a teaspoonful each of ground allspice, cloves, cinnamon, ginger, and cayenne pepper, with four teaspoonfuls of flaxseed meal, may be quilted into a bag of flannel, 4 x 8 inches, which will fit entirely over the baby's abdomen. Spice plaster

When the spicy smell is lost the plaster is no longer good for use.

Oil
inunction.

Warm oil rubbed gently in over the abdomen for ten to fifteen minutes at a time, will often give relief by leading to the expulsion of the wind causing the pain.

Anise seed
tea.

If the application of heat is not sufficient, anise-seed tea should be given. It is made as follows :—

Over a half-teaspoonful of anise-seed pour a half-teacupful of boiling water. Allow it to steep a few minutes, until the water tastes strongly of the anise-seed. A half-teaspoonful of this may be given warm, every ten minutes, until the baby has had four doses. This brings up wind from the stomach, and thus gives relief. Simple hot water will help in the same way should anise-seed not be on hand. Catnip tea may be made and used according to the same directions. These teas are preferred to the drop-doses of gin so frequently given.

Frequent
stools.

Frequent stools do not always indicate diarrhœa. For the first six weeks of its life a child averages three or four movements every twenty-four hours, after which it has about two a day until it is two years old.

A natural passage for an infant would be of a mushy consistency and a yellow or orange color. It should contain no curds. Bottle-fed babies have

whiter and more offensive stools than breast-fed babies.

In diarrhœa there is a change in consistence or appearance. A liquid stool, or one colored green, or white, or like putty would be abnormal. The presence of curds also would show an inability to digest the food properly.

If, therefore, these curds exist in the stools, or the matters vomited be curdy, the indication would be to use some alkali or a small quantity of some thickening substance, as barley-water, gelatine, or one of the prepared foods intended to serve the same purpose, or the milk may be peptonized. Modifica-
tion of food.

Lime-water is the alkali most usually employed. Lime-water. Lime-water contains but about half a grain of lime to the fluidounce of water, so that at least a third of the feeding should be lime-water where it is used to correct indigestion. To make lime-water a piece of lime about the size of the fist should be placed in an earthen vessel ; about three or four quarts of water may be poured over this, strained thoroughly, and then allowed to settle. The water should be used only from the top of the vessel. It is better to filter it before use. The vessel may be kept filled with water so long as any of the lime remains in it, when it will be necessary to add more lime.

When lime-water cannot be obtained, a small powder of baking soda—three or four grains—may

be added to the nursing-bottle. These rules apply when the baby is artificially fed. Should the baby be nursing the breast a teaspoonful of lime-water mixed with an equal quantity of boiled and filtered water may be given it before each time it is put to the breast.

Barley-water.

Of the thickening substances used to help in the digestion of food, barley-water is one of the best. To make barley-water a gill of boiling water should be poured over a teaspoonful of washed pearl barley, freshly ground in a coffee-mill and boiled for a quarter of an hour, then strained. It should be mixed with milk in the proportions required, two-thirds, a half, or one-third.

Gelatine.

Gelatine is sometimes used instead of barley-water. A piece an inch square of plate gelatine is put into a half tumblerful of cold water and allowed to stand about three hours. This may then be turned into a teacup and set in a pan of hot water and boiled. The gelatine thus dissolves, and when allowed to cool, forms a jelly, of which one or two teaspoonsful may be added to a feeding.

Infants' "foods."

Of the various kinds of "infant's food," those in which the starch has been made into dextrine or grape sugar are the best. "Mellin's Food" and "Horlick's Food" belong to this class. A teaspoonful of these dissolved in a little hot water—about a tablespoonful—may be added to the milk

for the feeding. These starch foods cannot be well borne by a child before it is five or six months old, as a rule.*

Condensed milk contains a large proportion of ^{Condensed milk.} sugar, hence tends to make fat. It is not as nourishing as many other forms of food. Babies fed on it, though large, are generally far from strong, and are very apt to suffer from indigestion.

A careful regulation of the diet, as suggested by ^{Dr. Broom-} Dr. Anna Broomall, for the early weeks of infancy, ^{all's} with the addition of barley-water, lime-water or gelatine as indicated, in place of plain water, has been found most satisfactory in the care of infants in the Woman's Hospital. The use of water alone as a diluent is preferred. ^{dietary.}

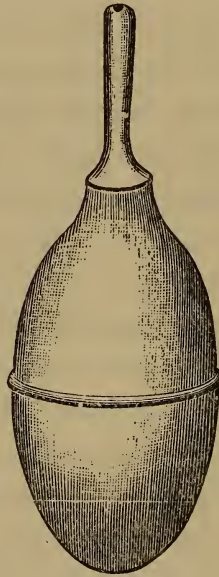
Constipation is not an infrequent occurrence in ^{Constipation.} infancy. Its management consists principally in the use of mechanical irritants for stimulating the bowels; thus a soap suppository, an injection of warm oil or water, gentle friction over the bowel, especially following the direction of the large bowel from right to left, are among the most effective methods for overcoming this condition.

The soap suppository is made by taking a piece

* The prepared foods are not to be recommended, notwithstanding their efficacy in certain cases. Made by the quantity—their composition is of necessity often uncertain, and they must frequently be stale as obtained for use.

of Castile soap, about one inch long, and shaping it into a cone and making it very smooth, so that it will not be larger around than the end of the little finger. This should be gently insinuated about half its length into the bowel and held in the opening until it excites the bowel to act.

FIG. 34.



Single-bulb Syringe (Starr).

The bowel injection may be given by means of the single-bulb syringe, known as the "eye and ear syringe." The bulb holds about two table-spoonsful of liquid. This may be warm cotton-seed oil, sweet oil, or warm water. The nozzle used

should be small, smooth and well oiled. It should be very carefully introduced into the bowel, being directed a little to the left side, and the bulb gently squeezed to force the contents into the bowel. It is best that the liquid should be retained for a little time before it is forced out. The keeping up of a slight pressure over the entrance to the bowel for a short time will aid this.

Rubbing the abdomen for about ten minutes (either with or without oil) in the direction of the large bowel—that is, upward on the right side as far as the border of the ribs, then across to the left side and down this side to the pelvis, is often efficient.

Of medicinal measures, glycerine, gluten or cocoa-butter suppositories may be resorted to, or manna may be given, a piece the size of a pea in the child's milk one, two or three times a day, or a spoonful of water sweetened with dark-brown sugar. Should the child be on artificial food, oatmeal-water may be substituted for barley-water in the preparation of the food.

Babies vomit very easily, because their stomachs Vomiting. are placed more vertically in the body than when they grow older, and over-feeding will cause them to bring up the amount in excess of what the stomach can hold. This vomiting is, of course, not serious. Should the vomited matter be sour and

curdy, the child seem to suffer from nausea, weakness or fever, it indicates a condition of indigestion which should receive attention. The management would largely consist in the regulation of the quality and the quantity of the food, as has just been said.

Thrush.

Thrush is a disease due to want of care of the baby's mouth. If milk be allowed to collect on the tongue, it sours, and the presence of this acid favors the development of thrush, which is really a vegetable parasite. White patches may be seen on the soft palate, inside the cheeks, lips and tongue. The attempt to rub off these patches causes bleeding. Gastric catarrh and diarrhœa usually accompany this trouble. Care in cleansing the child's mouth after each nursing, will prevent the occurrence of thrush. Its treatment consists in the use of an alkaline wash, as borax and water (twenty grains to the ounce), or some antiseptic wash prescribed by the physician.

"Red gum."

"Red gum" is an eruption which comes out over the baby in the first or second week of its life. Sometimes these little points of elevation on the skin are white. The eruption is then called "white gum." These eruptions are due to changes in the skin and irritation from exposure to air, and are not serious. They rarely last over a week.

"White gum."

Blisters.

The occurrence of little blisters on the child's

body, especially on the palms of the hands and soles of the feet, is a matter of more moment and should at once be brought to the attention of the physician, as also should sores around the finger nails. These indicate a condition of the blood for which the use of remedies prescribed by the physician will be necessary.

Sometimes a whitish, glairy discharge comes from the privates of little girl babies. This is simply the matter found there at birth. Occasionally a little blood may be mixed with it, the result of an abrasion in the vagina, and may last a day or two. The nurse need not be afraid to remove this matter ; in fact, if left, it causes irritation of the skin.

Leucorrhœa, "the whites."

A healthy baby usually wets its napkin very frequently. It may be every hour during the day, and four or five times at night. Sometimes several hours may pass and yet the napkin remain dry. Either of these conditions may exist in health, being dependent largely upon the weather, the food, etc. If urine is not passed for twelve hours, the condition should be reported.

Urine.

The nurse may try to make the baby urinate by using fomentations over the bladder and kidneys before reporting the matter to the physician.

The skin of new-born babies is soft and thin, and apt to become sore, especially when two surfaces rub. First, a little crack is noticed, next day this

Care of skin in excoriations.

will have widened until, sometimes, a large surface is left bare. To prevent this, proper care of the baby from the very beginning is important. Never use soap. Use warm water in washing it, either plain warm water or water with sufficient powdered borax to make it soft, and wash the part very carefully; wipe or mop carefully with a soft cloth. Then, to prevent further rubbing of the parts, particularly if the skin be broken, use a piece of patent lint or soft Canton flannel, with some salve, as zinc ointment, containing 20 grs. of boric acid to the ounce, spread over it, and carried into the crease between the rubbed surfaces. This should be changed at least three times a day, or as often as the baby soils the napkin.

Sore eyes.

Baby's sore eyes generally come about from some infection of the eyes through the mother's discharges at the time of the birth, or in lying-in hospitals one baby infects another. Hence, should care be taken to cleanse the eyes immediately after the delivery with a saturated solution of boric acid, or even clean warm water, they may be prevented, as a rule, from getting sore. Should the inflammation occur, however, the nurse must remember that the affection is contagious, through the matter which forms in the eye. This matter is capable of setting up an inflammation elsewhere, as when a towel used about the eyes may produce a similar inflam-

mation about the privates; a scratch or wound in the hands may be affected by it. The discharge from affected eyes is greenish white. The poison it contains is not destroyed by drying; it catches and clings to the room, as the poison of smallpox. Hence, a nurse's hands should be thoroughly cleansed after washing the eyes, and the nails cleaned with a nail-brush. The cloths used in washing the eyes should be burned at once after using. The greatest precautions must be taken not to carry the poison. The nurse's chief care, apart from preventing the spread of the trouble, in such a case, would be to keep the eye or eyes free of the discharge by frequent cleansings with warm water gently syringed into the eye from the inner toward the outer angle, the lids being held everted by their gentle separation by the thumb and finger of one hand. This washing may need to be done every hour. The baby's hands should be kept down by fastening a towel around the child's body, pinning it in the back. The baby may be held between the nurse's knees and its head inclined over a basin, which will receive the water from the washing. Another basin should contain the clear water to be used. Should only one eye be sore, in placing the baby in its crib, or laying it down at any time, the nurse should be careful to place it with the sore eye down, so that any discharge from it may not

enter the other eye. Any further irritation, as of a strong light, should be prevented by keeping the baby in a darkened place. Want of attention in these cases may cause a child the loss of its sight. A room occupied by a baby with sore eyes must afterward be carefully disinfected.

Snuffles.

Snuffles, or a cold in the head, shown by watery eyes, sneezing, stopping up of the nose, hence difficulty in nursing, should be managed by keeping the nose cleaned out by means of soft linen twisted into a cone, greasing the nose well afterward with a little oil by carrying it up the nostrils on a twist of cotton, greasing the outside of the nose between the eyes, and keeping the baby warm. If the baby has no hair, the head may be kept warm by a little mull, or in winter thin flannel, cap.

Discharge from ears.

Running at the ears is generally very serious in new-born babies, especially when the discharge is matter or blood. Some trouble with the brain may be indicated, hence the physician should be told of it as soon as it is noticed. Of course, the discharge entering the ears at the time of the birth should be carefully excluded from this disorder. The breasts of new-born babies often swell. Generally this occurs about the seventh day or during the second week. Occasionally they gather, and must then be lanced by the physician. Nothing should be done for this swelling, except to see that the clothing is

Enlargement of breasts.

loose. It disappears in a few days, as a rule. The same may be said of swellings on the head or about the face, which are due to pressure during the birth. One form of scalp tumor may last several weeks before its entire disappearance. The latter is the result of temporary injury to the bone, and not simply the ordinary swelling which comes from interference with the circulation of the blood in the soft tissues of this portion of the scalp.

Moulding of head.

Scalp tumors.

A child may be born with some deformity, as hare-lip, or cleft-palate, or club-foot, or there may be some malformation about the external organs of generation or the bowel. Whatever the deformity may be, the nurse should avoid letting the mother know anything about it until the physician has told her of it. The shock produced by the knowledge may do the mother much injury; hence the physician should bear the responsibility of making the announcement. A nurse will need considerable tact in managing this, as the mother is apt to ask to see her baby very soon after its birth. An excuse may be made by stating the necessity for washing and dressing the child first, or it may be asleep and the nurse hesitate to disturb it.

Deformities.

Quite frequently the bridle beneath the baby's tongue is too short, and interferes with the free movement of the tongue. This is called "tongue-

Tongue-tie.

tie." It may prevent the child's nursing, and thus interfere with its nutrition. If the baby can extend the tip of the tongue beyond its lips, it is not probable that there will need to be anything done, as the baby ought to be able to suck a good nipple with ease. If the nurse should introduce the tip of her little finger into the baby's mouth and allow the child to draw on it for a few minutes, she can tell whether the act of sucking can be properly accomplished. Should it not be able to suck, the attention of the physician should be called to the matter, as the bridle will have to be nicked—an operation following which there may be considerable loss of blood, hence it should not be attempted except by a physician.

Bleeding
from the
cord.

Bleeding from the cord or navel string may occur within a few hours after birth. It may be that the cord has not been tied sufficiently tight, or there may have been a very thick cord, which, in shrinking, has loosened the ligature. If, after tying, the cord has been looped back upon itself and tied in a single double bow-knot, this may be untied by the nurse and fastened more tightly, so that the bleeding may be controlled, or another ligature may be thrown around the cord a little nearer the body of the child than the first one. Should this not check the hemorrhage, the nurse should hold

the cord firmly between thumb and finger, making compression until the physician, who should be sent for, arrives.*

The cord commonly falls off about the fifth day. <sup>“Falling”
of cord.</sup> The process of ulceration, by which it falls off, leaves an open surface on the child's body which offers an avenue for septic infection. Great care should therefore be taken that the nurse's hands and anything else that comes in contact with this surface are perfectly clean. Should any moisture exist about the stump, the use of the antiseptic powder of salicylic acid and starch, before spoken of, or some other drying-powder of the kind, is indicated. It is necessary, also, to see that the dressing used is thoroughly antiseptic. When infection does exist, it shows itself in the occurrence of <sup>Septic
infection of
navel.</sup> inflammation around the navel, or some other part of the body; the child loses flesh, becomes puny and emaciated, and abscesses form in various places. In the majority of cases it dies, not having sufficient vitality to survive the poisoning.

The physician will, of course, prescribe the treatment for such a child; the nurse will be required

* Bleeding from the base of the stump after the cord has fallen is a more difficult condition to manage. The physician needs sometimes to control the hemorrhage by a ligature drawn beneath transfixion pins. The nurse must keep up pressure over the site until the doctor comes.

to see that these directions are faithfully carried out, and especially that the child gets all the nourishment and stimulation required.

Jaundice of
infancy.

A peculiar yellowish coloration of the skin is to be noticed with babies a few days after the birth. This disappears, as a rule, by the end of the second week, and is due to changes in the circulation.

Should the jaundice be very marked and seem to persist, warm baths once or twice a day, with gentle friction over the liver with soap liniment, helps, with free action of the bowels, to overcome the condition.

When the child is suffering from blood-poisoning, the peculiar coloration of the skin is due to this cause.

Convulsions.

Convulsions may occur in very young infants at varying periods after their birth, according to the cause which excites them, as, injury during labor, indigestion, brain trouble, or other causes. The convulsive seizure is generally preceded by twitchings of the limbs, a rolling-up of the eyeballs, so that a large part of the whites of the eyes is seen, the thumbs are drawn into the palms of the hands, and the fingers tightly clasped over them, or the toes may be turned upward or drawn downward. During the convulsion the child grows rigid.

When the attack comes on the nurse should quickly undress the child and place it in a warm

bath. A tablespoonful of mustard added to the water will help to stimulate the skin, and the convulsion will gradually subside. The child, on its removal from the bath, may be wrapped in a heated blanket, and allowed to perspire freely. On the recurrence of the convulsion, the same measure of placing the child in the bath should be resorted to, until the physician comes and institutes such other treatment as he may think proper.

Bruises, the result of falls or blows, should be treated by the repeated application of hot compresses. This will relieve pain and prevent swelling, and the black and blue coloration of the skin which would otherwise result.

The occurrence of a fall or blow should be carefully reported by a nurse, as the child should be carefully examined for the discovery of any injury, the serious consequences of which may be averted by prompt treatment. The occurrence of paleness or vomiting after any such accident is a serious symptom and should receive immediate attention by the physician.

A hot, dry skin may accompany various of the disorders of infancy, notably inflammatory conditions of the digestive organs and of the lungs. The normal temperature of a new-born baby is 99° Fahr., the pulse 140, the respiration 44.

Should the child seem to be ailing, its tempera-

ture should be taken. A clinical thermometer may be held the requisite number of minutes in the groin or in the folds of the neck. Some slip the bulb of the thermometer into the rectum. Should the temperature be raised, the pulse rapid and the respiration hurried and difficult, some lung trouble probably exists. A catch in the breath, noisy breathing, a distention of the nostrils on taking an inspiration, would indicate the same thing. The frequent rubbing of the chest with some counter-irritant liniment, as St. John Long's liniment, the use of the cotton-jacket for the protection of the chest, and, if the child is very feverish, the use of a drop of sweet spirits of nitre in a teaspoonful of water once in three hours, will constitute the nurse's management of the case until the doctor has seen the baby and laid down his plan of treatment. The cotton-jacket is made by taking a high-necked, long-sleeved merino vest a size or two larger than would be needed by the baby for ordinary wear, opening it down the front, and fastening tapes an inch or two from each edge in front, by which the jacket may be closed. The inner surface of this vest, back and front, should be quilted with sheep's wool or cotton-batting, the outer surface with oiled silk or oiled muslin. This makes a very warm covering for the chest.

Lung
troubles.

Cotton-
jacket.

Cyanosis, or "blue disease," comes from the

imperfect closure of an opening which exists in the heart before birth. The baby is called a "blue baby," and is very delicate in consequence of this imperfection in its circulation. Such babies generally die, if not during infancy, some time during early childhood. With great care they sometimes live, and the opening in the heart gradually closes up. The special care required is to keep the child warm and to handle it very carefully, so that it may be subjected to no jar or nervous fright. The child should be kept lying on its right side, or on its back, in order that there may be as little interference as possible with the action of the heart, and that the tendency of the blood to flow through this opening in the upper chambers of the heart—from right to left—may be overcome.

Cyanosis or
"blue
disease."

Rickets is a disease of the bones—the result of poor nutrition. There is not sufficient deposit of earthy matter in the bones, hence they remain too soft and are subject to all kinds of distortions in consequence of this. The child may be bow-legged and is stunted in its growth, curvatures of the spine may exist, or an unnaturally large head, known as hydrocephalus, or "water on the brain."

The baby having this disease is very weak, cannot hold up its head well, perspires very freely, especially about the head. The complexion is very

white. The baby has constant trouble with its bowels, having green stools nearly all the time. The opening in the front of the head is depressed and the child seems to waste.

As the baby grows older, unless well cared for, the evidences of disease increase, the joints are enlarged, the baby cannot support itself on its limbs, its teeth are slow in coming, etc.

The mother can do much for the health of her child while still carrying it, by a careful regard for her own general health. After the baby's birth it should be kept well nourished, to overcome any tendency to this disease. Salt baths, oil baths, and the use of tonics ordered by the physician, as cod-liver oil, together with careful attention to the quality and quantity of nourishment, will do much to prevent the progress of rickets.

Vaccina-
tion rash.

The question often arises as to how soon a baby should be vaccinated, particularly if smallpox be prevalent. As a matter of experience, it is found that the vaccination does not "take" well before the third month, though, if a younger baby is to be exposed to the poison, it would be well to have it vaccinated. Vaccination should be avoided, if possible, when the baby's health is run down from any cause, also at the time of teething. A peculiar and distressing form of rash sometimes occurs, or

there is a great deal of inflammation following the vaccination, leading the parents to imagine that the baby has been poisoned by the virus used.

An insight into the frailty of human life in its earliest days proves how much the world owes to the faithfulness of mothers and nurses for the existence of its great and good men and women, and should be a stimulus to scientific research in the discovery of improved methods for the management of infancy.

The world's debt to nurses and mothers.