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NURSING

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MATERNITY NURSING



MATERNITY NURSING

BY

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TRAINED NURSE

(MEDICAL, SURGICAL, FEVER, AND GYNÆCOLOGICAL)

MIDWIFE BY EXAMINATION; APPROVED BY THE CENTRAL MIDWIVES BOARD
FOR THE PURPOSE OF SUPERVISING THE PRACTICAL WORK OF PUPILS

MATRON OF THE SALFORD MATERNITY TRAINING SCHOOL AND
PRIVATE NURSING HOME

WITH ELEVEN DIAGRAMS

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TO :

MY DISTRICT MOTHERS



PREFACE

THIS book is intended to appeal to all women who are anxious to be initiated into the special work of maternity nursing, in the belief that it will fill a distinct want.

Pupil midwives are well provided with many excellent books; but, in my capacity as matron of a training-school, I find that these are not really suitable for the use of a monthly nurse, for they tend to puzzle her as to where to draw the line between her own duties and those of a midwife.

Yet, while she realizes her own special status as distinguished from that of the doctor or the midwife, it is essential that she should understand a certain amount of midwifery, so that she may act intelligently in emergency.

There is also an urgent call for instruction in "district work," which work, with its constant tax on the ingenuity and resources of a nurse, is

a very different kind of nursing from that required in a well-equipped hospital or private house.

My aim has been to write down these lectures exactly as I give them to my own pupils, hoping that, as a woman's work for women, the book may be of use, not only to nurses, but to the mothers tended by them.

The books that have helped me in my daily work as well as in the preparation of my lectures, and to which I feel greatly indebted, are those written by A. B. Calder, M.B., M.R.C.S.; J. K. Watson, M.D. (Edin.); and A. Dingwall Fordyce, M.D., F.R.C.P. (Edin.).

To several makers of surgical instruments I am also much indebted for kind permission to make use of their illustrations.

My special thanks are, indeed, due to Dr. A. B. Calder for his kindness in revising my lectures and in giving me the benefit of his criticism and suggestions; also for the influence of his teachings, which have accompanied me always, both in theory and practice.

SARAH MACDONALD.

SALFORD MATERNITY TRAINING SCHOOL,
January, 1913.

A FEW WORDS OF ADVICE TO INTENDING PUPILS

ASK yourselves the following questions:
Am I strong and able to stand the strain
of long hours of duty?

Can I feel in a measure confident that I am
fitted for this particular branch of nursing?

Then see that your teeth are in good order; if
not, they should receive attention for your health's
sake, and also that your breath shall not be offen-
sive to your patient.

See that you have good shoes to wear on your
rounds; few things are more tiring than a long
round in high-heeled shoes.

Try to cultivate a sense of humour, which,
coupled with tact and common-sense, will go a
long way towards making you a good nurse.

Try to remember that the arrival of every little
baby is an important event in its own circle, even
though it becomes a common event in your own.

Try to remember that in every baby you

nurse you lay the foundation of its future life; you have a great responsibility in your hands, and it lies in your power to teach the mother the right or wrong way to bring up her child.

Remember that the captain (doctor) holds his lieutenant (yourself) responsible for the well-being of both his patients, and that doing your work well means establishing your reputation.

Remember that when you are a fully-fledged certificated maternity nurse your engagements should always be entered in your engagement-book in the presence of your patient. Dates sometimes go wrong, and if the engagement is merely verbal there is no chance of compensation.

Last, but by no means least, remember and try to assimilate the words of Robert Burns: "I would rather have men credit me with giving distinction to my profession, than have my profession give distinction to me."

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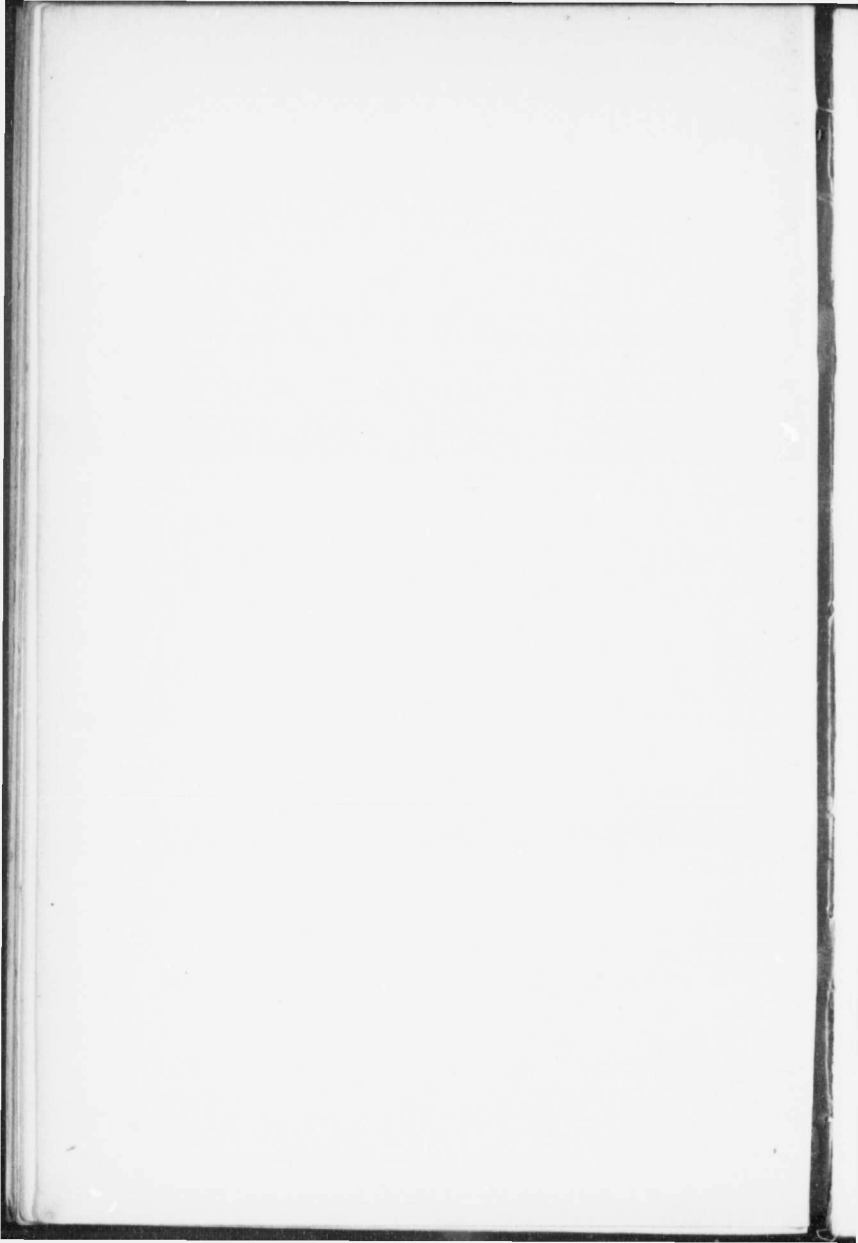
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PART I



MATERNITY NURSING

LECTURE I

THE PELVIS

ALTHOUGH it is not considered necessary for a monthly nurse to be well versed in the anatomical details of pregnancy, yet to a certain extent she should understand something of them; so I shall commence my lectures by the study of the pelvis in such a manner as I think will be of use to you.

The pelvis, then, is a bony basin composed of the hips and the lower bones of the spine; and containing the bowels, bladder, and organs of generation.

It is usually described as being formed by the juncture of four bones—namely, the two *ossa innominata*, the *sacrum*, and the *coccyx*.

The *Ossa Innominata* are the two hip-bones, and each bone contains a deep round cavity called the *acetabulum*, into which the large rounded

head of the thigh-bone fits. Each hip-bone consists of three bones—viz., the ilium, ischium, and the pubes.

The Obturator Foramen is a large hole in the hip-bone through which the large bloodvessels

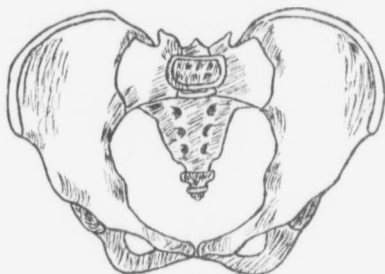


FIG. 1—THE PELVIS
(From Calder's "Lectures on Midwifery")

and the obturator and sciatic nerves pass to the legs.

It also serves to lessen the weight of the pelvis.

The True Pelvis is described as a curved tube, having a brim, a cavity, and an outlet.

At the brim it is heart-shaped, at the outlet diamond-shaped.

The joints of the pelvis are four—viz., two **sacro-iliac synchondroses**, one **sacro-coccygeal**, and one **symphysis pubis**.

During pregnancy these joints swell, in con-

sequence of the serous oozing which takes place from the mother's blood allowing more room in the pelvis. During labour movement takes place at these joints, especially at the sacro-coccygeal, when the coccyx is moved backwards during the perineal stage.

This movement increases the size at the outlet by about an inch.

THE ORGANS OF GENERATION

These are the uterus, ovaries, Fallopian tubes, vagina, and vulva.

The Uterus is a hollow pear-shaped organ situated in the centre of the true pelvis, and is kept in position by ligaments, the most important being the broad ligament. The normal weight of the uterus is from $1\frac{1}{2}$ to 2 ounces, but at the end of pregnancy it weighs from $1\frac{1}{2}$ to 3 pounds.

In size it is about—

3 inches long.
1 inch thick.
2 inches wide.

It is divided for descriptive purposes into three parts :

The upper, or fundus.
The middle, or body.
The cervix, or neck.

At the junction of the middle to lower portion is a ring, known as "Bandl's ring." It is to this lower portion of the uterus that sometimes a part or the whole of the placenta becomes attached, causing afterwards serious loss of blood, and this condition is known as *placenta prævia*.

Like the bladder and rectum, the uterus is composed of three coats—viz. :

The inner, or mucous.
The middle, or muscular.
The outer, or peritoneal.

The opening of the uterus is called the "external os."

You will readily understand how very much this uterus must expand by the time that a full-time child is ready to be born, and you will see what I mean when I tell you it is an "elastic structure." It is a marvellous thing, when you think of it, that an organ only 3 inches long can expand so as to accommodate a child 6 to 12 pounds in weight and 20 inches in length, not to mention all the other accompaniments of pregnancy.

It is more wonderful still that, after the child is born, the organ gradually shrinks back to almost the size it was in the beginning.

The Ovaries are almond-shaped bodies, situated one on each side of the uterus. Each ovary weighs about $\frac{1}{4}$ ounce, is $1\frac{1}{2}$ inches in length, and $\frac{1}{8}$ inch

in breadth. They may be called the chief organs of reproduction in the woman, as their function is to produce the germ cell, or ovum, which, when fertilized by the male sperm cell, forms the embryo from which a human being is developed.

The Fallopian Tubes are canals with muscular walls, extending from the uterus on either side near the fundus. They pass outwards in the fold of the peritoneum which covers the surface of the uterus.

The broad ligaments enclose the Fallopian tubes in their inner margin on either side.

The Vagina—This extends from the uterus to the vulva, and is the canal from the internal to the external organs. It is about $2\frac{1}{2}$ inches long at the anterior wall, and $3\frac{1}{2}$ inches at the posterior wall. It lies between the urethra and bladder in front, and the rectum behind. The orifice of the vagina is, like the anus, kept closed by a sphincter muscle.

The Vulva (or external organs)—This comprises the mons Veneris, the labia majora or outer lips, the labia minora or inner lips, the clitoris, orifice of urethra, orifice of vagina, hymen, and the fourchette.

The Mons Veneris is a rounded pad of fat lying over the pubes, which surmounts the vulva and is directly continuous with the labia majora.

The Clitoris is an erectile structure situated between the two labia minora. The orifice of the urethra is situated 1 inch below the clitoris, and is surrounded by mucous membrane. The fourchette is not a distinct structure, but the posterior junction of the thinned-out labia minora, and is usually torn in first labours.

The Perineum is part of the floor of the pelvis, and lies between the anus and the vagina. It is $1\frac{1}{2}$ inches in length, and removal or partial destruction of it leads to a prolapse more or less complete of the organs contained in the pelvis.

At this point I think it will be advantageous to study the positions of the rectum and bladder in relation to the uterus, as these are of great importance during labour.

The Bladder is situated behind the symphysis pubis, lying when distended directly in front of the uterus, whilst the rectum lies immediately behind. The bladder is attached to the upper half of the vaginal wall and to the lower half of the cervix.

This arrangement allows the bladder to be raised up above the pubes as the dilated os is pulled up over the head of the child when it leaves the uterus to enter the vagina at the completion of the first stage of labour. This displacement of the organ is in order to save it from pressure and

injury, also to allow more room for the child to pass, and this movement cannot be satisfactorily performed if the bladder is full and heavy. The effect of a full bladder will be a delay in the first and second stages of the labour; and in the



FIG. 2—EXTERNAL ORGANS OF GENERATION

(From Calder's "Lectures on Midwifery")

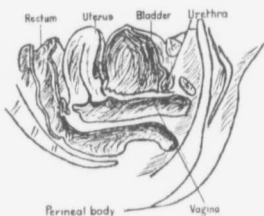


FIG. 3—INTERNAL ORGANS OF GENERATION

third stage it may prevent the expression of the placenta.

A full rectum will also prevent satisfactory advance of the fœtus, and cause undue pressure on the urethra, which eventually becoming swollen, may in its turn cause retention of urine.

LECTURE II

FERTILIZATION

THREE subjects will be considered in this lecture, viz., menstruation, ovulation, and the early growth of the embryo.

Menstruation is marked by a congestion of all the genital organs, which commences shortly before the flow is established, and at each period a portion of the mucous membrane of the uterus is shed, producing a raw surface. The object of this may be to allow the impregnated ovum a nutritive surface on which to develop when it has taken root. At this time the whole organ is enlarged and more generously supplied with blood, whilst the bloodvessels become dilated.

The ovaries are composed of granular tissue, and enclosed in a strong capsule. On being opened, the appearance suggests a gland studded with sago-like bodies, called "ovisacs." Each ovisac contains one ovum, floating in a fluid which

is liberated by the ovisac bursting. At least one ovum is liberated every month, and this escape of the ovum is known as "ovulation."

The human ovum is from $\frac{1}{100}$ to $\frac{1}{120}$ inch in diameter; and should it not be impregnated, it does not grow on the surface of the uterus, but passes away with the menstrual flow. If impregnation takes place, the fertilized ovum attaches itself near the opening of the Fallopian tubes, and grows by a process of cell division and multiplication; thus, commencing as a single cell, it divides and becomes two cells, and so on, until a large number of cells are formed, which then separate out into different layers.

Thus the different parts of the body and the various tissues are formed.

The mucous membrane to which the ovum becomes attached is called the *decidua vera*.

This increases rapidly in thickness, and takes part in the nutrition of the ovum until the placenta is developed. The ovum now burrows into the mucous membrane, the burrow heals, and then the membrane bulges as the ovum grows. The part between the ovum and the uterus is now called the "decidua serotina," and the bulging membrane is a portion of the decidua serotina which becomes reflected round it to form the decidua reflexa.

The embryo, as the ovum is now called, is enclosed in a bag made of two membranes closely attached, called the "chorion" and the "amnion." The latter is inside, and envelops the cord and the fœtus.

The chorion is rough outside with loops of bloodvessels called "villi," which absorb nourishment for the ovum.

At this time a sac is formed containing a substance similar to the yolk of an egg, and this stores up nourishment until the placenta is formed, which occurs by the villi of the chorion being absorbed, except at the site of the decidua serotina. The remaining chorion villi and decidua serotina then fuse together and form the maternal and fœtal portions of the placenta respectively.

LECTURE III

THE ANATOMY OF THE PLACENTA

THE placenta is composed of the decidua serotina, the amnion, and the chorion. The amnion is the inner of the two membranes, forming the bag which contains the "waters" (liquor amnii).

It is thin and very strong compared with the chorion, which is the other membrane; it is smooth, clear, and transparent, easily separated from the chorion, and entirely encircles the fœtus, being attached to the fœtal surface of the placenta, and passing up a short distance on to the umbilical cord.

The Amnion is at first close to the back of the fœtus, but as the waters increase in quantity it is brought into contact with the chorion.

When a child is born with a caul, it is the amnion which usually forms it, but occasionally the chorion is present also. Sometimes there is a fluid between the two membranes, and one mem-

brane bursts at the commencement of labour; in this case the woman may be misled, and tell you that she has lost her "waters," meaning that the membranes have ruptured.

The amnion is considered to be free from blood-vessels.

The Chorion is the outer of the two membranes encircling the fœtus. It is in contact with the decidua reflexa and serotina, and portions of the decidua are found adhering to it after the expulsion of the placenta.

The chorion is of a creamy appearance and is easily broken; therefore care must be exercised in expelling the placenta, or a portion of the chorion may be left behind. It is attached only to the margin of the placenta, and is rough on the outer surface, which roughness is due to the shreds of attached decidua.

Liquor Amnii—This is the name given to the liquid in which the fœtus floats. It is partly the secretion of the child, and partly of the amnion itself, the quantity of fluid being usually about 20 ounces. Its uses are—

To protect the child from injury.

To allow space for it to exercise its limbs, and so assist its growth.

It acts as a fluid wedge when labour commences, by the protrusion of the bag, thus helping to dilate the cervix or os uteri.

It also flushes out the passages, rendering them aseptic during the descent of the child.

The placenta consists of two vascular membranes, one from the mother (maternal), and one from the foetus (foetal). They are so closely woven together that, without any actual communication between the two vascular systems, gases, nourishment, and excretions, can pass from one to the other.

As the placenta grows the blood-spaces expand, and communicate more and more with each other, until there is one general blood-space throughout the entire placenta, filled with the mother's blood, and into this space the chorionic villi dip like fingers covered with a glove.

The placenta when fully developed forms a round mass of spongy consistency; it weighs about $1\frac{1}{4}$ pounds, measures 7 to 8 inches across, and is about 1 inch thick. It is attached either to the anterior or posterior wall of the uterus. The foetal side is smooth and glistening, and is marked with arteries and veins from the cord which course under the surface of the amnion.

The maternal side is composed of lobes called "cotyledons," with depressions between them, and into each lobe passes a bloodvessel from the umbilical artery; whilst the uterine arteries enter at the sulci and open into the placental blood-spaces.

THE CORD, OR FUNIS

This structure is attached to the child's navel at one end, and to the centre of the placenta at the other.

In the first few weeks of foetal life it is straight, but as growth proceeds it becomes twisted. It is composed of two arteries and one vein, the vein being in the middle, and these are bound together by a whitish jelly-like substance called "Wharton's jelly." Its length varies from 3 to 70 inches, the average being about 20 inches. If the cord is excessively long it is liable to form loops round the child's neck, limbs, or body. This is usually a drawback in labour, and a danger to the child, as it may cause suffocation.

Up to the third month the intestine is found a little way in the cord, but after that it retracts into the abdomen.

In very rare cases, however, this condition has remained at birth, so you see the importance of always separating the cord quite 2 inches from the navel, to avoid cutting the bowel, for you can never be sure whether this condition is present until the cord is cut.

Your first case might be just such a one, and if the bowel is cut the child must die.

The function, then, of the placenta is to act

as lungs by the interchange of gases between the foetal and the maternal blood; it conveys the blue blood, which contains carbonic acid gas, from the foetus, and returns to the foetus the red blood, containing oxygen, from the mother.

It also acts in the capacity of stomach, as it conveys nourishment from the mother to the foetus; and as kidneys, as it conveys the waste products from the foetus to be eliminated by the mother.

These functions are performed from the fourth month of pregnancy.

When the placenta is expelled, the foetal side presents first.

ABNORMAL PLACENTÆ

Having now learnt something of the structure and uses of the placenta, we will go on to study the various abnormalities which may arise.

For one thing, the placenta varies very much in size. In the normal placenta, also, the cord is attached in the centre, but you will find sometimes that it is attached to the edge, and this variety is known as the "battledore" placenta.

Also you may find that the cord reaches the membranes a little distance from the edge of the placenta, and the bloodvessels then divide into

branches and run into the membranes. They look like the roots of a tree running in various directions into the ground, while the main stem, as it were, can be seen above the ground.

This variety is known as a "placenta velamentosa." If a cord is pulled upon in this condition, there is a liability of breaking one or more of the branching bloodvessels, and thus causing serious hæmorrhage.

In another condition there may be detached masses of placental tissue apart from the main placenta, which are due to development of isolated patches of chorionic villi. This is known as "placenta succenturiata," and is a dangerous condition, because it is very easy for one or more of these little placentæ to tear away from the main placenta and be left behind in the uterus, causing either secondary post-partum hæmorrhage or puerperal fever, due to decomposition or septic absorption.

If, on examination of the placenta after expulsion, you find some torn bloodvessels, you may reasonably come to the conclusion that it is of this variety.

When the placenta is very thin and spread over a large surface, it is called "placenta membranacea."

It may also be found diseased or congested, and such conditions may cause the death of the fœtus.

LECTURE IV

CIRCULATION OF THE FŒTUS

AT the end of this lecture I recommend you to study well the circulation of the human body, so that you may see the difference between the two circulations.

I explained to you in my last lecture that the fœtus is nourished from the mother's blood by means of the placenta, which also aerates and removes waste products from it. The action of the lungs is in abeyance, and only sufficient blood goes to these organs to nourish them. Now, the umbilical vein, which brings the aerated blood from the placenta, divides near the liver into two branches; the larger division unites with the large vein supplying the liver, and the smaller division passes into one of the large veins of the body—*i.e.*, the inferior vena cava. The greater part of the blood enriched with air passes through the liver before entering the general circulation, and the proportion of blood increases as pregnancy advances.

The heart consists of four chambers—viz. :

Right auricle.	Left auricle.
Right ventricle.	Left ventricle.

The right auricle receives from the inferior vena cava a mixture of venous blood from the lower parts of the body, together with aerated blood from the placenta.

In the earlier months of foetal life the blood-stream of the inferior vena cava is directed by a valve called the "Eustachian valve" across the right auricle, through an opening in the division which separates the right from the left auricle, *into* the left auricle, and then it passes into the left ventricle.

This opening is called the *foramen ovale*.

The venous blood coming from the upper part of the body by the large vein—*i.e.*, the superior vena cava—passes in front of the Eustachian valve through the right auricle into the right ventricle. It is then driven into the lung artery, known as the "pulmonary artery."

Only a small amount of the blood actually goes into the lungs, the larger amount passing into the large artery of the body (known as the "aorta"), and being thus conveyed to the lower parts of the body.

Thus, in the earlier part of foetal life, while the

Eustachian valve almost entirely prevents the mixing of the blood-streams in the *right* auricle, the head, neck, and upper parts of the body, are supplied with almost pure aerated blood ; whilst the lower parts of the body are only supplied with venous blood which has already passed through the other part of the circulation.

This is the explanation why the head and upper parts of the body are more developed in early foetal life. However, a change takes place about the middle of pregnancy : the Eustachian valve becomes smaller, and the foramen ovale is more developed.

Thus, a portion of the aerated blood entering from the inferior vena cava is retained in the right auricle and reaches the descending aorta.

So, in the latter half of pregnancy, the head and upper parts of the body are still supplied with comparatively pure blood, while the *lower* parts of the body are supplied no longer with venous, but with mixed blood.

This explains why the lower part of the body grows more quickly during the latter half of pregnancy than the upper.

Directly the child is born a change takes place. With the first inspiration the air sacs of the lungs become dilated, the foramen ovale closes, and so ordinary circulation is established.

LECTURE V

DURATION OF PREGNANCY : ITS SIGNS AND SYMPTOMS

THE normal period of pregnancy is ten months of four weeks' duration, or forty weeks, or 280 days.

The date of the confinement should be ascertained by adding 280 days to the date of the first day of the last menstrual period.

This is equivalent to nine calendar months plus seven days, but it is best to regard the date thus reached as the middle of the fortnight when labour may be expected to take place—that is, that it may set in a week earlier or a week later.

Generally speaking, a woman first suspects that she is pregnant when the usual monthly discharge does not appear. This is called the "cessation of the menses," and is one of the most constant signs of pregnancy; although some women menstruate up to the third month, and in rare cases during the whole ten months.

Morning Sickness—This is a usual symptom, and consists of a feeling of nausea, often accompanied with actual vomiting. It is experienced most frequently on rising from bed in the morning, lasting sometimes throughout the day.

Usually it disappears about the third month; it is very distressing, and if persistent is dangerous to both mother and child, as both are running the risk of starvation from lack of nourishment.

Uterine Enlargement—This occurs about the third month, the uterus being lifted up out of the pelvis.

Breast Changes—Changes in the breast may be found from the very first. There is a feeling of fullness and tenderness, whilst a little later they become enlarged, the nipples become more prominent, and a little fluid may be expressed from them. The surrounding parts become darker, a condition known as the *areola*.

Discolorations—The vagina and vulva will be found to be of a violet hue, due to the congestion of the veins of the pelvis, whilst various discolorations or pigmentation of the skin may be seen on the face or other parts of the body.

Striæ—These are small white marks to be found on the abdomen, and are due to stretching of the skin.

Quickening—This occurs about the fourth or

fifth month, and is usually reckoned to be the half-way of pregnancy.

There is a popular but mistaken notion that this is the time, and also the sign, that the child becomes alive.

The real explanation is that by the middle of pregnancy the uterus has enlarged so much that it is brought into contact with the inner surface of the walls of the abdomen.

The first consciousness of it often produces a feeling of sickness and faintness, but as pregnancy advances the movements of the child become more distinct.

Some other small signs are, excessive salivation, deposit in the urine, and a longing for unnatural diet.

Now, although these are signs of pregnancy, in certain cases they may be misleading. For instance—

Suppression of the menses may be due to change of life, neurotic causes, or anæmia.

Morning sickness may be caused by different organic disturbances.

Breast changes may be due to inflammation or cancerous growths, whilst uterine enlargement may be due to rapid obesity, dropsy, or spurious pregnancy, the latter being usually found in

highly-strung women who are anxious to have children.

Changes in the body generally are, that the cavities of the heart enlarge and the muscular walls increase in thickness, in order to perform the extra work necessary to carry on the circulation. The quality of the blood alters, and the quantity of urine increases.

The respiration is interfered with, in consequence of the enlarged uterus limiting the work of the diaphragm.

The nervous system is changed, the patient sometimes becoming subject to hysteria, neuralgia, faintness, or irritability. Others may develop certain skin diseases, such as eczema.

LECTURE VI

LABOUR

BY the term "labour" we mean the various phenomena observed in bringing a child into the world. Labour is divided into three stages.

The first or preparatory stage is from the beginning of the pains (which mean painful contractions of the uterus) to the time when the os (mouth of the uterus) is fully dilated (opened).

The second stage, called the "expulsive stage," is from the full dilatation of the os to the complete birth of the child.

The third stage is from the birth of the child to the complete expulsion of the placenta and membranes.

The first stage of labour usually lasts about twelve hours, and the beginning of labour is indefinite. The pains will at first be slight and at long intervals; soon, however, they increase in force and frequency, and are accompanied by an

appearance of mucus tinged with blood. This is termed the *show*.

These pains consist of a contraction of the uterus, then an incomplete relaxation when the pain passes off; and the amount of suffering during this stage varies very much in different women. As a rule the patient is able to be up and walk about, which considerably helps the pains to do their work.

As the os is dilating, a lubricating secretion is poured out by the glands of the cervix, and the walls of the vagina become relaxed and dilatable. Sometimes vomiting occurs, and in a normal labour it is usually at the end of this stage that the membranes rupture.

The second stage lasts from one to two hours, and consists of contractions of the uterus and abdominal muscles, with uterine retractions and advance of the "presentation," or presenting part.

The vagina becomes dilated by the advancing part, and is rendered aseptic by the liquor amnii.

The anterior (front) wall of the uterus is pulled up with the bladder, and the posterior (back) wall is pushed down with the rectum. The anus dilates; the perineum is distended and thinned. The child is born, breathes, and draws blood from the placenta into its body.

The third stage usually lasts from twenty to

thirty minutes. After the birth of the child the uterus contracts, the sinuses close, and the blood clots.

Pains return, the placenta gradually becomes detached from the wall of the uterus, and passes through the vagina, thus further aiding asepsis. In multipara, pains, named the "after-pains," will return after a pause. These occur with the retraction of the uterus, this retraction compressing the vessels, and protecting also against sepsis.

Very wide differences are found between the duration of labour in different women, all depending upon the unison of the passages, passenger, and powers.

PART II



LECTURE I

HYGIENE OF PREGNANCY

HAVING studied the process of pregnancy and labour, we will now go on to the more personal part of your work, and commence with the hygiene of pregnancy—that is, the care a woman who is pregnant should take of herself and the being which is eventually to be her child.

Each organ of her body must contribute its share to the child through the mother's blood, and each one of these organs will need a certain amount of assistance.

The majority of women, because they do not know better, treat their pregnancy in a very haphazard way, taking no further precaution than an occasional dose of castor-oil, which is supposed to work wonders.

Now, a monthly nurse is often looked upon as a friend and confidante; a patient will ask her a

thousand and one things she would never dream of asking her medical man. This is, I suppose, a question of sex, but in my opinion it is a circumstance which offers unique possibilities to the nurse, for she holds in her hands (or her head) an immense power for good or evil.

Especially is this so if the advent is a first baby; for as you teach that mother, so will your teaching be carried on at her future labours. Teach her, then, that the hygiene of pregnancy is the prelude, as it were, to a grand finale. Tell her of the influence of her own mind on her unborn child, and that the very health of that child depends on her own.

Teach her, as I said before, that each organ of her body needs her care and assistance.

The Heart must be helped so that there is no obstruction to the circulation. This organ, you have been taught, increases in size during pregnancy because it has so much more work to do, and to help this all tight garters must be removed, and corsets and waist-bands loosened.

The Lungs must be helped by putting off too heavy clothing, whilst bedrooms and living-rooms must be well ventilated.

The Digestive Organs must be helped by eating suitable food at regular times, and not a snatch at any odd time.

The **Bowels** must be helped, for the child is throwing off excretions into the mother's blood which must be cleared away. Even so they do not require constant medicine, but occasional medicine and plentiful use of fruit, such as apples and figs, which usually act as aperients.

The **Kidneys** must be helped by keeping the skin clean, the body being washed all over at least once each week, so that the pores of the skin may not be hindered in their special work.

The mother should drink plenty of cold water to flush out the kidneys, and she should never take beer or stout.

Here, let me tell you, you have a great privilege—the privilege of teaching many women the harm of alcohol. It is amazing how very popular the notion is (even with women whose education and environment ought to convince them otherwise) that a glass of alcohol in the morning or at bed-time is in some mysterious manner preparing them for their trial later on; also that it has the power of producing milk for their child. Of that we shall speak again; but here let me impress upon you that it has been proved that alcohol is poison to the developing child, interfering with the tissues and organs of its body.

During pregnancy the **Breasts** will need to be prepared for their special work; therefore all

tight clothing should be avoided, and care taken that the corsets do not compress the nipples. The nipples should be washed daily with warm water, dried carefully, and anointed with glycerine or lanoline; they should also be drawn out with the fingers, a proceeding which will save some pain when they perform their functions later on.

Last, but by no means least, we must remember the **Brain**. This busy little centrepiece of the body is always at work, controlling this and that portion of our anatomy, and to do its work well it must have its share of rest. To this end advise your patient to avoid undue excitement, late hours, and severe exercise.

I cannot impress upon you too much how by attention to all these organs you are preparing the mother herself for her hour of trial, and at the same time teaching her how immeasurable is the help she is giving to the growing fœtus.

Childbirth is a process of Nature, we know, but the pendulum swings so finely that it sometimes takes very little to cause the death of both mother and child.

LECTURE II
THE TEMPERATURE

THE temperature of the human body, which in a state of health is fairly constant, and almost independent of varying external conditions of heat and cold, is subject in disease to marked changes.

It is increased by fever and lowered by debility or collapse. In health the temperature is $98\frac{1}{2}$ degrees, and is written thus— $98\cdot4$, meaning 98 degrees, point 4; but in fever this may be increased to 101° or 103° , the latter showing a very serious condition.

On the other hand, it may fall to below 96° , when we find the patient collapsed or in a state of shock.

If the patient has a wound or has had an operation, and we find the temperature rising, then we know there is septic infection, or, in other words, "something going wrong."

So it is with childbirth, which we must consider a surgical case with wounds to heal.

Therefore the temperature must be faithfully taken night and morning, and any rise immediately reported.

It may be taken in the armpit, mouth, rectum, or groin ; but the armpit is most convenient unless the patient is very thin, when you would perhaps not obtain a true record. In that case the mouth would be better, the bulb being placed underneath the tongue.

To take a temperature, a self-registering clinical thermometer must be used.

On the instrument is a scale of degrees and points, the former being the long lines, the latter the small ones ; and in reading these the upper end of the index is to be looked for, and the degree and number of the points noted. The index is a small portion of mercury separate from the main column or bulb at the end of the instrument.

Before proceeding to take a patient's temperature, you will shake the index to below 97° , and this operation of shaking down requires a little practice. You will find it best managed by a series of jerks from the wrist.

The skin of the armpit will now be dried, and the bulb of the instrument placed in position between the folds, the arm being brought well over the chest.

Do not be in a hurry, even if you are using an

instrument which registers in thirty seconds; a full five minutes spent on this duty is not time wasted. After withdrawing the thermometer, and having noted and charted the temperature, you will again shake down the index and wash the instrument ready for further use.

THE PULSE

The pulse is an indication of bodily health, and in a healthy adult the beats number from 65 to 80. They ought to be regular and steady, with no difference in force and strength, and the most convenient place to count the beats is at the depression above the wrist where the the radial artery can be felt, or near the temple, at the temporal artery. I recommend you to use a watch, and to count the pulse a full minute. Personally I do not approve of a pulse-glass, for I consider counting for a quarter or half minute, and doubling the beats, is careless work. In doing so you cannot possibly observe any irregularities and



FIG. 4.—THERMOMETER

peculiarities, which a good nurse should be always interested in and quick to detect.

To try to calculate the beats without either watch or pulse-glass may give you an important

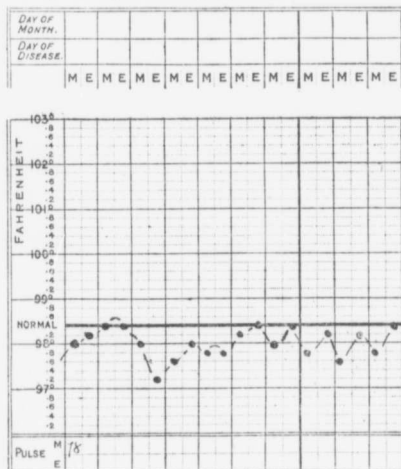


FIG. 5—SPECIMEN OF NORMAL CHART

pose before your patient, but is very bad work indeed.

The temperature and pulse in fever usually rise or fall together, a quick pulse without rise of temperature being as a rule due to an excitable temperament.

Having taken your patient's temperature and

pulse, you will proceed to record them on the charts kept for the purpose; also an account of the state of the bowels, and notes of any special treatment, such as an enema or a douche.

A good nurse takes especial pride in her charts, and they are often useful to refer to at some future time, when she may wish to study or compare different kinds of treatment.

ANTISEPTICS

The use of antiseptics is a subject which every monthly nurse must master, for on your knowledge and practice of this subject will depend, in a great measure, your success in your vocation.

Cleanliness, not ordinary, but what is known as **surgical cleanliness**, must be understood, and carried out in a whole-hearted fashion.

Antiseptics are substances which arrest putrefaction or decomposition. They also prevent decomposition, and it is in this latter capacity I wish you to understand them as far as your work goes.

The usual antiseptics employed in midwifery are—

- Perchloride of mercury.
- Binioidide of mercury.
- Carbolic acid.
- Izal.
- Lysol.
- Cyllin.
- Iodine and permanganate of potash.

Perchloride of mercury, or corrosive sublimate, is one of the strongest antiseptics in use, but its disadvantages are that it is highly poisonous, and that it cannot be used for cleaning instruments, as it corrodes them.

It is used in the following strengths:

For the hands	...	I : 1,000 to I : 2,000
For the douche	...	I : 3,000 to I : 5,000
For baby's eyes in ophthalmia	}	I : 7,000
(if it be ordered by the doctor)		

You will find it is made up in small blue tablets, and each tablet is capable of making a lotion of I : 1,000, or one tablet to I pint of water. If the lotion is to be I : 2,000, then half the tablet is to be added to the pint of water, or the whole tablet to a quart.

This preparation is very poisonous, as I have previously told you, and patients have been known to die through absorption of the fluid, so be sure you take every care that the strength is accurate if you have occasion to use it for any purpose whatever.

Biniiodide of mercury—This is also a strong antiseptic, and is used in the same strengths as the perchloride.

It is made up in pink tablets; therefore you cannot mistake the two.

Izal, cyllin, lysol, and iodine, are all useful antiseptics and their strength is about 1 teaspoonful to 1 quart of water.

Condy's fluid and permanganate of potash are cheap disinfectants; just sufficient is used to colour the water. Their disadvantage is that they stain the hands and linen if not carefully used.

SANITATION

The lying-in room, like every other room of sickness, should as far as possible be wholesome and suitable for the purpose, as patients recover much more quickly in a large airy room with a sunny aspect.

Therefore, if you have the choice, choose a room as spacious as possible, and with a window that will open top and bottom; with an open fireplace also, as this will act as a ventilating shaft whether a fire is lighted or not.

The room should not be near a water-closet or soil-pipes, whilst slop-pails, bedpans, etc., must be kept elsewhere. All unnecessary hangings and curtains should be removed, for these not only hold and hide germs, but cause a great deal of unnecessary cleaning and fuss, and are too often used as a cover-up to lumber. It is not an easy

matter to arrange the bed in the most convenient position, but you must always try to place it away from the wall, to be easy of access all round.

A thermometer should hang on the wall, and should register from 60° to 65° . It should not hang near a window or fireplace.

VENTILATION

I have already explained to you that the fireplace will act as a ventilating shaft, but I want you to understand that this is not sufficient ventilation.

I have often known nurses shut up the window at night, thinking that if the fire goes out or the door is open a little there will still be plenty of air in the room.

This is a great mistake, and I would remind you that there are usually three people—*i.e.*, mother, nurse, and baby—all requiring a generous supply of fresh air.

So leave the window open, please. If you are afraid of too much air, it is a good plan to open the window at the top, and fix a strong piece of well perforated brown paper across the opening.

If plants and flowers are allowed, they should always be removed at night; and it is a good plan, when you have finished your morning's work, to

cover the patient warmly and throw open the windows top and bottom.

If the room feels stuffy when you enter from outside, then your patient will have headaches; and in any case she is not breathing air conducive to her recovery.

LECTURE III

ENEMAS AND DOUCHES: WHEN GIVEN

AN enema is given to relieve the bowels when there is not time for an aperient, and what is known as a simple enema is composed of soap and water, about $1\frac{1}{2}$ pints in quantity.

You will first proceed by preparing all you require, which will be—

Mackintosh and pad to protect the bed.

Bedpan.

Enema syringe.

Vaseline.

Hot water.

Good plain soap and a few swabs.

Prepare the water with a good lather of soap, seeing that it is neither too hot nor too cold; prepare the bed with the mackintosh and pad, place the patient on her left side, and swab the anus and surrounding parts.

See that there is a good flow of water through

the syringe, anoint the nozzle with vaseline, and insert carefully into the anus. Be sure you inject the water slowly, or the effect will be lost, the patient crying out for the bedpan before sufficient water has been injected.

Instead of using quite all the water, leave a little of it at the bottom of the bowl, as a precaution against air entering the rectum.

After again swabbing the parts, do not fail to examine the contents of the pan, so that you can give a correct account of the result, which in many cases may be of more importance than you think.

A *douche* is given for various reasons, but not often in a normal labour, and it must never be given by a monthly nurse without the sanction of the doctor. It is usually administered by means of a *douche* can with long tube and nozzle. The latter should always be one made of glass, so that you can *see* it is perfectly clean.

The bed should be protected with mackintosh and pad, and the patient placed on her back on the bedpan. Prepare the lotion with whatever anti-septic has been ordered, and see that there is a good flow through the nozzle; disinfect your hands, also the patient's vulva, and insert the nozzle carefully. The patient, if well enough, can hold the nozzle in position whilst you attend to

the tube and douche can, holding it as high as you can, although it is much more convenient to hang the can on a nail in the wall if at all possible.

Be sure to turn the stopcock before the lotion is quite finished, as a precaution against air entering the vagina; and on withdrawing the nozzle press your hand on the abdomen, to expel any lotion which may be left in the vagina. You must again swab the vulva, make your patient comfortable, and thoroughly cleanse all the articles used.

A siphon douche tube takes up less room in your bag than a douche can. It is used in conjunction with a large jug; the sinker, as you will see, keeping the tube in position. Now, all these instruments are sold with vulcanite nozzles, which are anything but aseptic to use, so I advise you to cut off about 3 inches of the tubing. One end of this is to be attached to the stopcock, the other end to the glass vaginal or uterine nozzle.

The dangers of a douche are, either that septic infection may be caused by dirty hands or dirty apparatus, or that the antiseptic used may become absorbed by the patient.

All douches should therefore be carefully prepared.

Warm douches should be of a temperature of 85° to 100° ; hot douches, 105° to 115° .

At this point I wish you to understand how to arrange a patient's bed, either for giving a douche or for swabbing purposes.

We arrange what we term the "divided bed," which does away with all discussion as to turning down the bedclothes after or before the hands have been disinfected; also, the patient is protected against cold, and is not unnecessarily exposed.

First turn back completely and remove the counterpane, fold the top blanket back halfway, so that it will be double from abdomen *downwards*; fold under blanket or sheet *upwards*, to be double over the chest.

In this way you have both upper and lower parts covered, whilst you can proceed with your duties at the division of the blankets.

An intra-uterine douche is given by the doctor to wash out the cavity of the uterus. You are sure sooner or later to be called upon to assist in this operation, as bad cases will occur sometimes, in spite of the highest skill and attention.

Your preparations will be—

- Plenty of hot water.
- Antiseptics for hands, and lotion.
- Douche can.
- Swabs, mackintosh and slop-pail.

The bed should be protected as for an ordinary

douche, then a piece of mackintosh or strong brown paper arranged to hang from the bed into the slop-pail to act as a funnel for the fluid. The patient will be placed on her left side, buttocks projecting well over the side of the bed, with a large firm pillow between the knees.

The vulva will next be washed and swabbed with antiseptic.

For this operation the doctor will use a long nozzle, which he will pass through the mouth of the womb; and you must see that the lotion he needs is properly prepared with the antiseptic ordered, and at the right temperature. You may be asked to boil the nozzle; if so, choose an absolutely clean pan, cover the nozzle with water, and boil for ten minutes. If the nozzle is made of glass, do not make the mistake of placing it in very hot or boiling water, or the result will be disastrous.

After boiling, place the nozzle in a bowl of antiseptic until required.

During the operation, see that the patient's shoulders are well protected, and that she is not unduly exposed. When it is over, cleanse the vulva and surrounding parts, make your patient comfortable, see that she is warmly covered, and give warm nourishment, as in many cases a rigor follows a douche of this kind.

The dangers of an intra-uterine douche are, either that the antiseptic fluid used may be absorbed, or that any force may send the fluid through the Fallopian tubes into the peritoneal cavity, thus causing peritonitis.

If you are expecting this douche to be given, it is your duty to ask your medical man if he



FIG. 6—SIPHON DOUCHE AND INTRA-UTERINE NOZZLE

approves of a vaginal douche being given first, to lessen the possibility of any septic matter being carried to the uterus by the passage of the nozzle through the vagina.

When Douches are required

“ANTE-PARTUM” (MEANING “BEFORE LABOUR”)

Not in a normal labour.

To render the vagina aseptic previous to operations.

If any abnormal discharge exists.

In placenta prævia.

In accidental hæmorrhage.

"POST-PARTUM" (MEANING "AFTER LABOUR")

After intra-uterine operations.

When instruments have been used.

When the fœtus is dead.

When there is foul lochia.

When there is post-partum hæmorrhage.

Allow me to tell you again, you are *never* to use your discretion as to the need of a douche; your work is to carry out the instructions of the medical man in charge of the case.

LECTURE IV
A NURSE'S EQUIPMENT

THE profession of monthly nursing, like any other profession, needs a certain amount of equipment, and I always maintain that the successful nurse is the one who is careful of her appearance, and who has all her *working tackle* in good order and always ready.

My advice to you is : Dress well, but neatly and plainly, avoiding a display of jewellery and lace. Prepare for yourself—

Three washable dresses made with sleeves to turn up above the elbows.

One dozen aprons.

Plain collars and cuffs.

A cap of any design, provided it is neat and without hangings.

Carry out the same effect in all your under-clothing; for what is the use of being spotless where things are seen, but wearing (as many nurses do) a dark petticoat which, to use a popular

phrase, "does not show dirt, and needn't be washed each week." So wear washable petticoats, please.

Look to your feet ; you are many hours on duty. Therefore provide yourself with a sensible pair of slippers for the house ; then you will feel the benefit of your outdoor shoes when you take your walk.

Provide yourself also with a warm pair of bedroom slippers and a dressing-gown ; you will appreciate them in the night when you have a cross baby to nurse.

Choose a neat outdoor uniform ; a conspicuous uniform may attract attention, but it does not insure admiration or respect.

As regards your "tackle." To begin with your bag, I always recommend the washable basket-bag for several reasons :

1. It can be washed thoroughly after every case, and the many washings do the bag good instead of making it look shabby.
2. It is cheap to buy, and can be replaced four or five times at the cost of one leather bag.
3. You have no qualms about destroying it if you are unfortunate enough to have a septic patient.
4. It is not heavy to carry on the district.

It must have a washable lining, or, if you care to spend a little more money, a lining of jaconet, which is easily scrubbed, and if washed with care

will last quite a long time. An ingenious nurse will easily make a series of pockets and loops in the lining, also several small square bags of the same material.

The bag should contain—

Clean sterilized towel.

Small kidney tray.

Enema syringe (in small bag).

Long tube (siphon) for douching (or douche can).

Antiseptic soap and nail-brush (in small bag).

Air-tight bottle containing boracic lint and ligatures.

Dressing forceps, blunt-pointed scissors.

Thermometer.

Sterilized glass douche nozzle.

Sterilized enema syringe nozzle.

Sterilized catheter.

For holding the three last-named articles a glass tooth-brush case with well-fitting top does admirably :

Spring balance.

Thread and needles.

Medicine glass.

Teaspoon measure for antiseptics.

Small enamel cup for eye swabs.

Bottle of cyllin, lysol, or izal.

Tablets of perchloride or biniodide of mercury.

Ergot (for emergencies).

Rules for your bag :

Never place your bag on the floor.

Never leave your bag open uncovered.

When awaiting a case, have your bag in order, and wrap it up in a towel until required.

A nurse who is proud of her work will do everything with thoroughness and proper pride, and guard her bag as her jewel-case.

It is quite an easy matter to keep in your own home—or lodging, it may be—a fish-kettle which may be bought for 6½d., and is a good substitute for a sterilizer. With this you can keep the contents of your bag surgically clean, and you will have the satisfaction of knowing and feeling that everything is in the condition it ought to be, and that you are not a germ-carrier yourself.

There is just one other aspect of your equipment we must not overlook, and that is the moral aspect.

It has been said that the influence of every person is either bad or good; well, try to leave behind you a good influence. It may be a small matter to you that you live in a certain house with certain people for a month or so, and in time you may have so many patients that you forget them. But they do not forget you; little things will be remembered by the mother when her child is a child no longer, and those things will be remembered either with a pang of ill-feeling or with a feeling of deep gratitude. It lies in your power—which?

Try to cultivate a pleasant behaviour in all things. Make an effort to be agreeable even under

what may be very trying circumstances ; they will come to an end. Do not be wasteful ; although your work is a mission of charity, it is in many cases a work of necessity, and thoughtless waste on the part of the nurse may be nothing less than a dire calamity to the family purse.

Learn to do all things with delicacy, remembering that there are still some sensitive people who are not so accustomed as yourself to the necessary exposures of childbirth ; and, in conclusion, try not to be a tale-bearer.

Your position will make you intimate with many things appertaining to the house and its occupants, things which ought not to be repeated, and which usually lose nothing in the telling. So, in a few words, "Keep your own counsel and mind your own business."

On Booking Engagements

Doctor So-and-so has asked you to call on a certain lady, or has asked the lady to call on you.

Well, make up your mind to give a good impression straight away. Treat her in such a manner that she will end the interview by feeling that she has the utmost confidence in you and your capabilities ; nay, more, that she feels she is engaging a friend as well as a nurse in her hour of need. You have an opportunity during this

interview of giving many little bits of advice if you have learnt the hygiene of pregnancy; also you can give her a list of things she will require at the time, and guide her in her choice of clothes for her babe. This is a subject which does not receive sufficient attention, outward display too often taking the place of sensible garments.

You are a missionary of health; then, teach her

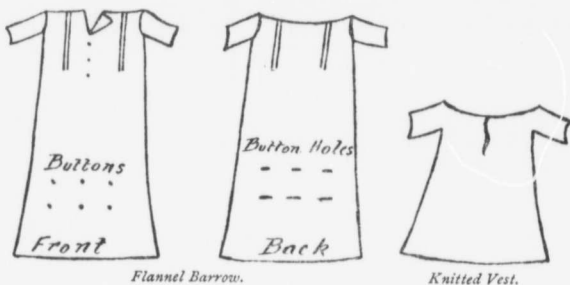


FIG. 7—BABY CLOTHES

that tiny babies need garments to keep them warm—cosy woollen vests instead of dainty bits of cambric; flannel binders instead of the cold fine linen variety; flannel barrows made of flannel throughout and of fair length, and not cotton bodices with a yard and a half of flannel to turn up over the feet; neat and cosy little gowns made of nun's veiling or some woollen material, and not the embroidered starched variety, which no doubt

are attractive to the eye, but not at all comfortable for baby.

In giving a list of requirements, do not ask for more than is absolutely necessary—too much is as bad as too little ; and although you must carry a fully-equipped bag for emergencies, that does not mean you must provide your patient with things she can well afford to buy.

List for the Mother

- Bottle of lysol or other disinfectant.
- Absorbent wool (for swabs).
- Boracic lint for baby's eyes and mouth.
- Bedpan.
- Binders ; these are very suitable made of double Turkish towelling.
- Brandy for emergencies.
- Mackintosh for bed.
- Feeding-cup.
- Flannel aprons (for baby's toilet).
- Two new nail-brushes, good soap.
- Good strong safety-pins.
- Olive-oil or vaseline.
- Warm receiver for baby.
- Roller towel for bed.
- Sanitary towels.
- Toilet-powder and sanitary sheets.
- Powder-dredger.

Other things you may require are usually found in any well-managed household, and you will bear in mind I am not giving you a list such as may be

demanding and expected by some dame of fashion, but a list to suit the middle-class people of to-day, who will in all probability be the patients who will require your services.

Whilst the lady is with you, make a definite point of booking the engagement, with all particulars, including fees to be paid and a clear understanding as to the date on which your residence will begin.

LECTURE V

DUTIES OF A NURSE IN PREPARATION FOR, DURING, AND AFTER LABOUR

IT may be that you are in the house of your patient several days before labour begins; if so, you have every facility for putting into action what you have already learnt concerning the importance of attending to the bowels, and you will have no excuse if the room and requirements are not in order.

On the other hand, you may be hastily summoned. In such a case go at once, but do not rush into the house as if you were the one important person missing; a good nurse knows how "to make haste" without showing it.

If you have cultivated observation, now is the time to use it; your patient's appearance will tell you much.

If labour has commenced, an opportunity will soon occur to allow you to judge to a certain

extent how far it has proceeded. Your questions should be: Has she had her bowels moved, and to what extent? Has she, to her knowledge, lost her "waters"? (meaning, Have the membranes ruptured?) Has she had any "show"? (meaning the mucous discharge tinged with blood).

As she is replying to your questions, she will in all probability have a pain, of which you will notice the degree of severity and the time it occupies.

In the early part of labour the pains are slight and at long intervals, and are felt mostly in the lower part of the abdomen; but as labour advances they become much more frequent and at regular intervals, affecting also the back and loins.

If there is no doubt in your mind that your patient is really in labour, your next duty is to acquaint the medical attendant. If she has not had her bowels moved for five or six hours, you will give a soap and water injection without delay; and in the case of a first baby this should not be omitted for any reason, although the patient herself may tell you she does not require it.

Whilst this is operating, the fire should be lit, the bed prepared, and instructions given to someone to arrange for a good supply of hot water.

The usual position of a woman in labour is on her left side, so this means that the right side of the bed must be prepared.

Begin by turning the bed completely—it will be more comfortable; for you know, even if all goes well, you will not be able to do this for several days.

The foot of the bed is most convenient for labour, as it is often helpful for a patient to press her foot against the bed-rail—which should be protected with a pillow—during a “pain.”

The bed should be prepared in this manner :

If you are fortunate enough to possess two mackintoshes, spread one first of all over the mattress; if not, a piece of strong brown paper will do just as well. This is a precaution for the cleanliness of the mattress, in case there is more discharge than you would naturally expect.

Over this place the usual bottom sheet and pillow, now the second mackintosh, and over this the folded blanket, sheet, or sanitary pad. The upper bed-clothing should consist of sheet, blanket, and counterpane.

A long roller towel should be fastened to the foot of the bed near the patient's feet, the object of this being that she may pull on it during a “pain.”

By this time, no doubt, the result of the injection will be over, so that you may attend to your patient in the following manner :

First turn up your sleeves above the elbow and

look business-like ; scrub and disinfect your hands and arms.

Place the patient on her left side ; wash the vulva, anus, and surrounding parts, with soap and water ; then swab them with your favourite antiseptic, using pieces of cotton-wool. One firm wipe should be given with each swab, which should never be replaced in the lotion.

Now apply a clean diaper, and allow your patient to walk about to help to dilate the os.

Of course, during this time you will have been making use of your powers of observation, and will have come to some conclusion as to the stage reached.

Now turn your attention to the other preparations.

On the washstand should be two basins, one for scrubbing the hands, the other to contain lotion in which to immerse them ; a new nail-brush, soap, and reliable lubricant ; towels for the doctor and yourself.

A jug should be filled with boiling water in good time, so that it may have time to cool, and the top of this jug you will cover with a clean napkin.

A small table will be necessary for your own preparations, and if one is not available the dressing-table should be cleared, and covered with

a clean cloth or towel. On this should be placed a cup or bowl containing pieces of boracic lint about the size of a two-shilling piece, to wash the baby's eyes and mouth, and three ligatures for the cord. Hot water will be poured over these, so that you have all lying in a weak solution of boracic acid.

Put on the table also the blunt-pointed scissors,

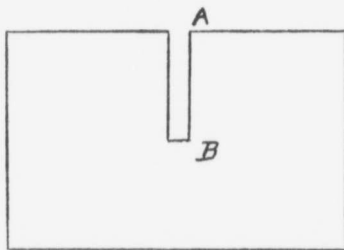


FIG. 8—DRESSING FOR CORD

and a glass containing 2 tablespoonfuls of water (ready to dilute ergot, if it is wanted in an emergency). The ligatures are made of several strands of thread, 8 to 10 inches long, knotted together at each end.

On this clean cloth will also be placed, until required, a dressing for the cord, and this will consist of a piece of gauze, boracic lint, or linen, about 6 inches square. Most textbooks will tell you to

cut a hole in the centre of this, pulling the cord through; but that is not our method, as I consider the cord is apt to be pulled upon by a heavy-handed nurse. I prefer to cut the piece down to the centre, placing it round the cord with the slit upwards, in the same manner that I would dress a tube wound in a surgical case.

Having prepared your table in this manner, cover with a clean towel until the things are required.

In a convenient place near the fire should be a complete set of baby clothes, pins, powder, etc.; a warm receiver for the child, binder and napkins for the mother, and a clean pad for the bed when the labour is over.

As labour advances, the patient herself should be prepared in this way:

She will put on a clean nightgown, which will be fastened up over the right shoulder, out of the way of discharge, and a warm flannel petticoat and dressing-gown. Her hair should be arranged in two plaits, so that it may be easily brushed each day.

By this time, no doubt, the doctor will have arrived to examine his patient; if so, your first duty is to pour out hot water in the two bowls on the dressing-table, at the same time asking if the antiseptic you are making is to his liking. Whilst he is engaged in scrubbing and disinfecting his

hands, prepare the patient by placing her on her left side, buttocks well to the side of the bed.

Make your own lotion in a separate bowl, and prepare the vulva for examination by thorough cleansing. Do not unduly expose your patient during this process, and say a few words to put her at ease.

When the examination is completed, you will again cleanse the vulva; and if the doctor has found that his presence is not necessary for some time, no doubt he will decide to leave you in charge, trusting you to send an urgent message if he should be required earlier than anticipated.

During this period of waiting you can occupy yourself by making swabs in the following manner:

The wool should be unrolled and placed in front of the fire, which will cause it to fluff out and thus be more economical. Small pieces will then be torn off, rolled lightly between the hands, and placed in a clean towel or pillow-case until required.

It is very undesirable for a patient to be surrounded by friends, but there can be no objection to one other person being present if the patient wishes it; also—one never knows—an emergency may arise when a third person will be most useful.

In the earlier part of the labour the food need

not be interfered with, but as labour progresses it is wise to restrict the patient to fluids, such as beef-tea, milk, or tea made with milk, and given in small quantities.

During this period she must be reminded every now and then to pass water, lest the bladder should become full and hinder the labour; and on no account must stimulants be given unless ordered by the doctor.

Vomiting may be a troublesome symptom, but will do no harm beyond being distressing, and sips of hot and cold water alternately will often give relief. Cramp may prove troublesome, for which you should resort to gentle rubbing with the hand or bathing with hot water.

As the second stage is reached the pains will alter in character, compelling the patient to bear down; the face will become flushed, and the skin moist with perspiration. A message must be sent to the doctor, asking him to come without delay; the patient must be put to bed, and encouraged to bear down to assist the pains.

A good nurse will find no difficulty in giving comfort and encouragement at this time, when it is so much needed, but you may have an hysterical patient, when sympathy and firmness will need to be combined.

As soon as the doctor arrives, follow the same

procedure as on his first visit, and during the time he is delivering the patient your duty is to swab away the discharge which of necessity comes with each pain.

Sometimes fæces will be expelled from the rectum, which you will swab away, swabbing backwards to avoid coming in contact with the vulva. Between the pains place a clean napkin over the buttocks, see that she is not too much exposed, and give her small quantities of nourishment.

The doctor will require a napkin to guard the perineum as the head descends, and the moment the head is born your first duty is to attend to the child's eyes by swabbing them, before it has an opportunity to open them and so admit discharge.

When the child is fully born, and you are waiting for the pulsation of the cord to cease, clean the face and also the hands with a napkin, as babies are apt to put their hands up to their eyes.

If the cord has ceased pulsating, ask the doctor if you are to tie it for him; if so, tie it with one of your ligatures about $1\frac{1}{2}$ inches from the navel (umbilicus), taking care to tie it tightly. The second ligature will be tied a few inches from the mother; take your scissors and divide the cord halfway between the two. The baby's

end should be gently pressed with an antiseptic swab to press out any remaining blood in the cord.

Place the child in its warm receiver, and see that it is kept warm until you can attend to it.

Now hold your kidney tray to the vulva to catch any rush of water or discharge; empty it, and hold it again to receive the placenta.

You will now notice that the doctor will control the uterus until contraction of that organ is fairly established, and this is your opportunity to prepare a fresh supply of lotion for swabbing, and to arrange the clean things you require for the mother within easy reach of the bed.

Some doctors prefer to do the final swabbing, etc., themselves, but usually during a labour they are able to estimate the nurse's capabilities, and will leave you to do everything yourself. If so, commence by placing the patient on her back; remove the soiled petticoat, drawing it downwards over the feet. Then arrange the divided bed so that she is warmly covered, and begin swabbing. First wash thoroughly but gently the thighs and surrounding parts, taking care not to touch the vulva. When these parts are quite clean, take your scissors and cut away any pubic hair which would be difficult to keep clean, and wash the vulva, swabbing *upwards* to avoid the vaginal

orifice, and also to make this duty less painful to the patient. Let me remind you to be light-handed in this operation, as your patient will probably have had sufficient pain without adding more unnecessarily. Now turn her on her left side and swab the buttocks, then the perineum, noticing at the same time if there is any tear. Remove the soiled pads, place the clean pad or draw-sheet in position, also the binder, which should have been previously rolled; turn her gently on her back, draw the binder and pad from the opposite side, and apply a warm napkin to the vulva. Fold a warm napkin and apply to the abdomen, where you will feel the contracted uterus bulging like a cricket-ball. The binder should come well down over the hips and fastened fairly tightly with four large safety-pins, beginning at the bottom of the binder and pinning upwards.

Arrange the nightgown, etc., make the patient comfortable, give a warm drink, such as milk, and allow her to rest.

You will now turn your attention to the baby.

Method is again necessary in this portion of your duties, as there is a wrong way as well as a right way to wash a newly-born baby.

It must be borne in mind that the child has come from a warm atmosphere; therefore be as expeditious as you can. Arrange everything you

will require, and begin by washing the baby's eyes with the boracic lint swabs. Do not be content with washing the eyelids, but gently separate the lids and wash well between them, allowing a gentle stream of water to drop into the eyes, and always swab from the nose outwards; now curl a piece of lint round your fingers and *gently* wash out the mouth. Next make a quick but thorough inspection of the child to see if it is perfect in every way; and if it is covered with a white greasy substance, known as "vernix caseosa," smear the body with cotton-wool dipped in olive-oil or vaseline. Next wash the face, soap all over, including the head; and having removed the oil, immerse the baby in the bowl of warm water, supporting it by the back of the neck. Have a basin of clean water by your side with which to rinse thoroughly, directing the flow of water backwards to avoid the child's face. Lift from the water on to your lap, dry quickly but thoroughly, and dust with a powder of good quality, taking special care of the armpits, groins, and folds of the neck.

Tie the cord with the third ligature as a precaution against hæmorrhage, place your dressing round with the slit upwards, powder the cord well, and turn it upwards.

Now fold the dressing in the form of an envelope and put on the binder. To apply this satisfactorily,

hold the rolled binder in the right hand, place the end well over the dressing, holding it firmly in place with your left hand, whilst with the right hand you pass the rolled portion between your own knees and the baby ; now round once more, and fasten by means of four stitches. This will at first seem a difficult performance, but it is soon mastered, and on no account should a baby be sat up or turned over to have this done. After the binder is on, there is no necessity to turn the baby over more than once if you follow my directions. You have him lying on his back ; if the vest is of the close-knitted variety, draw it up over the feet rather than down over the head. If of the open variety, just turn him over on his abdomen and put on the vest, one napkin, with the point tucked under the binder to save soiling, a second napkin doubled square, and the flannel ; one turn, and you find all ready to fasten in front.

The gown should be slipped upwards from the feet, and not put over the head.

Having placed the child in its cot, your next duty is to take the mother's temperature and pulse, and to examine the pad to see if there is any undue hæmorrhage.

If all is satisfactory, you will now clear the room of all things used during the labour as quietly and expeditiously as you can.

LECTURE VI

COMPLICATIONS WHICH MAY ARISE DURING LABOUR

THE first thing we shall inquire in this chapter is, How would you proceed in the case of precipitate labour, or if the child should be born before the arrival of the medical man ?

We will go back to the stage of severe pains, when you placed your patient on the bed, and we will suppose that you see the child's head pressing on the perineum.

Keep your wits about you, do not get flurried or excited, but turn back the bedclothes so that you may see what is taking place. Remember your rules of asepsis, and do not *touch* the vulva. Do not try to help the head to escape by enlarging the vagina with your fingers, or you yourself may cause a tear.

If the doctor does not yet come, and the head is born, examine with your fingers to see if the cord is round the neck ; if so, free it by slipping

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it over the head as quickly as possible, or it may interfere with the circulation of the blood and cause suffocation of the child.

Now attend to the child's eyes, and wait for another pain to expel the shoulders. On no account must you pull on the head, thinking you are helping, as you do not understand the danger which lurks behind.

Sometimes it happens that the child is born with the membranes unbroken, and death would occur from suffocation unless they were quickly torn open. This is being "born with a caul."

As soon as the child is born it should cry lustily; if it does not do so, clear the mouth and throat of any mucus, and, turning the child over, give it a few smart slaps with the flat of your hand.

When breathing is properly established, and the cord has ceased pulsating, instruct the mother to place her right hand over the uterus whilst you tie the cord in the manner you have been taught, and place the child in a warm blanket out of your way.

Now place the patient on her back, and put your left hand over the uterus, which you will easily find.

This is termed *controlling the uterus*, and its object is to prevent the uterus being filled with blood and to prevent hæmorrhage. There is no need

for you to hurry this stage—indeed, it would be disastrous to do so—and often the placenta can be left until the doctor's arrival. If he should not arrive, however, and you feel the uterus rising higher under your hand, accompanied by pain, you may try to express the placenta by pressing downwards and backwards, with your hand spread out and your fingers pointing upwards. Be very careful not to pull upon the cord, and when the placenta has fallen into the kidney tray grasp it in your right hand, twisting it round several times to preserve the membranes from tearing.

A discharge of clotted blood and fluid usually follows; but if there should be a *gush* of blood, grasp the uterus firmly, sending an urgent message for the doctor.

When the placenta has been expressed, you will still require to control the uterus, which you will feel hardening under your hand. If it becomes soft, firmer pressure must be applied, and a gentle rubbing movement made with the fleshy part of the tips of the fingers. This rubbing should be rather in the nature of a coaxing movement than of harsh rubbing, for you must bear in mind your patient has just experienced great pain.

If all is satisfactory, in about twenty minutes you may proceed to examine the perineum for injury and finish the post-partum toilet.

Eclampsia (Fits)

This is another complication which may arise. It is a consequence of kidney disease, and may come on during the labour or after.

Should one of these fits occur before the arrival of the doctor, no time should be lost in sending for him.

You yourself must keep your wits about you, trying to prevent your patient from hurting herself by keeping her flat in bed or on the floor; loosen all tight clothing, and try to prevent the tongue being bitten by placing something between the teeth: a pocket-handkerchief folded will do admirably. Turn her on her side to allow the saliva to escape, lest it be sucked into the lungs, when there would be danger of septic pneumonia.

No stimulants must be given; and if the doctor has not arrived by the time the patient has regained consciousness, you may do some good by giving an enema of soap and water or a dose of castor-oil.

Fainting during Labour

This should always make you suspect that there is loss of blood going on, as, you must understand, hæmorrhage may be internal and unseen as well as external and visible.

You must send an urgent message to your doctor, and your duties are, to keep the patient lying quite still ; to open the windows to give air ; to prepare, or instruct someone to prepare, hot water for douches, etc. ; and to provide a stimulant. Anything further is not in the province of a monthly nurse, your main duty being to have the doctor in attendance as quickly as possible, and then to carry out his instructions.

Instrumental Labour

Instruments are required when for some reason labour cannot be completed naturally.

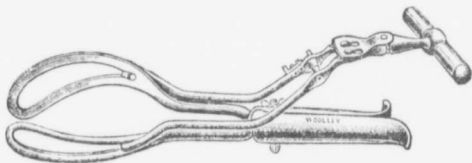


FIG. 9—AXIS TRACTION FORCEPS

Your first duty on these occasions is to see that the bowels and bladder are empty, and, if chloroform is given, to see that the patient removes all artificial teeth. If the doctor carries his own sterilizer, he will require you to cover the instruments in it with boiling water, and to allow them to boil for ten minutes.

If he does not carry a sterilizer, and the forceps

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are already boiled, you must provide a deep jug or large toilet basin, which you will fill with warm antiseptic lotion, and place the instruments in this until they are required. Now place your patient with her knees well up and buttocks projecting over the edge of the bed.

Your own position is on the left hand of the doctor, and, whilst supporting the buttocks against your knee, you will pass your left arm round the



FIG. 10.—BARNES'S FORCEPS

right leg of the patient, holding her legs apart whilst the instruments are applied.

As the child's head descends, cover the anus with your hand, protected by a clean napkin, as some remains of fæces may be expelled.

In the majority of instrumental labours the perineum is ruptured, and will be sutured immediately the placenta is expelled.

You will make some lotion in which to place the needles and sutures, and proceed to swab the vulva free from blood and clots.

When the stitching is completed, inquire from

the doctor his special instructions as regards the care of the perineum. If he should leave this to you, a good plan is to apply a strip of boracic lint over the repaired part each time you have occasion to swab the vulva or change the napkin.

Now tie the patient's legs together, either at the knees or ankles, as a reminder that she must lie as quietly as possible until the parts have healed.

LECTURE VII

CARE OF THE MOTHER DURING THE FIRST TWELVE HOURS AFTER LABOUR

YOUR duties consequent on the labour being now completed, it is very necessary that the mother should have rest and, if possible, sleep; therefore give a nourishing warm drink, such as milk or milk-tea, and allow her to see her husband for a few minutes. Even if she is very exhausted after her labour of love, these few minutes together will do more good than harm; and if you are a tactful nurse you will be very busy, apparently, during these precious moments, which mean so much to the woman who has just been "through the valley of the shadow."

Then draw the curtains to subdue the light, and keep the room as quiet as possible; at the same time you must not forget to observe your patient unobtrusively, and if you see her face become suddenly pale, or wear an anxious expression,

ascertain at once if hæmorrhage is taking place, in which case the doctor must be sent for without delay.

You will need to act at once by taking away the pillows, unfastening the binder, and controlling the uterus; if this cannot be felt, gently but firmly massage and knead the abdomen while you feel the uterus hardening like a tennis-ball.

Whilst you are doing this (I assume you have sent an urgent and plain message to the doctor), instruct someone to raise the foot of the bed across a chair, to open the window to give air, to provide hot and cold water in readiness for a douche, and salt in readiness for a saline injection. Try to keep your patient as quiet as possible, and also be calm and collected yourself, so that you can carry out the doctor's orders intelligently. If in the meantime he does not arrive, you may give a hot douche (115° to 120°), taking every antiseptic precaution. If on his arrival you are instructed to give a saline injection, prepare 1 teaspoonful of salt to 1 pint of warm water, and inject into the rectum slowly. If you do not possess the tube and funnel usually employed for this purpose, you can manage in emergency with an enema syringe, if you use it carefully. You will also keep a sharp watch for bleeding, as post-partum hæmorrhage is

sometimes followed by secondary post-partum hæmorrhage later in the puerperium.

For the first few hours after delivery the vagina and external organs are very sore and painful; the patient may also complain of after-pains, but these require no treatment unless they are very severe; indeed, they are very necessary, as they aid retraction of the uterus.

The mother's food will consist of milk, gruel, and such-like preparations, but a good nurse will think of many little variations of what is termed "fluid diet."

In five or six hours after labour she should be encouraged to pass water, the bedpan being warmed before use; if this is not successful, and the labour has been a normal one, there will be no harm in turning the patient on her hands and knees, using a chambervessel instead of a bedpan.

If this is not successful, warm cloths may be applied over the bladder and neighbourhood of the vulva. Change these as they become cool, and give liberal drinks of warm barley-water, thus helping externally and internally at the same time. Should these means fail, then in twelve hours' time you must send a message to the doctor, who will probably pass the catheter.

Whilst on the subject of messages, let me im-

press upon you that messages of this description should be written, and not verbal.

Your preparations for this operation will be: Hot water and lotion for washing and disinfecting the hands, your own lotion and several swabs, glass dish or bowl with lotion in which to place the catheter, and your kidney tray in which to receive the urine.

You may be asked to boil the catheter; if so, obtain a clean pan (if you have anticipated the operation, you will already have made this surgically clean), place the instrument in the water, and boil for ten minutes, *after the water has commenced to boil*. Now place in the lotion until required.

Whilst this is boiling you will prepare the divided bed in the manner you have been taught, wash and disinfect your own hands, place the patient on her back, thoroughly cleanse and disinfect the vulva, taking great care to hold the labia apart so that you can *see* that the vestibule and surrounding parts are absolutely clean. You will now wring a swab of wool out of your lotion, and carefully place it into the vagina to act as a plug to prevent any discharge escaping, which might otherwise come in contact with the catheter.

This plug will also prevent any mistake being made between the orifice of the urethra and the

orifice of the vagina, as often after a severe labour, when the parts are very swollen, it is not easy to find the urethra, and any accidental contamination of the catheter might cause cystitis, which means inflammation of the bladder.

Now ask the doctor if he prefers the patient to lie on her side or on her back, and arrange her accordingly.

Place your kidney tray in position to catch the urine, and hand the doctor the bowl containing the catheter. The *bowl*, I say; it is not your business to touch the catheter itself.

When the operation is over, again swab the vulva, remove the plug, and apply an antiseptic pad.

It is not desirable to repeat this operation, so take care to encourage your patient to pass urine naturally within the course of a few hours.

CARE OF THE MOTHER DURING THE PUERPERIUM

The puerperium is the period of ten days after labour, and you have just learnt what your duties are during the first day. Now, in the first place, please remember that you are the lieutenant of the doctor, and as such you must carry out his orders, and not use your own suggestions.

You will find as you go through life that doctors,

like other folk, vary considerably in their work ; and if you are wise you will try to fall in amicably with their "isms," even if they are not what you have been taught. You will also learn that in so doing you will not go far wrong, for, after all, you are only carrying out instructions from your superior officer.

The only thing you must not depart from is your ever-vigilant care that everything—yourself, your patient, your surroundings, and your implements—shall be, as far as possible, surgically clean.

You are in charge of a sick-room, and your duties include keeping that room clean, uncontaminated, and well ventilated. You will need to begin your duties early, for monthly nursing is, taken on the whole, exacting and engrossing ; therefore strike a healthy tone in your recovery-room, as it may be called. Do not litter it up, but have a place for everything, and put everything in its place ; in dusting use a duster that has been wrung out of an antiseptic. Try to keep an even temperature, about 65°, as having a room first hot, then cold, might induce your patient to have a rigor, or shivering fit.

Always take your patient's temperature and pulse before commencing her toilet, and chart them at once. Of course, you will carry your own charts, which you will find inexpensive. Do not

allow yourself to get lax in this respect ; these are the little things which give a certain amount of tone to your work, and every trained nurse should take a special pride in her charts. They are meant to show at a glance the daily progress of your case, and are of great value to the doctor when things go wrong, as they sometimes do.

You will now attend to your patient's toilet ; and, let me tell you, it is no small art to wash a patient in such a manner as to make the proceeding feel, to the person concerned, a pleasure. Be very careful to dry the breasts and nipples well after washing, at the same time noticing if the milk appears to be coming in and that the nipples are suitable for the baby.

Next comes the most important portion of the toilet—*i.e.*, the vulva—so commence in this wise (I shall teach you in detail) : Prepare your antiseptic lotion, swabs, and clean napkins ; turn back and remove the counterpane, fold one blanket double over the patient's chest, the other double over the lower limbs—thus you have a divided bed, and are able to do your work without unduly exposing your patient and subjecting her to the risk of a chill. Scrub and disinfect your own hands, and wash well round the legs and surrounding parts, taking care not to touch the vulva with these swabs ; then, whilst

you separate the labia with your left hand, swab out the vulva, giving one firm, clean wipe with each swab, remembering always to swab upwards, away from the entrance to the vagina. Never place a used swab back into your lotion, but immediately place it in your kidney tray to burn.

Then turn the patient on her left side whilst you attend to the buttocks and perineum, now as before swabbing to avoid the vaginal orifice. If the perineum is torn, try to be light-handed, but at the same time thorough, in your cleansing, as any tear must be regarded as a source of danger until it has healed. Apply a clean diaper and reapply the binder. This should be brought well down over the hips, and made to feel as comfortable as possible. Commence your pins at the hips, pinning upwards, and taking care not to pin too tightly over the diaphragm, or lower portion of the ribs.

If the bed is of the large variety, bed-making will be a more difficult process, and you will carefully assist the patient to the opposite side of the bed whilst you shake up the flock quietly and apply the necessary clean sheets, etc. Here let me tell you that too much changing of bed linen is almost as bad as too little, and, instead of a constant changing of bottom sheets, it is better to have a good supply of draw-sheets or pads.

When the toilet is completed, a warm drink will add considerably to your patient's comfort.

The vulva should be cleansed in this manner night and morning. I consider this to be sufficient unless the patient has an action of the bowels, or, in the case of a repaired perineum, when she passes urine, as it is very necessary then to keep the part as dry as possible. You will, of course, see that she is from time to time supplied with clean antiseptic pads.

Learn to give clear reports, so that when the doctor arrives you can tell him accurately how his patient has fared in his absence. His questions will probably be :

- Has she slept? If so, how much?
- Has she had much discharge?
- Has she had any pain?
- Has she passed urine?
- What are her temperature and pulse?

He may ask for the character of the lochia, so I will explain to you the meaning of the term.

After the separation of the placenta and membranes, following the birth of the child, an aseptic wound is left in the uterus, and from this wound comes the discharge known as the "lochia." For the first few days it is red in colour, and composed chiefly of blood and clots, but gradually

becomes paler, and eventually has a heavy but not offensive smell. You must notice the various smells particularly; in fact, it is part of a nurse's vocation to be educated in smells.

Sometimes the redness persists until the tenth day or after, or it may suddenly reappear by the patient getting up too soon, by excitement, or severe straining of the bowels. This, of course, you will report to the medical attendant.

An aperient is usually ordered on the second or third day, but the doctor will tell you his wishes in this respect.

You will also find about this time that the breasts become harder and more painful, and that the milk is fairly free on the fourth day. The incoming of the milk may cause a rise of temperature, and it is your duty to see that the child partakes of the nourishment provided for it regularly, using each breast alternately. If the mother progresses favourably, she may attend to her own toilet on the fourth day, and also sit up in bed for meals.

During the first few days the diet will be chiefly fluid, and must be given at intervals of two hours. A little toast or bread and butter may be included. After the bowels have been moved, the diet may be increased and more varied, including such things as fish, fowl, and lightly cooked eggs.

Vegetables, however, are better avoided for the first ten days, or until the patient can take some exercise.

Whilst we are on the subject of food, I would have you remember that fish and fowl are sources of danger as far as your special work is concerned, as decomposition has set in before they are eaten. Therefore, if you have occasion to prepare these for meals, take especial care that your hands are well scrubbed and disinfected before doing anything for your patient.

You will also use your discretion in deciding the matter of visitors, and will not treat all with rigid routine in this respect. What is injurious to one patient may be of great benefit to another; and where one may be heartily glad of quiet days and retirement, another may grow weary of seclusion, and cheerful society, administered with discretion, will prove an admirable tonic and aid to recovery.

During these days of convalescence you will keep the bowels acting regularly, and also notice each day, as you unfasten the binder, if the uterus is falling gradually into its normal position. On the tenth day you should be quite unable to find it, as it ought to have disappeared behind the pubes.

On the eighth day after labour, if everything

has been normal and you have the doctor's permission, the patient may sit up to have her bed made, but this should be done as quickly as possible. The floor should be washed over occasionally with disinfectant, instructions being given that it must be made as dry as possible after washing. The room must be well ventilated, a good plan being to cover the patient with an extra sheet after the room has been tidied, and open the window quite wide. This could be done with advantage several times a day.

After the fourth day a blanket bath may be given each alternate day if it is done quickly, care being taken that the patient does not take a chill, and so induce a rigor.

Many doctors prefer to keep the mother in bed for a fortnight, but after that time, in the absence of any bad symptom, she should go into another room for change of air. At the end of the third week she should be taking short walks out of doors if the weather is favourable.

What must be aimed at is the happy medium between reasonable care and coddling.

I think I cannot do better than conclude this lecture by reminding you of another duty—*i.e.*, your duty to yourself.

I have told you that maternity work is engrossing and exacting. You go on month after month

with rarely a full night's sleep; your babies are varied, some cross, some turning night into day; your patients are varied, too, some thoughtful, some exasperating. This is bound to have its effect sooner or later: you may not be really ill, but you are below par; little things worry you, and petty annoyances seem great difficulties.

All sick people live in a little world of their own, and sometimes forget they have a nurse who is capable of becoming tired and ill herself.

So you must be on the defensive, as it were; think of a future as well as a present time, and watch your own health. Be punctual at your own meals, insist on having your daily walk, and have a daily bath if possible. Do not neglect your bowels, and, if you lose sleep at night, do your best to obtain some rest during the day. Feeling well, you will do your work with a light heart, leave your baby with regret, and look forward to your next with interest and enthusiasm.

LECTURE VIII

ABNORMAL PUERPERIUM

THIS means the abnormal conditions which may take place during the days following the birth of the child.

I have already explained to you the difficulty you may have with the bladder, and the possibility of eclampsia. Suffice it to say, then, that the latter may occur during the puerperium as well as during the labour.

Hæmorrhage also we have dealt with; but there is such a thing as secondary post-partum hæmorrhage, which may be caused by retention of something in the uterus or by the patient getting up too soon. The former condition only concerns the doctor; your duty is just to report it; but for the latter condition you may very easily be blamed.

The treatment ordered is usually rest, douching, and ergot.

This drug you may have to give on various occasions, so I will explain its action to you.

It is the remedy used to stop any bleeding from the uterus, because it has the power to excite the uterus to contract. It is usually given in doses of 1 drachm in about 1 tablespoonful of water, and when given in this way takes from twenty minutes to half an hour to act. It may also be injected under the skin by what is known as a "hypodermic syringe," in which case it will take effect in about five or ten minutes. It is usually wanted urgently; that is why you are taught always to have ready water in a cup during the labour.

The other preparations for this emergency you have already learnt (see p. 80), but I hope you will bear in mind that hæmorrhage is a serious complication, and that your patient may die.

Subinvolution of the Uterus

In a normal case the process of involution goes on daily—that is, the uterus is gradually sinking into the original position which it occupied previous to pregnancy.

In subinvolution this retraction does not take place. It may be caused by the patient getting up too soon or by retention of something in the uterus.

There may be a prolonging of the red lochia, which may lead to hæmorrhage or sepsis. The treatment is usually rest, douches, and ergot.

The Lochia

This may become very foul-smelling or be too scanty or even arrested. Warm antiseptic douches may be called for, and you should teach your patient to change her position occasionally, so that there may be free drainage from the vagina.

After-Pains

These may become so severe as to be counted abnormal. In this condition retraction of the uterus is incomplete, due, probably, to retention in the uterus or bladder.

The symptoms are pain, profuse lochia, and rise of temperature.

Rigors, or Shivering Fits

These must be watched for and reported, as they may be the forerunners of an abscess of the breast, a white leg, or even puerperal fever.

Shivering fits are encouraged by the patient being chilled while her toilet is being performed; therefore a good nurse will endeavour to do the swabbing, etc., as expeditiously as possible, and to expose the patient as little as she can. If a rigor

should occur, you will cover the patient with an extra blanket, and give a warm drink, such as milk. A very efficient drink is half a tumbler of hot milk filled up with soda-water, and given whilst effervescing. Place hot bottles in the bed, take the temperature and pulse, and keep a very sharp lookout for further symptoms. Do not give brandy or any stimulant unless you have direct instructions from the doctor.

Usually after a rigor the patient perspires freely; so, if you have presently occasion to change her nightgown, be sure the fresh one is quite warm and that you are speedy in changing it.

Rise of Temperature

This may arise from various causes, a very common one being excitement from worry or visitors. It may also be due to the inflow of the milk in the breasts, or to a check of the flow of lochia.

In very many cases I have found it to be due directly to the bowels, even when the customary aperient has been given with what was supposed to be success. In some of these latter cases we find symptoms bordering on sepsis—the rigor, perspiration, anxious look, persistent temperature, and distension of the abdomen. Relief is often given by injections of oil, followed by one of soap

and water into the higher bowel, an intra-uterine douche being given also as a precaution.

If you have such an injection to give, you will require about 8 inches of sterilized tubing attached carefully to the nozzle of your enema syringe.

This should be well vaselined and passed high up into the rectum. One advantage of this proceeding is that the patient usually retains a larger quantity of water.

For your own sake, have two bedpans within easy reach; and if there is a good action of the bowels, you may find on examination of the result that you have removed the obstruction, and that the temperature will fall.

Insanity, or Puerperal Mania

This is more common in primipara than multipara. The symptoms are fever, sleeplessness, rambling, and a peculiar kind of slyness. The patient may take a great dislike to the nurse or her own husband, may be very talkative, or on the other hand very melancholy.

She should never be left alone, as the slyness often leads to great cunning, and there is a strong tendency to suicide. The baby should be taken entirely away from her, or she may harm or even kill it. These cases are exceedingly trying, and you must carry out all orders implicitly.

White Leg

The symptoms of this are ushered in by a rigor, fever, pain and swelling of the leg, accompanied by a cord-like feeling of the vein, which will become very tender.

The swelling is painful, travels from above downwards, and very soon you will notice it to be tense and shiny. The dangers are that the clot in the vein may become detached and give rise to embolism, or that it may suppurate and cause blood-poisoning. The patient's strength may also become exhausted, as recovery takes a long time. You will strictly follow out the directions of the doctor, but the very moment you perceive the swelling the leg must be raised on a pillow, kept warm and absolutely at rest. You will need to improvise a bed cradle to prevent pressure of the bedclothes, and give great attention to the shoulders, back, elbows, and heels, to prevent bedsores.

The Breasts

Even in a normal case these need careful watching, as a careless mother will very soon have cracked and sore nipples if she does not keep them clean and dry. If they are inclined to crack, they should be anointed with glycerine

and borax, or bathed with a lotion composed of boracic powder and perchloride of mercury, the baby using a nipple-shield until they are healed. If the breasts are imperfectly emptied, or the child is not fed regularly, they may become swollen, hot, and hard, and the temperature may be raised to 101° or 102° .

They should then be gently rubbed with the fleshy part of the tips of the fingers, the movement being made towards the nipple, whilst a little warm oil will make the rubbing less painful. A hot flannel should be applied, or fomentations if so ordered. If there is more milk than the child can take, you will be wise to use the breast-pump.

Cracked nipples and lumps in the glands predispose to an abscess, which, I assure you, is a very painful thing. If an abscess should develop, you must understand your duties in regard to it.

A short time before it is lanced, you will carefully wash the breast with soap and water, then with an antiseptic. Be as light-handed as you can for your patient's sake. Next wring out a compress in disinfectant, and place over the breast until the doctor arrives.

If you have not been able to supply lint, jaconet, etc., for a compress, you can easily find simple substitutes.

A clean napkin may be used for a compress, and a square of brown paper is an admirable substitute for jaconet.

Other preparations will be—

Hot water and disinfectants for the doctor.

Nail-brush, soap.

Boracic lint.

Your own lotion.

Swabs of cotton-wool.

Kidney tray or fair-sized bowl.

Small glass or dish for the doctor's scalpel.

Two sterilized towels.

In most cases the doctor will freeze the part to help to annul the pain, and before this is done you will arrange your sterilized towels, one above and one below the breast.

Be ready with your kidney tray or bowl, for the moment the scalpel is inserted, out comes a great rush of matter and pus, so much that you wonder where it can all have been hiding. The doctor will give you instructions as to the treatment, which you will conscientiously follow, always taking care to remember to be as light-handed as you can. The dressing should be kept in place by a bandage in the form of a binder fastened with safety-pins down the centre. It is quite possible that the child will be using the other breast; if so, a hole should be made in the

binder, so that the nipple may protrude without disturbance to the dressing.

If the death of the baby has occurred at the birth, the mother's breasts are bandaged in the same manner, and under the arms and between the breasts are placed light packings of cotton-wool. Some doctors apply plasters of belladonna also, and the majority will prescribe saline aperients to be given in the early morning. If the child dies after a few days, then a more satisfactory method of disposing of the milk is by the judicious use of the breast-pump.

If the nipples are small or abnormal, you will have to persevere with a breast-shield.

Sapræmia

This arises by poison from clots, membrane or placental shreds left in the uterus, which induce foul lochia, rigors, and fever. The temperature rises gradually, usually on the third or fifth day.

The treatment will be washing out the uterus with an intra-uterine douche.

If taken in time the symptoms gradually disappear, but if neglected or treated lightly they may lead to acute sepsis.

Sepsis, or Puerperal Fever

This is, without doubt, the most serious complication which may happen in your work. The onset is sudden, usually with a rigor, quick pulse, and high temperature, whilst the lochia may be arrested. The patient will have a foul tongue, great thirst, sleeplessness, headache, and perspiration. The germs may gain entrance to the system through any wound, such as a torn perineum, or in clots left about the vulva. The one precaution is absolute cleanliness in everything.

Puerperal fever may be carried from one patient to another, as it is extremely infectious. If it is acute, it runs its course in about seven days.

You must bring all your resources into play when nursing a case of sepsis, and it will be much to your credit if your patient recovers.

Your attention must be constant, special attention being paid to supporting her strength by plenty of nourishment.

She will need all the encouragement you can give her, and very careful handling, whilst you may add considerably to her comfort by sponging her body occasionally with vinegar and water.

This is a notifiable disease; therefore, when your patient has recovered, the sanitary authorities

will disinfect the bedding, etc., whilst you will disinfect yourself, your clothing, your bag, and all you have used during the illness.

Many sanitary authorities now expect a monthly nurse to be disinfected at the public disinfecting-station, as if she were a midwife, and this is really a more convenient plan than carrying out an awkward disinfection at your own or your patient's house.

Afterwards you will spend as much time as possible out of doors, as fresh air and sunlight are capital disinfectants. Also, you must not on any account undertake another case without an explanation to the doctor, so that he may either disapprove of your attendance or be responsible for you.

LECTURE IX

ABORTION AND MISCARRIAGE

AN abortion is the expulsion of the ovum from the uterus after pregnancy has commenced, but before the complete formation of the placenta.

A miscarriage is its expulsion after the formation of the placenta, but before the child is viable.

A premature birth is one which occurs after the child is viable, but before full time.

Abortions are more frequent in multipara, owing to the increased laxity of the uterus from previous distensions. Some women abort habitually each time they become pregnant, and in such cases syphilis can usually be traced, either congenital or acquired; and when abortion takes place during the earlier months it may be easily mistaken for an overdue period or one more profuse than usual.

Up to the third month the uterus is generally emptied naturally, but after that time, as the ovum

becomes more firmly attached, a part of the membrane may remain; and there is a risk of severe hæmorrhage as well as the possibility of septicæmia, so that medical assistance should always be sought.

There is greater risk of abortion during the period of each month when menstruation would have taken place did not pregnancy exist.

Abortion is sometimes induced by certain drugs, taken with criminal intent, and by illegal operations.

Other causes are fevers, violence, diseases of the uterus, mental shock, fear, worry, dancing, lifting a heavy weight, or constitutional disease, such as consumption.

The symptoms are pain and hæmorrhage; if both are present, and one or both severe, abortion is inevitable.

If the hæmorrhage is moderate and pains slight, the abortion may be threatened only, and with care it can be averted. If you are present, send at once for a doctor, and keep all clots and whatever is passed for his inspection. Keep the patient at rest, and elevate the foot of the bed.

Make preparations for the doctor as follows:

Hot water.

Antiseptic for hands and douche.

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If the doctor is long in coming, give a douche (115° to 120°), using every antiseptic precaution, and see that the patient's bowels are emptied.

Of course you will need your lotion, swabs, etc., just as in an ordinary labour; and you may find there is occasion for the doctor to plug the vagina, in which case you may be called upon to boil a few things, such as gauze or speculum. Keep your wits about you, and carry out orders intelligently, remembering what you have learned about asepsis.

The after-treatment of these cases will be much the same as a normal birth as regards rest, diet, and precautions. If the death of the fœtus has occurred, the abdomen ceases to enlarge, as also do the breasts. The mother is in grave danger by absorption from the dead fœtus, and in any case she is unwell and feels a weight in the pelvis.

In all these cases you must remember that the womb is ready to absorb any impurities, and every care must be taken to avoid sepsis.

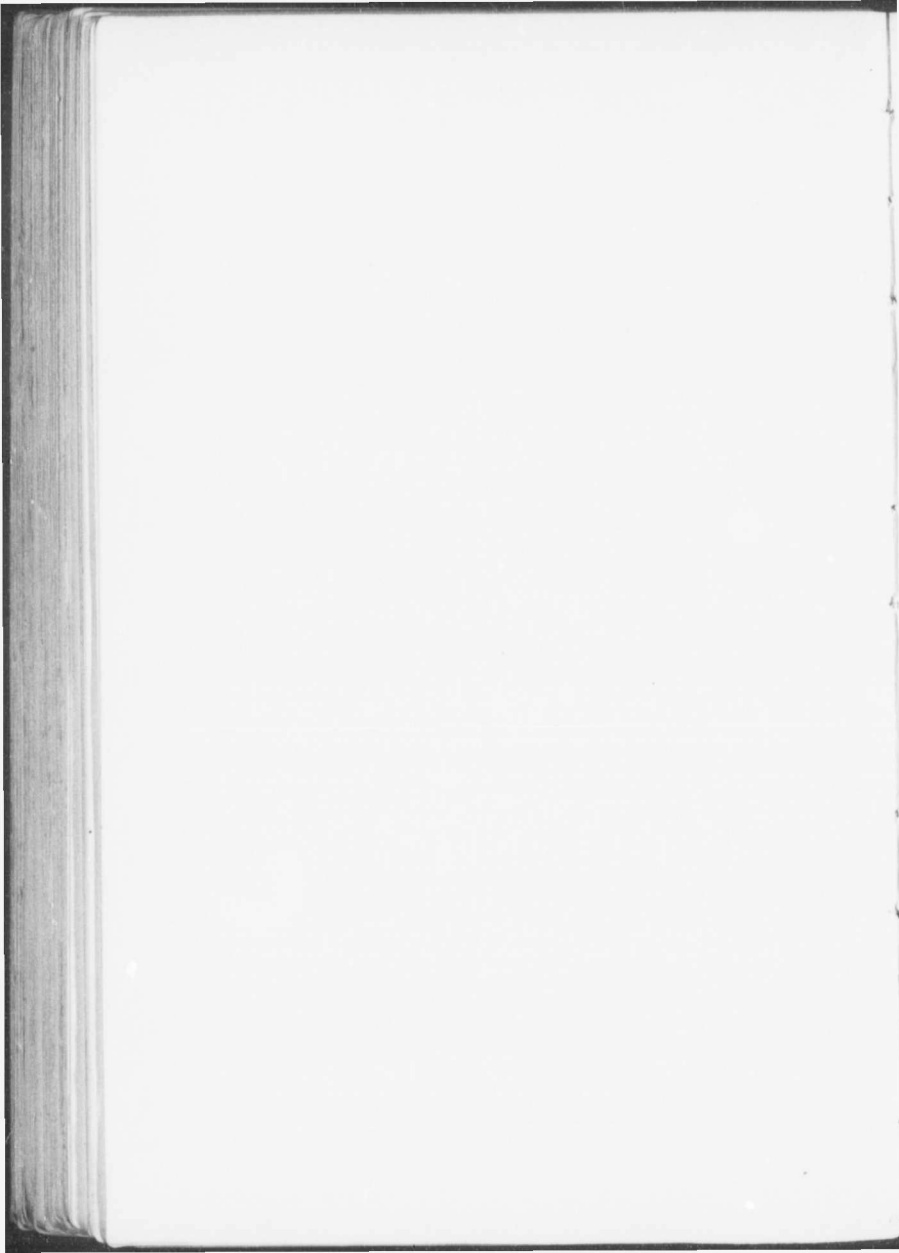
Although it is not necessary for you to learn the measurements of the fœtus, it may be interesting to you, so I will give you the following table:

GROWTH AND MEASUREMENTS OF THE FŒTUS
AS IT PROGRESSES EVERY FOUR WEEKS OF
PREGNANCY.

Month.	Length.	Weight.
1st	The ovum is the size of a pigeon's egg; embryo $\frac{1}{2}$ inch long	20 grains.
2nd	The ovum is the size of a hen's egg; embryo 1 to 2 inches long... ..	2 to 5 drachms.
3rd	The ovum is the size of a goose's egg; embryo 3 to 5 inches long. The fingers and toes have nails complete, and the placenta is formed	1 to 2 ounces.
4th	The embryo is now called a "fœtus"; length 6 inches; sex recognizable	$2\frac{1}{2}$ to 3 ounces.
5th	Length 7 to 10 inches; hair appearing on head and body; head very large	7 to 10 ounces.
6th	Length 11 to 13 inches; fat is deposited beneath the skin; if born, soon dies	1 to 2 pounds.
7th	Length 15 inches; eyelids separated; breathes and cries weakly and soon dies	3 to 4 pounds.
8th	Length 16 inches; skin red; child delicate and easily dies	4 to 5 pounds.
9th	Length 17 inches; body rounded; with care can be reared	6 to 7 pounds.
10th	Length 20 inches; nails project over finger-tips	7 to 9 pounds.

Generally speaking, the fœtus is twice as many inches long as the number of months that the pregnancy has advanced.

PART III



LECTURE I
THE NORMAL CHILD

YOU will no doubt have wondered why, so far, the baby has been neglected, as I have only taught you how to give him his first bath.

Well, there is so much to say and to learn about him that I feel it is much better to keep him to himself, as it were. I suppose, if we follow the times, we really ought to speak of this important person as *her*; but somehow it seems easier to speak of "him," so I think, as far as babies are concerned, we will give in gracefully, or at any rate tolerate his having the *misfortune* to be a male.

Now I want you to take your mind back to the time of pregnancy, and think of this child as he is growing.

You have learnt what is known as the "hygiene of pregnancy," and I want you to understand something of alcoholic drinks in pregnancy.

There is a very general public opinion that pregnant and nursing women need stout and beer. It is not only the belief of the poorer classes, but, as I have previously told you, of women whose very education and environment ought to convince them otherwise. It is a terrible mistake, and I consider that in the more humble walks of life there is no sight which fills one with more repulsion and disgust than that of a pregnant woman walking out of a public-house, where she has been drinking alcohol. The law has done well in prohibiting children to enter public-houses, but I say it ought to go one step farther, in the interest of the children unborn, and prohibit the sale of drink to pregnant women. Drink, more than any other vice, destroys the maternal instinct, and the child is being fed through the mother's blood in such a manner as to induce the destruction of its morality from the moment of its birth.

Alcohol interferes with the tissues and organs of the tender growing body in the womb. Nursing women have an idea that stout and beer in some miraculous manner increase the quantity of milk. That may be so, but, as they also decrease the quality, I fail to see the benefit. Experiments also have been made with a mother's milk shortly after she has taken alcohol, and it has been found in the milk quite unchanged. This, then, is just

the same as giving the baby a teaspoonful of stout to drink, a proceeding which would horrify many good mothers who have not sufficiently thought out the matter for themselves.

The Baby born

We will go back to the moment of his birth. He has taken in a good breath, filled his lungs, and is bellowing for all he is worth. You have attended to his eyes and hands, for he is almost sure to rub his face with them. You have waited until the pulsation in the cord has ceased, so that you give him a good start in life. Finally, you have given him his bath, and found that in every way he is a normal child.

He is now to be placed in his cot warmly wrapped, and left there until the mother is really rested, when he must be put to the breast. Nature provides the baby with the instinct of sucking, and, unless something is wrong with the nipples, he does not need assistance in this respect. In his first meal he obtains a solution called "colostrum," which is supposed to be rich in cream, and also, acting as a purge, removes the meconium from his bowels and prepares the stomach for its work of digestion. So at the outset, you see, a bottle-fed baby is robbed of its birthright and starts life handicapped. The

child probably weighs from $6\frac{1}{2}$ to 8 pounds, and measures about 19 inches in length. He must be taught good habits from the very first, and fed at regular intervals; no doubt he would like to be fed a great deal, but remember that you are teaching the baby, and not the baby teaching you. He can live for quite two days, without any discomfort, if he has a teaspoonful of sweetened water occasionally; but at times, especially in poor homes, the dismay of the mother would be amusing, if it were not tragic, when you try to teach her so. She imagines he is hungry from the very first, and you will find old-fashioned women giving the wee thing a taste of the first basin of gruel made for the mother. This is very common, but it is nothing less than cruelty to put gruel into a child's stomach that is yet quite unfit for digesting such food.

For the first day he should be fed every six hours; on the second day, every four; and on succeeding days, every two hours during the day, every four hours during the night.

Most of his time is spent in sleeping, and he must be wakened to be fed. It is a great mistake to allow a baby to sleep as long as he will, under the impression that the sleep is better than food. The result will be broken, weary nights, to say nothing of the irritability caused by loss of your

own rest, and eventually the lack of interest in your work; for the best of nurses cannot work night and day in succession without sufficient rest for both body and mind. So feed baby by the clock; if he cries between feeding times he is probably thirsty, and will enjoy a sip or two of water; or perhaps he may need attention as regards napkins. In any case he does not require nursing; his proper place is the cot, and he must be taught to stay there. It is your duty to keep him sweet and clean. He will require a bath each morning, after the manner in which you gave the first. The temperature of the water should be about 90°; and you must learn not to linger over the performance: a quarter of an hour is quite long enough to have a tiny baby exposed, so learn to be skilful in this duty.

The child must be placed in the bath, and not washed on your knee. The daily immersion is good for him, and you will find the cord will not suffer if you take pains to dry and powder it well afterwards. Sometimes the cord will smell, in which case a few crystals of permanganate of potash in the bathing water will be found beneficial.

One of the most important accomplishments you must acquire in regard to babies is *observation*. They cannot tell you anything; there-

fore you must learn to *detect* the little ailments. The eyes and mouth need close attention ; do not be content with just washing the mouth, but *look* into it and see for yourself that no germs of thrush develop. Change his napkins regularly, or chafing will be the result, and use a powder-dredger in preference to the popular powder-puff. Never dry a napkin to be used a second time without washing, and give plain instructions that they are to be washed without soda, or sore buttocks will be the result. If the baby does not possess a cot, improvise one, as it is high time every mother should understand how much healthier and safer it is for a baby to sleep alone. Clothes-baskets, Japanese baskets, or even a drawer, can be made into quite a cosy cot. He needs plenty of fresh air, and should be taken out of doors in nice weather after the fifth day. In cold weather you will use your discretion, but more babies die from the want of fresh air than from too much of it.

It is your duty to encourage breast feeding as much as you can. The mother benefits in that it promotes and favours contraction of the uterus. The child benefits because—

1. Breast milk is free from germs.
2. It is the food best suited for its digestive organs.
3. It is received at the right temperature and in proper quantity.

4. The first milk, as I have already explained to you, has a purgative effect, removing the meconium from the bowels.

The baby should have ten feeds in twenty-four hours, should have stools of the consistency of soaked mustard, and should gain in weight 5 to 6 ounces each week; anything under 4 ounces is abnormal. The mother's diet must be simple and nourishing, and she should avoid excitement of all kinds, or her milk may upset the child.

If the nipples are depressed, use a nipple-shield for a time until the mother grows more accustomed to nursing, when the difficulty may be overcome.

Notice if he passes urine frequently, and carefully watch his bowels. During the first few days he will have several movements daily, and you will see them gradually changing colour: first the black meconium, which will change about the fourth day to a yellowish-brown, and finally to a pale yellow of the consistency of prepared mustard. He should pass about two motions each day, and at least one fair-sized motion in twenty-four hours. It is very desirable, and quite possible, to teach a child good and regular habits, and a good nurse will set a child in the way of these things before she hands him over to the care of his mother or nursery nurse at the end of

a month. Place a tiny enamelled bowl between your knees, holding the child comfortably in your arms in an easy position, and you will be surprised at the result if you persevere at the same time each day.

You will watch the child closely to be quite sure he is thriving on the mother's milk, and you will know that this is so if he sleeps well after suckling, cries healthily, but little, gains steadily in weight, has a good colour, and is contented and comfortable when awake. Weaning should commence about the eighth month, and should be concluded at the ninth. The mother's milk deteriorates after that time, and the child will lose ground through not obtaining sufficient nourishment. It is a fallacy to think that prolonged nursing prevents conception; and even if it were so, I consider it would be utter selfishness on the mother's part to put her own interest before the health of her child.

Artificial Feeding

This is one of the puzzles of the age, for it is very difficult indeed to pilot a child through the first months of its life if robbed of its natural food. However, in some cases artificial feeding is really necessary, for women who have constitu-

tional disease, such as consumption or syphilis, are most unfit to suckle their babies.

An enormous amount of child-life is lost just from wrong feeding alone, and it is amazing, in these enlightened times, to see the ignorance and indifference that exist on this subject.

We are told that the Society for the Prevention of Cruelty to Children deals with 92,000 cases of cruelty each year, and I contend that if wrong feeding of children came under the same Act we should find that number more than doubled.

It is cruelty, and in many cases amounts to sheer manslaughter.

To begin with, the capacity of a baby's stomach at birth is only 2 tablespoonfuls, and at a fortnight old is but 2 ounces, or 4 tablespoonfuls. You can therefore easily imagine how necessary it is that the food should be in suitable form, so as to be easily digested, and that the small space must not be made smaller by the accumulation of undigested matter. The choice of food will rest with the doctor; it is your duty to see that it is prepared properly, and given in the right quantity, and to note if it agrees with the infant.

If more food is given than it can assimilate, the motions will contain undigested milk curd.

If the food does not contain sufficient fat, there will be constipation, and the motions will be dry.

If there is excess of fat, there may be diarrhœa and vomiting, and the motions will be sour-smelling.

The saliva has no digestive power for the first six to eight months of an infant's life; therefore starchy foods cannot be digested. If the food chosen agrees with the child, there will be a gradual gain in weight. During the first six months there should be a weekly increase of from 5 to 8 ounces, so that the birth weight is doubled by the fifth month and trebled at the twelfth. If the weekly increase during the first six months exceeds 8 ounces, the child is probably overfed; and if it falls below 5 ounces, it is a sign that too little nourishment is being assimilated.

Vomiting must be noted, and you must be able to distinguish between actual vomiting and regurgitation of milk. The latter is quite natural, and is simply the overflow of an already full stomach. It takes place immediately after a meal, and is not sour. Vomiting, on the other hand, is unnatural, and comes on about fifteen minutes after the food has been taken, the milk brought up being sour and curdled. This condition must be reported to the doctor without delay, so that it may be treated.

One of the most serious diseases brought on by improper feeding is **rickets**.

Breast-fed babies rarely show signs of this disease. Should they do so, it is a sign that the quality of the milk is too poor, or that breast feeding is being continued beyond the proper age.

Rickets is bone starvation, and, once commenced, its effects are usually felt through life, in girls especially, and as they reach the child-bearing period we find the pelvis is rickety and contracted. Besides wrong feeding, rickets may be induced by lack of exercise, the breathing of impure air, and insanitary conditions generally. Starchy and sweetened patent foods will also make much flesh at the expense of the bones.

The symptoms usually begin about the sixth month, and are associated with the period of from six months to two years. Early symptoms are restlessness, which is very marked during sleep; and profuse sweating, especially about the head. The child cries when handled, and soon assumes an emaciated appearance, as though his head were too large for his body. The bones of an infant consist largely of cartilage, which only gradually becomes converted into bony tissue; and if there is an insufficiency of lime or salts, the gelatinous substances in the cartilage continue to predominate. The process of hardening is retarded and the

bones become bent and deformed. The elbows, wrists, and ankles, become enlarged ; the ribs have prominences, and may present the condition known as " pigeon-chest " ; and the spine may be crooked. The child will suffer from malnutrition throughout the whole body, and will be very susceptible to such complications as bronchitis, pneumonia, and stomachic and digestive derangements.

If taken in time the condition is curable, but if neglected the severe changes in the bones cause deformity, whilst the accompanying complications may lead to death of the child.

From what I have told you, you will readily see that the treatment lies almost entirely in the regulation of the diet. The milk used must be fresh, good, and uncontaminated, and diluted with barley-water or lime-water. Emulsion should be given in the form of cod-liver-oil and malt, or an excellent preparation known as Virol.

Cod-liver-oil may also be rubbed daily into the abdomen, and fresh air, sunlight, and cleanliness, are necessary adjuncts to the treatment.

Milk Feeding

If it is decided to bring up baby on cow's milk, which holds first place in the rank of artificial feeding, then the milk must have some attention given to it.

To begin with, pure milk should show no deposit at the bottom of the vessel in which it is kept, so begin by ascertaining that it is obtained from a reliable milkman. Take charge of your own jugs, so that you *know* they are perfectly clean. They should be washed in cold water, then left in boiling water for some time, or at least thoroughly scalded with boiling water.

The place in which the milk is kept should be well ventilated, clean, and cool, as the temperature of the milk must be kept as low as possible. All jugs must be covered, to protect the milk from dust and flies. Do not be deluded by the popular idea that covered milk goes sour. A dead fly in the milk is a source of great danger, as flies carry on their legs a tremendous number of germs. Immediately the morning and evening supply of milk arrives, measure off the quantity you need for baby, and keep it under your own supervision.

There are various ways of treating the milk before it can be consumed by baby, and it must also have a diluent. The first day or two of its life the child will be quite satisfied with an occasional drink of sugar and water; but after that regular feeds must be commenced, with definite amounts of fluid.

At first the milk is diluted with double the amount of water, and as time goes on this degree

of dilution is gradually reduced. Also, the amount of sugar added to the mixture is gradually increased up to a dessert-spoonful, and cream may be added to the bottle in the second week of life in half-teaspoonful amounts to each bottle, gradually increasing to a tablespoonful or more.

The baby should be fed every two hours during the first two months, every two and a half hours during the third month, every three hours during the fourth to the sixth month, every four hours from the sixth to the ninth month; and at night every four hours until the fifth month, when no night nursing is required. The food must be given at a temperature of 98°, and the following table will teach you the quantities of milk and diluent:

Age of Child.	Milk.	Diluent.	Sugar.	Amount for Each Meal.
	Tablespoons.	Tablespoons.	Teaspoons.	Tablespoons.
1st two weeks	1	2	$\frac{1}{2}$	3
2nd " "	2	3	$\frac{1}{2}$	5
2nd month ...	2 $\frac{1}{2}$	3 $\frac{1}{2}$	$\frac{1}{2}$	6
3rd " ...	4	4	I	8
4th " ...	5	4	I	9
5th " ...	6	4	I	10
6th " ...	8	4	I	12
7th " ...	9	4	I	13
8th " ...	10	4	I	14
9th " ...	12	4	I	16

Of course you will use your own discretion. If the child is not satisfied, give the milk stronger;

if it cannot digest it, give it weaker. Also, you will observe and make the various allowances for the different qualities of milk.

Treatment of Bottles

These play a very important part in the success or otherwise of artificial feeding. You must

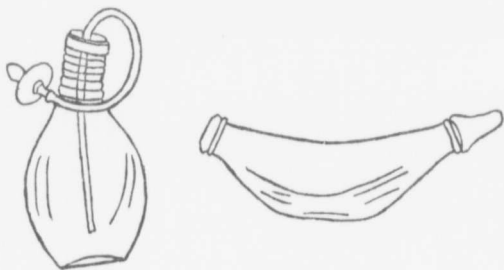


FIG. II.—FEEDING-BOTTLES

have at least two, with several teats, and they must be of the boat variety. Do not for one moment countenance the long tube bottles, and do all in your power to discourage their use, teaching the mother the many evils they give rise to. In some parts of the world their use is forbidden by law.

When not in use, bottles must be kept in a *clean* place, in a *clean* bowl of *clean* water, to which may

be added a piece of common soda as large as a nut. The teats must lie in the water, turned inside out.

After use they must be thoroughly scalded before being returned to the bowl, and they, along with any brushes used for cleansing, must be boiled once a day in a clean pan.

You cannot possibly be too particular in the cleanliness of this department. As it is very improbable that you will be able to wash the bottles, or at any rate feel inclined to do so, during the night-time, you will be wise to have clean bottles in readiness for each feed, and to prepare all you require before bedtime. Experience will teach you that one of the most valued of your possessions should be a Thermos flask, which is now quite inexpensive. In this you can place very hot water, pouring out the quantity you need into a jug when feeding-time comes. Measure out the food, put it in the bottle, and finally the bottle into the jug of hot water, whilst you attend to baby's toilet. By this time the food will be of the right heat, and your loss of rest reduced to a minimum.

Treatment of Milk

Having now learnt your duty as regards bottles, we will take the milk into consideration.

The chief reason for applying heat to the milk is to destroy the bacteria which may be in it.

There are various modes of doing this; for instance, it may be just boiled in the usual manner by placing it straight into the pan.

This, however, has rather a constipating effect, and is not so satisfactory as sterilized milk.

To sterilize milk, first scald a jug, jar, or bottle, and put in it the milk required for the day-feeds. Place the jug in a pan of water, the water reaching up to the height of the food. Boil for ten minutes after the water has commenced to boil, remove the jug, and cool quickly to a low temperature by holding under the running cold water tap. Finally, cover the jug to exclude dust and flies, a very good plan being to use a piece of cotton-wool, which will not exclude the air. This preparation of milk must be one of your early morning duties, and you must measure accurately the quantity you need for the number of feeds during the day. The evening supply must be prepared in the same manner.

You will also measure the quantity of water you will require as a diluent, boil it, add the sugar, and keep in a clean jug. When the feed is due, measure from each jug accurately, place the mixture in the bottle, then the bottle in hot water until it is the right heat.

For delicate babies, such as those who cannot assimilate their food, peptonized milk may be ordered, powders for the purpose being obtained from the chemist. Full instructions are given with them.

Citrated Milk

The addition of 2 grains of citrate of soda to each feed is found to prevent curdling of the milk in the infant's stomach.

This curdling often causes sickness, and the child suffers through not retaining sufficient nourishment. The citrate will, of course, only be ordered by the doctor; your part is to fulfil your duty of reporting the condition. A very common error of mothers is to try one patent food after another, seeking in vain to find something that will suit the baby. The poor child's stomach becomes worn out with the constant endeavours to appreciate the changes, and in the end it is really ill.

There certainly are times when a change of food is desirable, but this change calls for treatment. A dose of castor-oil should be given, and barley-water alone used for several feeds. In this way the new aspirant to the name of "perfect food" will have a fair chance of showing its capabilities, and will not start handicapped.

You will find that your work with an artificially-

fed baby is no sinecure, but you will have much satisfaction if, as a result of your energy, perseverance, and unstinted attention, you leave a wee baby plump, progressing in weight, and in every way making headway to become in the future a healthy citizen of our Empire.

LECTURE II

THE ABNORMAL CHILD

A CHILD may be abnormal at birth, or abnormalities may develop after birth.

We will study the former variety first, and go back to the time of our examination of the baby previous to its first bath.

The most common abnormalities are hare-lip, cleft palate, spina bifida, and imperforate anus.

Hare-Lip and **Cleft Palate** often accompany each other, there being a division both in the lips and in the roof of the mouth. These deformities are supposed to be hereditary.

Spina Bifida

This is caused by a cleft at the lower end of the spine, through which the membranes and fluid of the spinal cord bulge. The condition, I need hardly say, is serious.

Imperforate Anus

In this there is no opening from the bowel, and the condition calls for an immediate operation.

Asphyxia

The child may be born in a state of asphyxia, the result of the circulation through the cord and placenta being arrested. There are two kinds, blue and white, the white being an aggravated form of the blue.

In white asphyxia you will be required to prepare hot water (100° to 105°), in which the doctor will place the child, carrying out artificial respiration at the same time. It is in a state of collapse, and to all appearances dead.

In blue asphyxia the child's skin should be flicked with a wet towel, or slapped with the flat of the hand, to stimulate the respiratory efforts, and as the respirations increase the breathing becomes normal. The mouth, nose, and throat, must be cleared from mucus.

A **Cephalhæmatoma** and a **Caput Succedaneum** are other abnormalities. The former is a swelling on the child's head, due to the bursting of small bloodvessels in the pericraneum as a result of undue pressure during birth. It requires

no treatment, but disappears in about six weeks' time.

A caput succedaneum is also a swelling due to severe pressure, and may form on presenting parts other than the vertex, such as the buttock in a breech presentation or the cheek in a face. This also disappears without treatment.

Circumcision

The foreskin of a male child may be too long, or so tight that you are unable to draw it back. He will of necessity strain to pass water, which effort may induce a hernia ; also there may collect secretions which in time are a dangerous source of irritation. I shall describe this operation and your duties for it later on in our studies.

Premature Baby

This, as I have previously explained to you, is birth before full time, but after the child is viable, "viable" meaning its power to live apart from the mother.

As you can imagine, such a baby needs constant care and attention, for, besides being in an unnatural element, it is also undeveloped.

If possible, preparation should be made for it before it enters the cold world, so that no time may be lost. A basket, or even a small box or

drawer, can be made to answer the purpose of an incubator. This should be well lined with cotton-wool or flannel, or, failing these, a blanket tucked cosily in. A warm coat of gamgee tissue can be quickly made with sleeves attached separately to the shoulders with safety-pins. This is better than cotton-wool, as it does not get into the eyes and mouth, and is easier to remove when necessary. The coat should be made to open down one side, so that it need not be moved until a new one is required.

As soon as the child is separated, place it in a warm blanket whilst you attend to its eyes and mouth, and also to the cord. Clean the face and head, and, instead of the usual bath, smear the body all over with warm oil applied with a swab of wool.

The cord should be dressed in the usual way, and kept in position by a 2-inch binder fastened in front; then put on the gamgee jacket and cover cosily with blankets. A thermometer, which should register 85° to 90° F., must be placed among the blankets in the vicinity of the child. This temperature must be kept up by the use of hot-water bottles. Pads of cotton-wool should be used instead of diapers, and under them should be placed a piece of jaconet, so that the urine does not wet the little jacket.

The oil should be applied every second day, the

child being disturbed as little as possible, and never lifted out of its basket. The necessary attention can be given to it quite well as it lies there, the fact of the little gamgee coat being fastened down the side facilitating the performance without exposure to the air. Needless to say, the baby must be kept near to the fire, the basket being placed on a stool or other contrivance, never on the floor, and protected by a screen from any draughts.

The wee mite will need to be fed often, about every one and a half hours night and day. The food should be given by a medicine-dropper or small spoon, in quantity about $1\frac{1}{2}$ teaspoonfuls at each feed. The strength of this will be 1 part of milk to 5 parts of water, and as soon as the mother's milk becomes established it must be drawn off with a breast-pump, and given to the child diluted with a little boiled water.

The doctor will probably order a little stimulation in the form of brandy, 1 drop in 1 teaspoonful of boiled water being given every four hours. Many children are reared in this way, but they need constant warmth, rest, and attention. I need scarcely tell you that each type of premature baby calls for different treatment as regards food, and the quantities I give you can only be taken as an average.

Operation for Circumcision

A monthly nurse is often called upon to prepare for this operation in a private house, and you would be placed in a very awkward position if you were ignorant of the preparations necessary. When the doctor decides that operation is needful, and informs you of the time he will perform it, your first duty is to ascertain if he intends to give a little chloroform, as this will be a guide in your treatment of the child as regards food. In any case it is as well to see that the usual feed is about due by the time the operation is over, so that the child may be comforted. It would be ridiculous to carry out the strict régime of preparation usually required for operations; the chief thing is to aim at all being aseptic and carried out with as little fuss as possible.

The mother has often an exaggerated notion of the danger of the operation, and her feelings are very much upset at the thought of her baby having so early in life to bear pain; so choose a room as far from her bedroom as you can—one end of the dining-table will do quite well if it is in a good light. Cover this with a blanket, sheet, mackintosh, and draw-sheet. To the right hand of the doctor will be required a small table covered with a clean cloth, on which you will place two sterilized bowls, one for needles, one for instru-

ments, the latter usually being scissors, probe, forceps, and director. Your own small table will also be covered with a clean cloth, on which you will prepare a bowl for lotion, a bowl for swabs, and a kidney tray for soiled swabs. These, as well as the bowls on the doctor's table, must be covered with a sterilized towel.

Other things required are a jug of lysol or biniodide of mercury mixed ready for use, hot water, soap, and a sterilized nail-brush for the use of the doctor. All water used should have been previously boiled, and allowed to cool in a covered jug or jugs. Towels should be sterilized; if small ones are not available, large napkins will answer the same purpose.

In many households steamers are used for cooking purposes, and these will serve as sterilizers if made surgically clean, the towels being placed in the upper compartment. Failing every other means, they may be placed in a clean pillow-case and baked in a fairly hot oven.

A small pan must also be made surgically clean in which to boil the instruments.

Do not undress the child; a better plan is to replace the daygown by a warm nightgown; and a short time before the doctor is due you must wash the penis and surrounding parts with soap and water. Then apply a compress wrung

out of a weak solution of lysol or other antiseptic, and also a clean napkin.

On the doctor's arrival, your first duty is to supply him with hot water, etc.; and whilst he is "scrubbing up," place your baby on the table, arranging the clothes well out of the way. Now "scrub up" yourself, and remove the napkin and compress; place one sterilized towel under the buttocks, the other round the body of the child, thus tucking its hands and arms out of the way, and making a sterilized area all round the scene of operation.

Take one of your swabs wrung out of lotion and swab the parts just as the doctor is ready to commence.

During the operation, swab the blood away at convenient times, and otherwise follow the instructions of the doctor, who, when the operation is complete, will finish the little toilet and apply the dressing.

As far as the latter is concerned, almost every doctor has a different method, some preferring to keep the wound dry and powdered. A popular dressing is vaseline spread on lint, the lint having a hole in the centre, and being fixed round the penis, with the end just protruding through the hole. I must say that I have always found this method very successful in district work, when you can leave the mother a supply of dressings just ready to apply,

rolled up in a clean towel. The dressing will be changed whenever the napkins are changed, and you must keep a sharp lookout for hæmorrhage.

Your chief duty is to see that everything which comes in contact with the little wound, including your own fingers, is aseptic ; and if stitches have not been inserted, you will push back the prepuce gently each day.

You may possibly find retention of urine as an after-effect, but this is easily overcome by applying a sponge wrung out of hot water over the region of the bladder, or a swab of wool held in the same manner over the end of the penis.

The child should be bathed as usual each day, but great care must be taken that the bath and water are perfectly clean or sepsis may occur. A little boric acid added to the water is an advantage, and the wound must be carefully dried before any dressing is applied.

Stitches are taken out about the fifth or sixth day, when the wound is usually healed.

The chief thing is to keep the part clean and dry, the napkins being changed the moment they are soiled.

Abnormalities acquired

Although a baby may be quite normal, you must always be on the lookout for casualties ;

and these possibilities are numerous, as you will see.

Ophthalmia

This is one of the most serious complications you may have to deal with, and its prevention must begin the moment the head is born; by cleaning the eyes before the child is able to open them. Of course, it is not through any fault of yours that the mother has the discharge which is the primary cause of ophthalmia, but you may be blamed severely if that discharge enters the eyes, and so causes the disease.

Therefore it is your bounden duty to see that the eyes are kept clean; wash them well, and separate the lids, so that you will be able to drop the lotion *inside* the eyes as you have been taught (see p. 70). This precaution must be taken night and morning each day, and the slightest sign of inflammation reported. Do not content yourself by thinking that the child has *only got a cold*. That very cold, as you call it, may quickly develop into this terrible disease.

If you have the misfortune to find the baby's eyes inflamed, your duty is to carry out energetically and conscientiously the doctor's instructions, or you may experience the horror of finding that the child has lost its eyesight in a very short space of time. The discharge is most infectious, so that you must take great care to have everything used for the

baby kept aside, and all towels used must be disinfected. Especially is this so when there are other children in the house. You will take every precaution on your own account as well, I hope.

In ophthalmia the eyes become red and swollen, a little fluid of a yellowish colour oozing from them. This pus collects quickly inside the eyelids ; oozing out, it dries on the eyelashes, glues them together, and, being unable to escape, presses on the eyeballs. There is great danger of loss of sight.

It is your duty to remove the septic pus the moment it is formed, by douching the eyes with whatever lotion the doctor has ordered.

Proceed in this manner : First wash your own hands ; have a piece of mackintosh for your knee, and lay the child sideways. If you have someone to hold your kidney tray in position, so much the better. Clean the outside of the eye with a swab, with a movement from the nose outwards. Now separate the eyelids with the finger and thumb of your left hand, and hold your swab over the eye, allowing a gentle flow of lotion to stream in, and so into the tray.

Repeat this until the pus is washed away ; if but one eye is infected, take every precaution against infecting the sound eye ; if both eyes are affected, turn the child round, with its head on your other knee, whilst you douche the other eye.

Put a little vaseline on the edges of the lids, to prevent their sticking together. Persevere, and you will feel amply repaid when you see the child on the right road to recovery.

The Cord

There may be hæmorrhage from a badly-tied cord, and the child is in danger of losing its life from loss of blood. The cord may become septic through want of cleanliness and antiseptic precautions. The sepsis will bring in its trail erysipelas, arteritis, or blood-poisoning. Therefore you must keep the cord clean and dry, to avoid these complications. The umbilicus may also protrude after the separation of the cord, in which case you will find a good plan to be the application of a piece of cardboard. This should be cut to about the size and shape of a penny, wrapped in clean linen or lint, and *stitched* into the binder. If the protrusion is very persistent, as the child grows older it will require an umbilical belt.

Thrush

This is a growth which may occur in a child's mouth as the result of uncleanness. Dirty nipples, dirty bottles, dirty fingers, and neglect to wash the child's mouth, are the causes. Thrush grows in minute patches, which when washed off

leave a bleeding surface. Practise cleanliness to prevent this; but once the germ is there, it must be attacked with glycerine and borax, the mouth being washed several times a day, using soft pieces of rag curled round the fingers.

If the disease is allowed to go on, the child suffers extremely, the buttocks become sore and raw, and he loses weight. The doctor will tell you how to treat it, so report at the first sign.

Sore Buttocks

These are caused by acid motions, also by inattention to the napkins. The diet must be corrected, and the buttocks bathed with barley-water, until you receive the doctor's instructions.

Swollen Breasts

The tiny breasts may become quite hard and swollen, and old-fashioned people have an idea that there is milk in them which must be expressed by squeezing. This is absolute cruelty to the child, and will result in a most painful abscess. All that is required is a dressing of vaseline spread on lint or clean linen, and pads of wool to keep the breasts warm. The swelling will thus gradually disperse.

Rashes

The rashes most frequently seen are—

Sudamina, caused by blocking of sweat-ducts.

Intertrigo, caused by want of cleanliness.

Gum-rash, caused by too much clothing.

You see for yourself, from the causes, what the preventions and cures will be.

Fits or Convulsions

These may be caused by direct irritation and inflammation of the coverings of the brain. They may be inherited or caused by wrong feeding and rickets. The digestion of a little baby is very easily upset, and this in itself may cause convulsions. They may be slight or severe. In the former he may give a kind of shudder, roll his eyes, and twitch the body slightly. They may be so slight as to leave you wondering whether he did really have a fit at all. On the other hand, he may stiffen, twitch violently, and become very blue and death-like.

If a severe fit occurs, you will at once prepare a hot mustard bath and place the child in it for a few minutes, applying a cold towel to his head at the same time.

If the fits are frequent, following one on the top of another, you will find it more convenient, both

for yourself and the child, to place him in a hot pack instead of the bath. (Of course you will obtain the doctor's approval.)

The preparation for this will be—

Mackintosh and warm blanket for bed.

Small blanket to use for the pack.

Large towel to be used as a wringer.

Hot water.

Large bowl or bath.

Method

Prepare the bed with the mackintosh and blanket, wrapping the child in a warm blanket until you are ready; place the small blanket in the towel after the manner in which you would make a fomentation, pour the hot water over it, and wring it perfectly dry by turning each end of the towel in different directions. You will need a second person to help you with this, to do it satisfactorily.

Now shake out all the steam from the blanket, and wrap it securely round the child; cover him with warm blankets, and apply cold water cloths to the head.

He may remain in the pack for forty minutes; and if it does not need repeating, you can dry him with a warm towel and roll him in a warm blanket.

He should not be nursed; the proper place for

any sick child is his cot, and he will be content to stay there if you do not encourage him to do otherwise.

A very careful watch must be kept over the diet, as, if this be the cause of the fits, they will disappear with proper feeding.

Jaundice, True and False

During the first few days the baby's skin may become yellow in colour, a condition known as "false jaundice." It is due to the increased blood-supply to the skin, and requires no treatment.

True jaundice is a serious complication; the urine is highly coloured and scanty, and the motions are white. It may be caused by infection through the cord.

Colic

In cases of colic the child cries, draws up its legs, and keeps its abdomen very hard. The causes are, undigested milk, wind, constipation, and irregular feeding. The doctor will tell you what to do, but you can do no harm by rubbing the abdomen with warm oil, and giving an injection of warm water and oil, to remove the wind and relieve the bowel. A teaspoonful of dill-water or peppermint-water given in warm water will help to disperse the wind.

Diarrhœa

This occurs very easily in early life, and each year is the cause of a large number of infantile deaths.

The causes are, improper and unsuitable food, irregular feeding, overfeeding, or food contaminated with germs. It may also be caused by a cold or a chill.

The digestive organs are in a state of irritation, there are copious and frequent motions of a watery character, and the child will be collapsed from the drain of fluid. The collapse must be treated by keeping the patient warm with hot-water bottles, and warm clothing will be needed also. A teaspoonful of castor-oil should first be given to clear out the bowel, and all milk diet must cease. Barley-water and albumin-water must take the place of the milk, and, as the child will be thirsty, drinks of cold boiled water should be given to replace the drain of fluid from the body.

Fomentations wrung out of hot water to which a teaspoonful of mustard has been added may be applied to the abdomen, and in all probability small saline injections will be given *per rectum*.

Great care will need to be taken during the recuperating period, as the slightest chill may mean a return of the attack.

Constipation

This is very common even in breast-fed babies and when the mother's bowels are in good order.

The meaning of constipation is that the motions of the child are much drier and harder than they ought to be, and that they are passed less frequently than is natural.

The mother must vary her diet, drink plenty of water, and take salines as medicines occasionally.

The child should be given a teaspoonful of fruit-juice several times a day, the juice of grapes or oranges being most suitable. If aperients are really necessary, you will find fluid magnesia, given two or three times a day in doses of one teaspoonful, may be effectual. Also castor-oil and olive-oil equal parts, or glycerine and olive-oil equal parts, dose one teaspoonful.

A soap suppository may be placed in the bowel, but injections, as a general rule, are to be avoided. They may become a habit, and so discourage the natural functions; besides which, they do not remedy the root of the evil. In bottle-fed babies constipation is a constant source of anxiety almost from the very first.

One cause is insufficient fat in the foods, and cream will be needed as an addition.

Demerara sugar may be used instead of the

sugar of milk, and good results are often found from sweetening the food with treacle *occasionally*.

Manna also may be tried; but if this condition of constipation comes on after the doctor has ceased his visits, it is sufficiently serious to seek his advice.

Syphilis, or Venereal Disease

It is very necessary that you should understand something of this disease, as it is very dangerous and contagious. Let me beg of you, then, if you come in contact with it, to take every antiseptic precaution, especially if you have any cracks or sores on your skin, however slight they may be.

The signs of the disease may be present at the birth, or may develop later. The mother may have gonorrhœa, a condition which causes a yellow discharge, and this may get into the child's eyes during the birth and result in ophthalmia, or the child may even become infected with disease before birth. If either of the parents suffers or has suffered from syphilis, the baby may be born dead or infected, or may for the first month or two appear healthy. These babies usually have a large head and abdomen, and sores about the mouth and anus. They look old and wizened, whilst one of the earliest signs is snuffles. They are apt to become sore, as the skin is dry and parchment-

like. The cord usually has an offensive smell, and, instead of drying, falls off in a wet condition, and may leave the umbilicus discharging for some time afterwards. A syphilitic baby will need very careful attention, and you may be instructed to rub the abdomen daily with mercurial ointment, as mercury is the great remedy for this disease. The baby will require all the air and sunshine you can give it, also your *silent* sympathy in its affliction.

LECTURE III
NURSING IN "THE DISTRICT"

LET me tell you at the outset that this work is full of responsibility and anxiety. In the hospitals, training schools, or well-equipped private house, you have all you require, but in district work you are without many things which seem necessary, you are always in a state of "trying to make things do," and your ingenuity is taxed to the utmost.

Things go wrong very easily, as, in the first place, you only have your patient under observation during two brief visits each day, and the *meantime* could often reveal some alarming stories.

Again, you have all manner of dirt to fight, as ordinary cottage cleanliness is very far removed from surgical cleanliness.

You will see the wife of the artisan, clean in her way, but obliged to have the bed in the kitchen, so that she may watch the elder children and

superintend the daily work. Think, think of the germs in that kitchen!

You will see the dirty, perhaps drunken, wife whose house is a disgrace, and you find yourself watching furtively for very lively microbes, which usually give you their unwelcome attentions.

You will see the meek little body who is poor but scrupulously clean, and you thank your stars that here, at any rate, you have not *dirt* to fight against.

It is often work full of disappointments, for you may do your part well, only to find on your next visit that not one single order has been carried out, and everything is topsy-turvy! No clean clothes, no nourishment, no water, nothing but germs, germs, germs, and plenty of them. But there is another side to the story. Just at first you will find yourself growing quite a fervent party Socialist, expressing in very unmistakable language your views as to the state of the rich and the poor. Presently you find yourself "taken in," and wondering if, after all, most of the misery, dirt, and poverty, is not of their own making. Finally you end up by saying emphatically: Well, if they are poor, they can at least be clean!

You come in touch with many tales of human woe, sin, and ill-spent lives, and I say with all reverence, God help *them* if you become hardened, and God help *you* if you don't!

Your life should become mellowed ; to put it simply, you are content to live for your patients.

During the last few years a new feature of district work has been developed : the people who were content to have a medical man and a handy woman now realize the meaning of good nursing, and engage a visiting maternity nurse.

This portion of district work is more congenial to many nurses, although here, too, are many drawbacks, such as the small bedrooms full of furniture which are used for the confinement, and the bed curtained and draped with hangings. It will take all the tact you possess to remove these "outward signs" of comfort and prosperity.

So, you see, district work is indeed a work of skill, and it is nothing short of a miracle that septic cases do not abound. All honour, then, to the midwives and nurses who are working so conscientiously under such difficult conditions !

It is probable that your prospective patient will call to engage you about the sixth or seventh month of her pregnancy. Remember my advice to you on booking engagements, and send her away with the feeling that you understand your business.

In a pleasant chat will lie the opportunity of inquiring about the room she is going to occupy,

and you will instruct her tactfully as to the hygiene of pregnancy. Especially is this necessary for primipara, for the majority of women are woefully ignorant as regards provision either for themselves or their babies.

So, if you want to save yourself much unnecessary trouble and ruffling of temper, coach her well. Ask her to prepare large pieces of brown paper to protect her bed, and to collect all the old linen and rags she can find; these she is to wash thoroughly, and place in a clean pillow-case until they are required. Old petticoats and shirts are not to be despised; if they are clean, you will find them useful as pads for the bed.

When you receive your call, go at once, and your mode of procedure will be exactly as if you were engaged by a better-class patient as a resident nurse. Make your preparations in the manner you have been taught, and send a written message to the doctor as to how your patient is progressing. If he does not attend in answer to that message, be sure to send a later and urgent message when you think there should be no delay. Do not try to be clever and leave it too late, or you incur the doctor's displeasure, and well you deserve it.

I have heard maternity nurses say how pleased they were to have the case to themselves; but,

this shows a want of knowledge of the danger to the patient. Something abnormal might very easily be present, and even if there is not you are not eligible, as a monthly nurse, to be at the birth alone. So send for your doctor, and incur his displeasure by being too previous rather than too late.

Your duties through the labour are exactly those I have already detailed, the pieces of rag being used in place of the cotton-wool used by wealthier patients.

In this class of patient you will usually find that a handy woman, more or less intelligent, has been engaged to attend to the household affairs, and she is the one on whom you must rely for the well-being of the patient during your absence.

You will probably have to teach her how to make gruel and "change" the baby, and you must give minute instructions each day as regards food, or woe betide!

This class of patient usually recovers without many drawbacks, but if you are a maternity nurse or pupil with a midwife your work is full of anxiety.

To be sure, the midwife is responsible for the patient, but you are responsible for your own work.

Let me illustrate a typical, everyday case :
The night-bell rings ; a gruff voice says :

"No. 10, Green Street. The missus is very bad."

In less time than it takes to tell, two figures—pupil and midwife—are seen hurrying through the dark street to No. 10. The man stands outside, and saunters down the street as they enter the door. In a living-room is the bed, only fairly clean; near it stands the patient, half doubled with pain; a fire just lit, with the kettle on the top of half-smouldering sticks. Another pain, and the midwife sees at a glance the end is near, and asks for the paper and pad for the bed.

All so quietly, yet all so quickly, that in a few moments bed and patient are ready.

The maternity nurse has quietly been doing her share, too, for she has washed out the kitchen bowl (the only one available), washed out the chamber utensil (for swabbing purposes), brightened up the fire, prepared lotions and water, and torn up a few clean rags to a suitable size.

Patient on the bed; a hasty scrub up; baby born before there is time for any examination by the midwife, it is divided, wrapped in a shawl, and informs the street and the father outside of its arrival. The remainder of the labour goes on; the woman is made as comfortable as is possible under the circumstances, and a clean piece of paper, covered with an old but clean shirt, placed

beneath her. After clearing up the débris, we make the poor woman—who has borne so many of her pains alone rather than send for us too soon—a cup of tea, call in the father to admire his baby, and ask him to keep her as quiet as possible.

On your way back to the Home, no doubt you will have visions of antiseptics, bowls galore, absolute necessity of scrubbing up for ten minutes and immersing in lotion for five, and, last but by no means least, visions of those terrible microbes of septicæmia. But this is before you knew the district!

Another case:

“Will you come to Mrs. John? She has had bad pains, but they have gone now and she feels bad.”

You arrive at Mrs. John's house to find three or four women holding forth their views and telling of the bad times *they* had. As this is the little lady's first baby, it is very comforting, to be sure!

No water, no signs of necessaries; a broken-down bedstead and a rickety chair.

A little tact is necessary here, for if you give those women orders to quit, quit they will, but help you they will not.

A better plan is to smile sweetly, and ask who would like to be so kind as to oblige you with

a little water; rather than cause jealousy, perhaps you will ask Mrs. Number Two if she will lend you a bucket for slops; whilst Mrs. Number Three will probably rise to the occasion with a stool which you may sit on whilst you wash the baby.

The stool will come in handy, too, for holding the clean towel from your bag, the ligatures, etc., whilst the washing-up bowl placed on the rickety chair must be used for all purposes. Impress on Mrs. Number One of what help she will be if she keeps you supplied with hot water, and she will help you willingly when she understands she is of some importance. The midwife examines, and whispers, "Forceps required." A form is filled, doctor sent for, the patient delivered, perineum repaired, and everything satisfactory. During this flight of time, the skilled work of doctor and nurses under such disadvantages is not to be recorded; it is unknown, and not understood by the laity, but surely it is recorded in that book of *sometime, somewhere*, of the future!

We leave her—to what? Are we to say to chance?

Night and morning visiting with only meagre working tackle is discouraging enough, but the maternity nurse who is wise has made friends with the woman who boiled the water, so that the room, poor as it is, is kept clean; and what nurse

did in the way of washing a few napkins, tidying the room, and making a little gruel, need not be enlarged upon. Suffice it to say that the patient is up on the tenth day; and on calling again a few days later, we find her busily engaged with her household duties, and tell her she has done well.

If you are wise, you will not forget to call on Mrs. Number One, and thank her very much for all the assistance she has given you. Those words of thanks will bear fruit. Such careful nursing within the last few years, thanks to the Midwives Act, has been a revelation to the poor, for nowadays the poorest woman in the land can have the same skilled attention as the richest—though not the luxuries.

Let me give you another district case:

Mrs. Gee has been in slow labour for two days, and is getting weary. There is nothing wrong really, but the midwife explains to you that it is uterine inertia in all the stages. The little bedroom is clean and tidy, for the poor mother has been busy between her slow pains. We have time to take the necessary precautions here, and remain for a few hours until all is over. She is a patient little body, and the trouble is want of strength, resulting from want of food. For two days all is well, but on the third morning the thermometer

registers 101°. You question her; she complains of nothing, only that she is rather warm and a bit weary. A second visit, four hours later, finds the temperature rising, and she tells you she has had a shiver. The midwife will send for the doctor, who at once proceeds to treat her for sapræmia. Medicine is given, and an intra-uterine douche. In a day or two the anxiety will be over and the danger of septicæmia checked, but you will have learnt the lesson of a lifetime during the two-hourly visits, and perhaps a lonely night vigil when she seemed at the worst. You will not forget the terrible anxiety as to whether the patient's condition would have to be reported, and she herself transferred to the sanatorium, and last, but by no means least, the damaging gossip of idle women who do not understand, and think puerperal septicæmia *always* means neglect.

But thanks to the doctor's efforts, coupled with your own perseverance, she makes a good recovery, and you are initiated into all the mysteries of disinfecting yourself and your bag just as thoroughly as if your patient had been notified. Thus you resume your other cases without the slightest fear of anything going wrong.

There is just one other case I am anxious to describe to you, popularly known as a B.B.A.,

meaning—"born before arrival." This may be the result of a precipitate labour, but more often it happens because the woman has neglected to send for assistance in time. Unfortunately, it is usually with the careless woman that it occurs, and you arrive to find things in a terrible medley. She may be kneeling on the floor, with the baby nowhere to be seen, or she may be lying on an unprotected bed. Turning back the clothes, you find the little man enjoying himself, having a good look round, and filling his eyes with mischief. This is one of the risks of a B.B.A.—*ophthalmia neonatorum*.

The work of getting things in order can be better imagined than described; you can only make the bed as clean as possible, for often enough it is soiled through to the other side of the mattress, and until the day arrives when you are able to turn over the bed you are in a constant state of anxiety. Even then the danger has only been moved to the other side of the bed, instead of being underneath the patient.

Before leaving the house, you will place small pieces of boracic lint in a cup of water covered with a saucer, giving the mother plain instructions as to the cleansing of the baby's eyes, as a certain amount of discharge is bound to have entered into them.

Strange as it may seem, there are seldom any ill-effects after these cases, the mother usually making a good recovery.

You will readily see from these illustrations that there is a very wide difference between residential and district work.

If all goes well, the patient is glad to do her own toilet on the fourth day of the puerperium, and on the sixth or seventh day expects to be allowed out of bed to have her bed made. If you refuse this, you will probably find that a neighbour or her husband has done it in your absence; so you had better give in with a good grace, as you do know every care is taken if you make it yourself.

On the tenth day she will very likely open the door for you herself, and smile when you tell her to be careful. You will learn not to be extravagant with baby clothes, or you may receive a shock when you have to wrap him up in a petticoat or similar garment while his proper clothes are washed.

With the babies you will have endless work; they will be fed at any odd time, and allowed to sleep as long as they will do so. You will find the grandmothers anxious to pinch the nipples of the baby girls to "break the nipple strings," and to give them a taste of butter and sugar to "get the black stuff from their bowels." On your first visit after the

labour, you will find the wee thing already introduced to the "dummy," sucking away for all he is worth.

You will take great pains to teach them the right way, but don't be surprised to hear some ill-advising old lady in the background muttering something about, "It is much you know about children, considering you have none yourself."

It is surprising, too, what curiosity a new-born baby arouses, and how the neighbours will flock in to see it, to compare it with their own, and to compare the times *they* had, and, as likely as not, to compare their nurses, too.

Result : The poor woman, who has gone through quite enough, is tired of hearing their chatter, has a headache, a bad night, and a cross baby, all through visitors who ought not to have been admitted.

Then there are the interfering bodies who set at defiance all the orders you leave, just because *they* never did anything like that in their young days.

These are all small things, apparently, but you will find they can have very serious consequences in your work. A nurse who wishes to be a success in the district must simply lose herself, as it were, in her work. The cheery "Good-morning, mother," the pleasant chat, the homely advice, the interest in the older children, who think you brought the

new baby in your basket, must all be part of your real self.

You will learn their joys and their sorrows, and you will learn, too, to respect their confidence in you. You will become their friend, adviser, nurse, and, in spite of all the menial work you may do for them, you are still to them something higher and better than themselves. You will have many unpleasant and repulsive cases; but however distasteful they may be, you will forget all, when you remember you are helping a fellow-creature in distress; for high or low, rich or poor, clean or dirty, the pains of a woman in labour cry out for the sympathy and help of another.

If you can relieve with skill "the woman labouring with child," pilot her safely back to health and strength, set a wee bairn going in the right way of life, what is that but ample compensation for work done well? The harder the fight, the greater the victory; and I do assure you it is a victory, for in every "district case" there lurks, as a spectre in the background, the possibility of septicæmia during the puerperium.

LECTURE IV

A FEW THINGS YOU ARE EXPECTED TO KNOW

To Make Lime-Water

1 ounce of unslaked lime.
1 quart of boiling water.

METHOD.—Cover the lime with the water, and allow it to stand for twenty-four hours, when it will be ready for use. The clear fluid should be poured off as required.

Glycerine and Borax

Glycerine	...	...	...	1 ounce.
Boracic powder or borax	...	...	...	1 ounce.
Boiling water	...	...	...	10 ounces.

METHOD.—Mix the powder and water until the former has quite dissolved, then add the glycerine and shake well. Always shake before using.

Albumin-Water

The white of a fresh raw egg.
 $\frac{1}{2}$ pint of water.

METHOD.—Beat the two well together with a fork, and strain through muslin before giving to the patient.

Whey

1 pint of milk.
1 teaspoonful of rennet.

METHOD.—Mix the two, let the mixture stand till a curd is formed ; break it up with a fork, and strain the whey (or fluid) from the curd. Bring the fluid rapidly to boiling-point, and cool as quickly as possible.

Barley-Water

1 ounce of Robinson's barley.
1 wineglassful of cold water.
1 quart of boiling water.

METHOD.—Mix the powder with the cold water to a smooth paste, which must be entirely free from lumps. Pour into a pan containing the quart of boiling water, and stir over the fire for five minutes whilst boiling. It may be sweetened or flavoured, as preferred.

Oatmeal Gruel

1 tablespoonful of fine oatmeal.
1 pint of water or milk and water.
Sugar to taste.
Salt.

METHOD.—Mix the oatmeal with a little water to a smooth paste, boil the remainder of the water, pour in the blended oatmeal, and stir until it boils. Simmer gently for half an hour, stirring frequently, strain, add a pinch of salt, and sweeten to taste.

Barley Gruel

1 ounce of pearl barley.
1½ pints of water.
1 tablespoonful of sultanas.
Sugar or salt.

METHOD.—Thoroughly wash the barley; mix all the ingredients together, and bring them quickly to the boil. Simmer gently for about an hour, or until the barley is well cooked; by this time it will have boiled down to 1 pint. Sweeten to taste or add a little nutmeg.

Beef-Tea

1 pound of juicy beef.
1 pint of cold water.

METHOD.—Remove all fat, cut the meat into small pieces, place in a jar covered by the water, and allow it to stand for half an hour. Now

cover the jar closely, place in a saucepan of boiling water, and cook for about two hours. Strain, remove the grease, and serve.

N.B.—Salt should not be added during the making, but only when it is served.

OTHER THINGS YOU ARE EXPECTED TO KNOW

Measures

60 minims	make 1 drachm, or teaspoonful—written	ʒi.
4 drachms	„ ½ ounce	ʒss.
8 „	„ 1 ounce	ʒi.
20 „	„ 1 pint	O.i.

To Test Urine for Albumin

Clean specimen of urine.
 Clean test-tube (obtainable for 1d.).
 Spirit-lamp.
 Acetic acid.

METHOD.—Fill the test-tube nearly half full of urine; add 1 drop of acetic acid. Hold the tube slantwise across the flame so as to boil the upper portion of the urine. If albumin is present it will clot, and look very similar to the boiled white of an egg.

How to Give a Blanket Bath

This is an art which of necessity must be acquired in the work of a nurse, for it is the only

method of keeping the body clean when baths cannot be taken.

An *art*, I say, as many very good nurses cannot perform this in such a manner as to be agreeable to the patient.

Three things are to be remembered :

To have everything ready before you begin.

To be as speedy as possible.

To take every care your patient does not become chilled.

The things required are—

Basin of warm water, soap, etc.

Under-blanket (which must be kept for this purpose only).

Several towels ; change of linen if required.

Towels and linen should all be warmed before using. Now commence by placing the warm blanket beneath the patient, arranging your divided bed also in the manner you have been taught. Have a jug of very hot water within easy reach, so that you may add to your bowl of water as it cools.

Take off the nightgown, etc. ; keep your patient well covered with the blankets, tucking one of the towels round her neck. Commence by washing the face, then each arm separately, then the chest and breasts, still tucking your dry towel wherever you proceed. You will next wash the abdomen from

the division in the blankets, also the upper portion of the thighs. Now turn the patient on her left side, and commence from the top of the blanket with her neck and shoulders, at the blanket division for the lower portion of the back, buttocks, and upper legs. Again turn her on her back, and wash each leg, uncovering them separately. Take care that you dry all the parts well, and take the trouble to find out if she likes a somewhat vigorous rubbing or a gentle drying, as, I can assure you, patients differ greatly in this respect.

Now remove the under-blanket, put on the warm nightgown, arrange the bed, and *give a warm, nourishing drink*. Allow her to rest for a little while before you attempt any hair toilet; and if you have done your work well and quickly—it should not take more than ten minutes—you will find that your patient is considerably refreshed.

Sponging for High Temperature

For this you will proceed exactly in the manner I have described for a blanket bath. It will be a more difficult process, as your patient will probably be helpless and in a state of perspiration.

The water will be tepid instead of hot, with

probably a little vinegar or eau-de-Cologne added to it.

As sponging is given with the direct object of reducing the temperature, this should be noted before you commence, and you must keep a strict watch over the patient for signs of collapse. Remember you are not washing, but sponging, and, although your sponge must be fairly wet, you must be careful not to wet the bed.

If you are wise, you will have someone to give you assistance, and not try to manage single-handed, as, besides the help to yourself, your patient will feel the benefit of some support. When the sponging is finished, give some nourishment and allow her to rest for some minutes. Now take the temperature, chart it, and replace the night-gown.

Symptoms of Poisoning from Perchloride of Mercury

I have already warned you that this antiseptic is a strong poison, and, as you may be called upon to use it frequently, you must understand its danger symptoms. The first to be noticed are that the gums become very tender and sore, the breath becomes offensive, the teeth become loose in the gums, and there is an increase of saliva. Later there will be diarrhœa, sickness, and vomiting, accom-

panied by griping pains. The very first symptoms must be reported to the doctor, as action must be prompt to save the life of the patient.

How to Disinfect Yourself

You have learnt that, on concluding your care of a septic case, you are in duty bound to be disinfected thoroughly. If, therefore, your sanitary inspector does not give you instructions to visit the public disinfecting-station, you must understand how to disinfect yourself.

First, let me tell you, *don't* take leave of your patient and carry the germs home with you. Your first disinfectant bath must take place at your patient's house. As far as your bag is concerned, if you are using the basket variety I recommend, you will enjoy putting it on the fire and cremating the germs. The contents of your bag I recommend you to place in a large bowl of hot water and lysol or other disinfectant, and allow them to soak thoroughly whilst you have your own disinfectant bath.

Arrange that a clean supply of clothes be placed in the bathroom whilst you undress in an adjoining room, asking someone to take away the infected clothes you leave behind, placing them in a strong antiseptic solution. *Instruct her well.* She must boil the clothes in the copper for quite four hours,

some disinfectant soap, such as carbolic or cyllin, being added to the water. When thoroughly washed, they must be dried in the sun and returned to you, when you can overhaul them once more to your satisfaction.

Having had your own bath, wash and dry your bag contents, destroying such trifles as soap and ligatures. Wrap the washed articles in a clean towel and take them home to your fish-kettle sterilizer. Place everything that will boil in the kettle, cover with cold water, and allow to boil for at least half an hour.

During this time you will fix up your new basket (you can always have a duplicate ready in case of emergency), and replace the bottles, etc., already disinfected.

Now pour the water from the sterilizer, and allow the nozzles, etc., to dry in their own heat.

Thus you have a new bag at a trifling cost, and feel pretty sure your enemies are not lurking therein.

For several days you should repeat your disinfectant baths, and spend as much time out of doors as possible. By the way, allow me to remind you that these frequent baths mean frequent hair-washing too. It is exceptional, I know, that you should day after day wash your hair, and it is a great deal of trouble, no doubt; but bear in

mind you are dealing with an exceptional case, and one in which you must be prepared to take exceptional trouble. It will feel "worth while" when you take your next case with fair security of being germ-free.

Vaccination

In your capacity of monthly nurse you will be often asked as to what you think of vaccination, and it is important that you should know something about it.

We are in a progressive age, but sometimes this progression takes a wrong direction, as, for instance, on this subject. There are far too many people who now take advantage of the facilities given to avoid vaccination, and you should have sufficient knowledge of the subject to be able to contradict their views with some degree of warmth.

Vaccination affords immunity against the terrible disease of smallpox. It is the artificial production of a disease known as the cowpox, by inserting some of the matter of the disease under the skin. As far as our own discernment goes, we see that when this disease is prevalent the unvaccinated are the first to fall a prey to the attack; and if it does attack a person who has been successfully vaccinated, then the disease is not so virulent. As far

as statistics go, and the testimony of those who are entrusted with the public health, we have ample proof of its necessity.

The law demands that every child shall be vaccinated within six months of its birth, and in the event of the operation being unsuccessful it must be vaccinated again.

The operation may be performed by a private practitioner or by the public vaccinator. If by the latter, there is no fee attached, and when he has ascertained that the result is successful he will send a certificate to that effect to the vaccination officer of the district. If by the former, of course a fee will be charged, and the doctor is bound to give to the parent a certificate signed by himself that the operation has been successfully performed.

This certificate must be sent to the vaccination officer within seven days after the inspection of the child, and there is a penalty attached to failure in sending it.

The general rule will be relaxed if the doctor is of opinion that the child is not in a fit and proper state to be successfully vaccinated, and will give a certificate to that effect. This certificate only holds good for two months, when it must be renewed.

An exemption certificate should be applied for

within four months, a person making such application being known as a "conscientious objector."

The operation is usually performed by making an oblique puncture through the epidermis, and introducing the virus on the point of a lancet or needle. If it is successful, a small inflamed spot is discernible about the third or fourth day. It increases in size, becomes hard and elevated, and about the sixth day a small quantity of fluid may be distinguished in the centre.

About the eighth day the constitutional effects begin to appear. Baby will be irritable, lose his appetite, appear headachy and shivery; but in a day or two these symptoms gradually subside. The fluid now dries up, and a dark brown scab forms, which remains for about a fortnight, and on disappearing leaves a depression.

Should you prepare for vaccination, you will require the usual necessaries for antiseptics that you have already been taught for other small operations. The child's sleeve should be taken out to avoid any rubbing, and the doctor's own instructions for treatment must be carried out, as doctors differ in their manner of dressing the arm.

Registration of Births and Deaths

The birth of a child must be registered by its father or mother (or, if illegitimate, by the mother) at the office of the registrar of the district. Registration must be carried out within forty-two days of the date of birth, and the penalty for breach of this law is £10. In some localities notification must be made within thirty-six hours to the local authority.

The death of a child must be registered within five days, the persons responsible for registering being the nearest relatives present at the death, in attendance at the last illness, or having knowledge of the death, and living in the same registration district as the deceased.

Stillborn Children

For these the doctor or midwife will give a certificate declaring that the child was not born alive, the same declaration to be given to the undertaker who arranges to dispose of the body by burial. Very poor district patients have often not the slightest knowledge of what to do in such a case, and, as money is often a consideration, you can advise them to use an ordinary box, such as a soap-box, with the lid securely nailed down. They will then take the box and declaration to

the place of burial, where they will only have the expense of the burial fee, which is usually five shillings. Your duty to the dead child is to make it quite clean of discharge by washing it in disinfectant and place it in a napkin, which you will roll round it, including the head or not as you think fit. Then take needle and thread, and stitch the napkin securely.

The Care of Illegitimate Children

Like the artist, you have in your work *lights and shades*, and in the latter you will find the poor little not-wanted babes. Have pity on them; it is their misfortune, not their fault, that they are here in the world at all.

For the mother, blame does not come within your province; your vocation is to sympathize and to help the soul in distress, and by doing so you may unwittingly fill that soul with remorse, and set it on the right way once more. The child you may have to help materially by finding it a suitable home, and in doing this you must understand the law as regards the Children's Act of 1908 for the protection of infant life.

If you obtain a home for the baby other than a public institution, then the person in charge of that baby must within forty-eight hours notify the fact to the Board of Guardians for the district.

The inspector appointed for this particular work will then supply a form of notification to be filled up by the notifier.

This will include the place of birth, sex, date, and also the name of the person from whom the child was received.

The inspector will visit regularly to see that the child is properly housed and well cared for; and if it dies or is transferred, notice must be given within forty-eight hours at the office of the Guardians.

Failure to comply with these regulations renders the person liable to imprisonment for a term of six months or a fine of £25.

LECTURE V

SOME DISEASES OF WOMEN

GYNÆCOLOGICAL nursing is closely connected with obstetrical nursing ; therefore it is desirable that you should understand at least a little of some of the diseases of women.

This is an age of rush and hustle, which many of us know to our cost. Some are suffering through overwork ; some through, let us call it, over-family ; some through anxiety to make ends meet ; and so on.

Rush to make the family a success, rush to make the business a success, rush after pleasure—you must rush, you find ; competition is so keen that you are left behind, a failure, if you take things coolly.

But all this rush is telling its tale on the women of to-day. Dozens of diseases are treated by medical men which were unknown, or at any rate rare, in what are spoken of as the “ good old days.”

We are paying the price of our intellectual advance with our bodily health; but I believe that women could in a great measure check this if they understood more of the construction of the body and its wonderful mechanism.

You, as nurses, have a unique opportunity of conversing with mothers, who either through ignorance or false modesty allow their daughters to grow up through the most critical time of their lives, when they leave childhood behind and become women, in sheer ignorance of what is really happening to them.

As soon as a girl begins with her periods, it is every mother's duty to explain to her the ways of Nature, and to teach her to take the necessary care of her body at these times.

If this portion of a girl's education were not so sadly neglected, we should have fewer ignorant primipara, and fewer women who make such a hopeless muddle of motherhood.

If you cannot teach the mothers, teach the girls. Teach them to respect their bodies, and tell them that the bringing of children into the world is not a funny thing to be laughed at, but a most wonderful arrangement far beyond our understanding.

Great things are done in the scientific world, things which astonish us sometimes; but, in my

opinion, nothing can be compared to the wonderful, mysterious process of the reproduction of our kind.

Ignorance often causes great needless suffering, especially in young girls, who think that their suffering is unavoidable.

Sometimes the opening of the uterus is too small for the discharge to pass, and for this an operation may be necessary. This operation is called "dilating," and is quite simple, although it is surprising how many women suffer pain rather than submit to it.

Dysmenorrhœa, or painful menstruation, may be caused by constipation, painful contractions of the uterus, or general inflammation.

Amenorrhœa means the absence of or not sufficient flow, and in some cases is due to imperfect development of the uterus and ovaries; whilst other causes are general conditions of ill-health, such as anæmia.

Women should be cautioned against the habit of drinking alcohol to relieve the pain, and should be encouraged to attend to the everyday laws of health which Nature demands.

Menorrhagia means excessive flow, and may be due to constitutional causes, such as anæmia; or to fibroid growths. I need scarcely tell you that the condition calls for urgent attention.

Leucorrhœa, or the Whites

This is a symptom of a disease rather than a disease in itself, and brings many discomforts in its train.

The discharge may at first be thin and white, becoming later thick and yellow; as it grows more profuse it causes great irritation and chafing, which amount at times to little less than agony.

Local applications, often of a greasy nature, are tried, and only serve to aggravate the condition.

The causes are sometimes obscure, especially in young people; for although the mucous membrane lining the passages is normally moist, there should be no appreciative discharge. You can well understand that this requires treatment for the cause, and not for the symptom.

All the douches and applications used, as a rule, only relieve locally, therefore you should encourage sufferers from this disease to obtain good advice.

Tonics, rest, douches (as prescribed by the doctor), are called for, and his orders should be conscientiously followed.

There is just one other complication I wish to bring to your notice, and this is—

Prolapse and Displacement of the Uterus

This organ may fall forward (anteverted), backward (retroverted), or downward, which is known as "prolapse," or falling down of the womb.

In this latter condition you will hear many women say they have a "bearing down."

Very often it is the result of an accident, but more often the result of having too many children or miscarriages.

If the uterus falls forward, it will press on the bladder, causing frequent passing of urine; if backward, it will press on to the rectum, causing constipation; if downward, then you have both these complications, and soon a distressing discharge.

This condition requires a ring or pessary to keep the organ in place, these instruments being made of india-rubber, vulcanite, or other similar material.

You will in the course of your work probably be called upon to prepare a patient for examination for some of these diseases, and it is very necessary that you should understand your duties.

It is usual to examine a woman either on the left side (left lateral) or on the back (dorsal). In either case do not forget to arrange a divided bed, so as not to expose her unduly. You are expected to see that the bowels and bladder are

empty, and to cleanse the vulva and surrounding parts.

You must make the usual preparations for a doctor's visit, such as hot water, disinfectant, vaseline, etc., and you may have a few instruments to boil.

If the doctor wishes to view the parts, he will use a speculum, and may probably use also the curette, dilators, probe, and volsellum.

If such an examination is anticipated, it is your duty to inquire if a vaginal douche is to be given previously. A very common question is, Should the nurse always stay in the room when a doctor pays his visit? My answer to that is, *During an examination, always.* After that is completed, she can find some ready excuse for leaving the room for a few minutes to give an opportunity for private conversation.

A nurse with tact and intelligence does not need teaching in this respect; her own intuition will prompt her what to do and what not to do.

LECTURE VI

SELF-ABORTION—THE PHYSICALLY UNFIT—CANCER

IN my final lecture I wish to bring before you some items which will crop up in your daily life.

It is not my intention by any means to make you feel that you are qualified to give all kinds of advice, but I *do* intend that you shall go out to your work ready to show your fellow-women the right path to take in the maze of life known as "women's diseases."

The stand you take is peculiarly your own, and it is very just and right that you should understand to some extent some of the things you will be asked about. For it is the very nature of your work which will invite the confidence of your patients to such an extent that they, in the hope of enlightenment, ask advice on certain matters that they would not mention to others.

So, before I bring my lectures to a close, we will touch lightly on three points.

First of all let me tell you that by the laity you are supposed to know everything in connection with the mystery of child-making and child-bearing, and there are many women who will try to test your knowledge, also, as to child-preventing. You may not understand anything about this yourself, but you are bound in your daily work to hear of many things which you know are wrong. This is an age of prevention in all classes of life, and it lies in your power to teach young mothers the great difference between refraining from having children and prevention.

You will hear ghastly stories of abortions and miscarriages brought on by drugs and foul means, which you are expected to appreciate as being clever and a good joke; but let me implore you to have the courage of your convictions, and to condemn strongly all these things you hear.

They are no joke, I assure you, but horrible contrivances which destroy the health and life of many a woman of to-day.

Some women seem to be fortunate enough, if you may use the word, to bring about repeated abortions and miscarriages without apparent injury to themselves; but let me tell you this: that Nature has her own way of paying back when she is abused,

and if, after several successful attempts, the mother at last finds that she cannot prevent the birth, in the majority of cases the child will suffer; and the woman never for one moment thinks that she herself has helped to sow the seeds of disease in the innocent child by having tried to destroy it before birth. So, you see, you have it in your power to be missionaries of health in more ways than one, and I beg of you to teach your fellow-creatures, where opportunity occurs, the terrible wrong and the great danger of self-abuse and self-abortion.

Secondly, you have also very many opportunities of showing your views on the marriage of the unfit, and of giving tactful advice to parents who, saturated with disease, bring miserable little mites into the world, full of disease like themselves.

There is no law to prevent unhealthy persons marrying, and it is very questionable whether one person has a right to prevent the marriage of another, but everyone can learn self-control.

The mind must be educated to have a stronger will than the body, to subdue the passions of the body, to be, in fact, *master of the body*.

I intend to speak very plainly to you, as I believe there is nothing that one woman need hide from another. We are all fashioned in the same way, and the same things happen to each one of us. There is no getting beyond that.

We have all a certain number of passions, and we all know best how many we have to control; but I do believe that if we can control one we can control another.

A good many women need to learn how to exercise that control, and a good many men too.

But, speaking from a woman's point of view, we know very well that a good deal of either right or wrong is done by suggestion, don't we? It is one of woman's peculiar weapons, and if she cares to use it she has a tremendous power over man for good. So the one with the stronger will should try to influence the weaker will, and I appeal to all women, who know in their hearts they cannot produce healthy children, to do all in their power to control themselves and their husbands, and to learn consistency in this department of domestic life. They will no doubt be making a sacrifice, but they will also be playing a noble part in the game of life by helping to reduce the degeneration of the nation.

You, my pupils, I am hoping will do all in your power to preach this doctrine in the cause of what we may truly call "the slaughter of the innocents."

Thirdly, you will find that the majority of middle-aged women that you meet are keenly interested in

what is termed "the change of life." You will be the recipient of many confidences in this respect, and you can only do your best, and trust that your advice will sometimes, like the seeds, fall on good ground.

There can be no doubt that it is at the "change of life" that cancer of the womb develops in many women.

Cancer is so much on the increase that it is the duty of every nurse to understand something about it, and to be able to use her powers of persuasion on her patient's behalf when opportunity presents itself.

It is reported that 4,000 women die every year in England and Wales of cancer of the uterus. Surely this in itself is sufficient to make every nurse, worthy of the name, to be always on the lookout for its symptoms.

You do not want to think, or to make every woman think, she has a cancer, but you do want to teach women the danger of it. The time is not yet ripe to announce any certain cure for it, but there is no doubt that an early operation will considerably prolong life.

The symptoms of uterine cancer are hæmorrhage, pain, bad-smelling discharge, and later a yellow, earthy appearance of the skin. The first symptom is usually hæmorrhage, perhaps a sudden flow of

blood after lifting a heavy weight, or a flow from the bowels.

It may be that, after the periods have ceased for some months, there is an appearance of blood and a bad-smelling discharge.

There is a very popular idea that the change of life is signified by profuse and irregular bleeding, but this is a mistake, and a very mischievous one.

Bleeding a long time after the periods have ceased, and especially if accompanied by a bad-smelling discharge, is always a sign that something is wrong, and advice should be sought without delay. If women would be examined when they discover these symptoms, many valuable lives and a great deal of suffering might be saved.

It is a pity that false modesty on any woman's part should lead to delay in consulting a doctor; one would think anxiety would put such a thought in the background.

Too often the bleeding is neglected until the appearance of the foul discharge which is caused by the ulceration of the growth.

Too often, alas! the pain—at any rate, acute pain—is delayed as well, and the disease gets a fair hold, spreading in many directions before suspicion is aroused.

So let me repeat that it is your bounden duty to encourage any woman to be thoroughly examined

who tells you she has pain, discharge, and hæmorrhage, after the periods have ceased.

What a great vocation awaits you, if, in every sense, you try to fulfil the words so applicable to nurses—your duty!

You are *out* to fight cancer.

You are *out* for the cause of the great unborn.

You are *out* for the cause of the women who go through "the valley of the shadow."

You are *out* for the children who are to be the future citizens of our Empire.

A worthy cause. Let me trust that you prove worthy of your hire.

OBSTETRIC TABLE

Jan.	280	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Nov.
Feb.	280	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Dec.
Mar.	280	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Jan.
Apr.	280	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	—	Feb.
May	280	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mar.
June	280	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	—	April
July	280	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	May
Aug.	280	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	June
Sep.	280	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	—	July
Oct.	280	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Aug.
Nov.	280	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	—	Sep.
Dec.	280	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Oct.
Jan.	280	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Nov.

RECKONING 280 DAYS FROM THE FIRST DAY OF THE LAST MENSTRUATION

QUESTIONS

1. How would you describe the pelvis?
2. Name the joints of the pelvis.
3. How do they change during pregnancy and labour?
4. What are the organs of generation?
5. Give a full description of the uterus.
6. Which is the "dangerous portion," and why?
7. What is the name of the opening of the uterus?
8. What is the function of the ovaries?
9. What is the perineum?
10. Describe the relation of the bladder and rectum to the uterus.
11. What are the effects of a full bladder and rectum during labour?
12. What is fertilization?
13. How does fertilization occur?
14. Of what is the placenta composed?
15. What are its uses?
16. What abnormalities may occur in the placenta?

17. Why is the head and upper part of the body more developed in early foetal life ?
18. What happens when the child is born ?
19. What do you consider to be the normal period of pregnancy, and how would you calculate for your patient ?
20. What are the signs and symptoms of pregnancy ?
21. What changes take place in the body generally during pregnancy ?
22. What do you understand by "labour" ?
23. Describe the stages.
24. On what does a normal labour depend ?
25. What do you understand by the "hygiene of pregnancy" ?
26. What do you understand about the temperature and pulse ?
27. Describe how you would *take* them.
28. Give a full account of the antiseptics you know, their uses and strengths.
29. What do you mean by "sanitation" ?
30. What is ventilation, and how would you practise it ?
31. How would you give an enema, and why ?
32. How would you give a douche, and when is it likely to be ordered ?
33. What are the dangers of a douche ?
34. What is an intra-uterine douche ?

35. Why is it given, and what preparations would you make ?
36. How would you make a divided bed ? What are its advantages ?
37. What are the dangers of an intra-uterine douche ?
38. Describe in detail your duties during the labour.
39. Describe in detail your duties in preparation for the labour.
40. At what time would you send for the doctor ?
41. What stimulants may be given during labour ?
42. What is your duty to the child the moment it is born ?
43. Describe how you would treat the cord until it drops off.
44. Describe in detail how you would swab the vulva.
45. How would you proceed to wash a baby ?
46. What must be the contents of your bag ?
47. What do you mean by "sterilizing" ?
48. What is meant by "septic" ?
49. What are the rules for keeping your bag in order ?
50. How would you proceed on booking an engagement ?

51. What advice would you give a patient about baby clothes ?
52. What advice would you give about preparations for the labour ?
53. What would you do if you had no help at the birth of the child ?
54. What do you understand by "eclampsia" ?
55. What would you suspect if your patient fainted during labour ?
56. What preparations would you make if instruments were required ?
57. What are your duties to the mother during the first twelve hours after labour ?
58. What would you do if you found post-partum hæmorrhage ?
59. If the abdomen was swollen a few hours after labour, what would you suspect ?
60. What will be the doctor's questions on his first visit after labour ?
61. Describe in detail your care of the mother during the puerperium.
62. What preparations would you make for the passing of the catheter ?
63. What preparations would you make for the opening of a breast abscess ?
64. What preparations would you make for a circumcision ?
65. What is there important about the care of the perineum ?

66. What do you learn from the examination of the lochial pad ?

67. What is the lochia ?

68. How would you give a blanket bath ?

69. What abnormalities may take place during the puerperium ?

70. How is puerperal fever caused ?

71. What would you do on leaving a case of puerperal fever ?

72. What do you mean by "abortion" and "miscarriage" ?

73. How would you proceed if you were present at either ?

74. What is your treatment of an artificially-fed baby ?

75. How would you know it was thriving ?

76. Describe the normal child. How would it be fed ?

77. How would you treat a premature baby ?

78. Give a list of abnormalities which may be found at birth.

79. Give a list of abnormalities which may be acquired after birth.

80. What methods of modifying milk do you know ?

81. What is rickets ?

82. What is the normal weekly gain in weight of an infant ?

83. What is asphyxia ?
84. How would you treat a constipated baby ?
85. In what way does district work differ from residential ?
86. What essentials are necessary to make a good district nurse ?
87. What is the action of ergot ? Why is it used ?
88. What would you do in the case of a still-born baby ?
89. How would you test urine for albumin, and when is it desirable to test it ?
90. How would you sponge a patient ?
91. What are the symptoms of mercurial poisoning ?
92. What do you know about cancer ?
93. Why is it necessary to enter your engagements in an engagement-book ?

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