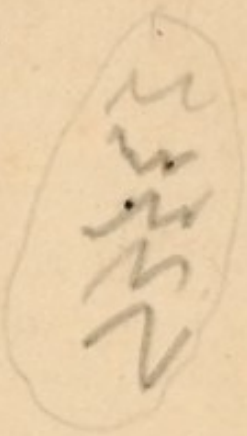
Advice to a mother on the management of her children, and on the treatment of their most common illnesses & accidents / by Pye Henry Chavasse .



ADVICE TO A MOTHER

ADVICE TO A MOTHER

ON THE MANAGEMENT OF HER CHILDREN, AND ON THE TREATMENT OF THEIR MOST COMMON ILLNESSES & ACCIDENTS

BY

PYE HENRY CHAVASSE, F.R.C.S.

TENTH EDITION

REVISED BY

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PREFACE

THE advance of knowledge and, in recent years, the closer study that has been made of the mind of the child have made it necessary to revise, add to, and in many sections rewrite this ever-popular work of my ancestor, Pye Henry Chavasse. The revision has, however, been kept in the same form of question and answer, and it is hoped that this new edition will be found useful by mothers in all circumstances of life, by those in the Dominions and Colonies, and those who live in foreign lands.

As a matter of historical interest, I am able, through the courtesy of the Editor of the *British Medical Journal*, to append the following particulars of the life of the original Author. Pye Henry Chavasse was born at Cirencester in the year 1810, and at an early age became apprenticed to his cousin, Mr. Thomas Chavasse, who carried on an extensive surgical practice from the Old Square, Birmingham, and who was very much of a personality. Having completed his pupilage, Pye Henry Chavasse proceeded to University College, London, as a student. He was admitted a Member of the College of Surgeons and a Licentiate of the Apothecaries' Hall in 1833. He shortly afterwards commenced to practise in Birmingham, directing his attention more particularly

to the diseases of women and children, and here he continued in practice till 1874, when he retired into private life owing to failing health. He was elected a Fellow of the Royal College of Surgeons in 1852.

He is principally remembered as the author of this book and "Advice to a Wife." Such books were a great innovation in those days; in fact he was a pioneer in the writing of simple advice on medical matters to lay men and women, and at the time he incurred some unpopularity and criticism for it. The need for such work was eventually recognized, however, and his books were translated not only into nearly every European language but into several Eastern tongues as well.

He is described as a man of "frank and congenial disposition, was always a firm friend to his professional brethren, and those who were his patients held him in the highest esteem." He died, September, 1879, at Hagley Mount, Edgbaston, Birmingham.

With the same "ideals and aims" as inspired him this book has been brought up to date. I wish to acknowledge the kindness shown to me, and interest shown in the rewriting, by members of the medical profession and many lay friends, and I wish to thank especially Dr. C. K. J. Hamilton, of Charing Cross Hospital, for reading and criticizing these pages, and Dr. Wilfrid Sheldon, of Great Ormond Street Hospital for Sick Children, for his advice on the treatment of children which I have received while working in his Out-Patients' Department. I am also beholden to many authors, especially Drs. Donald Paterson and A. Forest Smith, joint authors of "Modern Methods of Feeding in Infancy and Childhood."

This book is written, not to replace the doctor, but to assist the parent in co-operating with the doctor by observing every detail of the illness, and to assist the parent also in the nursing and treatment and in carrying out the doctor's advice.

CHARLES C. H. CHAVASSE

London.

PREFACE TO FIRST EDITION

It has fallen to my lot to witness the prejudices and mistakes and consequent dangers which Mothers, especially young ones, fall into from the want of some little work to guide them in the management of their offspring.

When it is considered that the first years, nay months, of an infant's life frequently determine whether he shall live or (if he live) whether he shall be healthy or otherwise, it would appear that too much attention cannot be paid to the subject.

Several works have been written on the management of children, but none, I conceive, have been sufficiently explicit or have entered enough into minutiæ, or have dwelt on that which is of as much or more importance than the cure of the disease, namely, the prevention. As none other competent person has filled up (what appears to me) this vacuum, I have ventured to send forth the following few hints.

I have not broached any new doctrines nor made any new discoveries. All that I have attempted is to have written useful advice in a clear style, stripped of all technicalities, which mothers of every station may understand.

It may be said that I have described too much into particulars and that I have dilated upon subjects not strictly coming under the province of a medical man, but, with due deference, I reply that nothing is too

trivial that will tend to preserve health; that a medical man should not only be acquainted with all things that may conduce to it, but at the same time communicate that knowledge to others; that he should not only be able to cure disease, but as far as in him lies, prevent it. The remarks I have made have all, I trust, conspired to this end.

I have adopted a conversational form as being more familiar and an easier method of making myself understood.

An impartial public will determine how far I have performed my task satisfactorily.

PYE H. CHAVASSE

Birmingham. 12 *The Square.*

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PART I

INFANCY

"A rose with all its sweetest leaves yet folded."—BYRON.

ADVICE TO A MOTHER

Bathing

1. Is a new-born infant to be bathed from birth? What should be the temperature of the water and what kind of bath should I use?

Yes, from birth. Do not be afraid of water and that in plenty, as it is one of the best strengtheners of a child's constitution. Many infants suffer from sore skin for want of water.

In very delicate or premature infants, cold water may be most dangerous, and the shock may cause death. But we must not run to an opposite extreme, as very hot water would weaken and enervate the babe, and thus predispose him to disease and cause him to lose appetite. Warm water should be used, and water as soft as is obtainable; rain-water, providing it is clean, is better than well- or cistern-water. The *temperature* of an infant's bath should be ascertained by means of a bath thermometer, which is an essential item in furnishing the nursery. It should be 90°–98° F. (32°–36° C.), or a little cooler in hot weather. A useful ready method of testing the heat is to put your elbow into the water; if it feels pleasantly warm, the temperature is about right.

The *bath* should be a basin or papier-mâché bowl, and it should stand on a wooden frame or large stool, so that it is at a convenient height for the nurse as

she sits on a chair. There is also a hammock bath, suitable for travelling or small quarters, which is suspended on a folding wooden frame, holds six or eight quarts of water, and is sufficiently large to take the child's whole body. There are other kinds of baths, but the simpler the one chosen the better.

Soap: it will be necessary to use soap, but one that is free from soda must be chosen—for example, Castile, or a special baby soap manufactured by a reputable firm. The soap must not get into the baby's eyes, as it may cause smarting or inflammation. The hair should be soaped only once a week, and care must be taken that it is all washed off before the scalp is dried.

In the case of the *premature baby*, who is very sensitive to changes of temperature, cleaning with olive oil is all that is needed for the first few days. One part should be cleansed at a time, so that no heat is lost, and the child is wrapped in cotton-wool until it has caught up to the normal weight and development of a mature baby.

If the skin is delicate or if there is any excoriation or "breaking out" upon it, then all soap must be avoided temporarily, and warm water or olive oil alone must be used; drying should be done by means of gentle dabbing with a soft diaper or towel. A pure cream should be applied and spread gently, and then a very little baby-powder may be dusted on. If the powder cakes or is too thick it will do more harm than good; powder, anyway, is not essential. In all cases of severe or persistent excoriation the doctor's advice should be sought.

Should the hair become *scurfy* or smell, soap has been either used to the head too often or not been

rinsed off properly. The application of the yolk of an egg or white vaseline for two or three mornings, after cleansing with water, will cause the condition to clear up. A subsequent washing should be done with an olive oil and soft soap shampoo.

2. Which is preferable, a flannel or a sponge, for the washing of a child?

A piece of flannel is very useful for the first part of the washing; that is to say, for using with the soap, and to loosen the dirt and the perspiration; but for the finishing-up process have a sponge. It is important that washing materials should be kept scrupulously clean, and they should be boiled for 20 minutes once a week to sterilize them. Each child must have its own sponge.

3. Ought that tenacious paste-like substance adhering to the skin of a new-born babe to be washed off at the first dressing? How should the eyes be treated after birth, and the hair?

Yes, it should be done by the nurse very carefully with a soft sponge. If there is any difficulty in removing the substance, the correct procedure is as follows: Gently rub the skin with a flannel smeared with sweet or olive oil. This flannel, unless thoroughly washed and boiled afterwards, had better be burned. The sponge should only be used to complete the process and to clear off what the flannel has already loosened. After the body has been well but gently rubbed with the oil, let all be thoroughly cleansed away by means of a sponge and soap and warm water. Then gently put the child for a minute or two in his tub. If this paste-like substance is allowed to remain on the skin

it becomes dry and cakes, and is likely to produce an excoriation or chafing; also it interferes with the skin's normal functions.

Before washing the baby, and as soon as possible after birth, *the eyes* should be wiped with sterile cotton-wool and water that has been boiled for five minutes and allowed to cool, the eyes being wiped from the corner nearest the nose outwards. If the paste-like substance has got on the lids, the same piece of wool should not be used for both eyes. After washing them the nurse or doctor should put some drops in the eyes.

As regards *the hair*, nothing further need be done to it than washing with the rest of the body: there is no need for brandy, an old custom; it is mere waste.

4. Have you any general observations to make on the washing of a small infant?

To begin with, here is a list of the commodities you will require:

A large sponge
A flannel
A cake of baby soap and soap-dish
A tin of baby powder
A tin of white vaseline
A roll of cotton-wool
A tooth brush

A babe should be washed every morning from head to foot, and partially washed every evening. It stands to reason that the babe, when he has been lying all night under the blankets, possibly in soiled napkins, with perspiration gathering in the night-clothes, needs more thorough washing than he does in the daytime when he is frequently changed and gets more air to his body. Of course this does not apply to a child when he begins to crawl.

The ablution should be thorough, and can only be properly done by putting him bodily into a bath half filled with water. Before doing so, however, attend to *the eyes*, wiping them with pieces of cotton-wool, a separate piece for each eye. Wet and then dry *the nose*, and with little twists of wool clear away all the mucus; in the same manner use twisted pieces of wool to clean *the ears*, putting aside each piece of wool after using it, never using the same piece twice, and never using anything firmer than wool. Then proceed to *the washing*.

The head should first be wetted, but not dried. Then immediately put the child into the water and with a piece of well-soaped flannel cleanse his whole body, the baby being held in the bath by the left arm, which, passed under his shoulders, supports his neck and head, the hand holding the buttocks. With the soaped flannel now wash the body, paying particular attention to the armpits, between the thighs, the groins and the hams.

Then take a large sponge and allow the water from it to stream over his body, particularly over back and loins. Some mothers prefer to soap the baby on their lap before plunging him into the bath; whichever way the mother finds most convenient, that way is the best.

The *cleansing of the navel* or umbilicus is sometimes a trouble, especially if the depression is deep. Make a small wisp of cotton-wool and with it wipe the navel round gently with a little surgical spirit; then with similar wisps, but dry, remove any excess; if the spirit is ineffective, use olive oil. Do not allow powder to collect in the navel.

After the bath, the skin must be thoroughly but quickly *dried* with warm, dry, soft towels. First envelop the child in one, thus gently absorbing the moisture with the towel; do not roughly rub and scrub his tender skin as though he were a horse being rubbed down. The ears must be carefully dried with twists of cotton-wool and a soft dry napkin; if water is left in the ear the skin may become sodden, and wax and possibly even inflammation in the inner ear may result. Do not, however, go to the opposite extreme. Cleaning the ears with matches, or hard ends of towels should never be done as it may cause a ruptured drum.

Directly after the infant is dried, all the parts that may possibly be chafed ought to be *lightly powdered*, but be sure that no collections of powder are left in the creases. The chest, back, stomach and limbs should be gently rubbed, care being taken that the baby is not unnecessarily exposed in the process.

He should be partially washed and powdered every evening; and it is necessary also to use a sponge and a little warm water frequently during the day, each time the bowels have been moved. After the parts are well dried, a little baby-cream applied to each ham and in between them, will help to keep the skin from becoming red and sore. *Cleanliness is conducive to health* and therefore cannot be too strongly insisted upon. If more attention were paid to this subject, and babies were not left lying in wet napkins, children would be more exempt than they are at present from chafings, "breakings out," and consequent suffering.

Measures for the prevention of chafing in infants with very delicate skins, other than the precautions

already given, consist in the use of a little pure white vaseline, or boracic and zinc ointment, or cod-liver oil, applying it in all the folds liable to be wetted or soiled. Only just enough should be used to make a thin film over the skin, and it must be cleansed away every morning in the bath when soap is used.

Other points to be remembered about bathing an infant are:

(*a*) Do not feed him before the bath.

(*b*) Do not frighten him by dumping him into the bath too quickly.

(*c*) Support the head and spine throughout the bath.

(*d*) Keep the head well out of the water.

The best *powder* to use is one consisting of talc and zinc, of boracic powder, or of zinc and starch; or there are proprietary powders made by reliable firms.

The nails from time to time will need attention; keep them short so that the child does not scratch himself. Cutting the nails should be done with sharp, blunt-ended scissors; and they should be straight, leaving no loose bits of skin or nail that are likely to tear and cause soreness.

5. If the parts about the groin and buttocks are excoriated, what is the best application?

The use of soap is to be avoided. After sponging with tepid water, hold the child over his tub and allow the water from a well-filled sponge to stream over the parts; then dry them by gently dabbing with a soft napkin, and apply, night and morning, a thin layer of baby-cream before powdering. Alternatives to the baby-cream are zinc ointment and castor oil.

The best way of applying powder is by means of

the sprinkler which is supplied with most proprietary brands, or on a puff, or by tying up a little of the powder in a piece of muslin and then gently dabbing the parts with it. A useful powder is zinc oxide one part and starch two parts, very finely powdered. *Napkins should be washed* in water to which a little boracic powder has been added.

An infant who every morning is well washed with water, who is never allowed to lie in soiled napkins, whose buttocks are properly cleansed and anointed after each fouling, whose napkins are properly washed and *never used twice without washing*, and whose motions or stools are healthy, seldom suffers either from excoriations or from any other of the numerous skin diseases. Cleanliness, then, is the great preventative of and the best remedy for excoriations.

6. Is it necessary for a mother or nurse to wear an apron while washing and changing the napkins of the infant? If it is, what material do you advise?

Certainly; a good, thick, soft flannel or towelling apron, made long and full. Of course it ought to be well dried before it is used, and it should be thoroughly washed at least once a week. It will add to the comfort of the mother or nurse if she wears a mackintosh apron under it during the bathing operations.

Napkins

7. What advice have you to offer on the choice of napkins and the washing of them?

The best material is soft butter-muslin. Cut this into large squares (26 inches) and use double thickness. Be sure to boil new napkins before use. There are other materials, such as Turkish towelling and

gamgee tissue, but these are less satisfactory, being harder to wash and taking longer to dry. You will want about three dozen napkins. Turkish towels will be needed for the babe to wear, secured with a large safety-pin, over the napkins.

To wash the napkins, soak them all night in cold water, then wash them in warm water with Castile soap, without soda; a little boracic powder should be added to the water. Boil them after washing and rinse them in cold water with a little Reckitt's blue. Dry them in the open air and sunshine if possible, and air them well in a hot cupboard or in front of the fire before using.

It is far better to wash your own napkins, so that you can be sure no soda has been used, than to risk sending them to a washerwoman or the laundry. If you have to have them washed out of the house you can always *test whether soda has been used* by soaking one napkin in fresh water and then tasting the water; it will be brackish and salty if soda has been employed.

Remember then, the washing of napkins is a most important duty and is best done by yourself. There should be a plentiful supply in the nursery. *No napkin should ever be used a second time until it has been washed and aired*, however little it has been soiled or however well it has been dried.

Management of the Navel and String

8. How should the navel string be treated?

The cord must not be allowed to become wet and sodden. After the baby has been washed it should be well dried with a soft towel and then powdered

with an antiseptic powder such as boracic powder. It is then wrapped in sterile lint if this is obtainable (some clean soft linen that has been washed and kept in a clean place will do), placed on the belly of the child, the loose end upwards, and secured in place by a flannel binder which is put round the body with the ends overlapping, the loose end being then tacked down. Do not use singed rags, as they are hard and liable to cause soreness.

9. If, after the navel string has been secured, bleeding should occur, how (in the absence of the medical man) must it be restrained?

Immediately take off the rag and tightly retie the navel string with thread, preferably one with four or five whity-brown plies. To make assurance doubly sure, after once tying it pass the threads a second time around the navel string and tie it again. Then, after carefully ascertaining that it no longer bleeds, fasten it up in the rag as before. Bleeding from the navel string rarely occurs, yet if it should do so when the doctor is not at hand, the child's health or even his life may be endangered if the above directions are not adopted. You should always inform your doctor.

Should the bleeding occur after the separation of the navel string—a rare occurrence—apply firm pressure to the stump and send an urgent message for the doctor, as this is a serious condition.

10. When does the navel string separate from the child? And if it does not come away when it should, ought any means to be used to cause the separation?

The navel string should separate from five days to a week after birth; in some cases it does not come

away until ten days or a fortnight have passed, or even, in rare cases, not for three weeks.

It ought *always* to be allowed to drop off. Meddling with the navel string has frequently cost the child a great deal of suffering, *e.g.* from rupture, and in some cases has even cost him his life.

11. The navel is sometimes a little sore after the navel string comes away, and is red and inflamed, and there may be a discharge. What should be done?

If the navel is only sore a little boracic ointment should be spread on lint and be applied every morning. If it is inflamed and there is a watery or yellow discharge, your medical man must at once be informed, as this may lead to serious consequences if it is not treated. A hot fomentation should be applied, as described in Section 169, after vaselining the part. This may be repeated every four hours until the doctor arrives.

12. What kind of binder do you recommend and when should it be discontinued?

I prefer flannel for two reasons: first, because it keeps the child's bowels comfortably warm and, secondly, because it is not chilling for him when he wets himself. The binder ought to be firmly applied, but if fastened too tightly it weakens the muscles of the abdomen.

The binder should be discarded as soon as the cord has come off. It might be retained, however, if the baby has a chronic cough or catarrh or has had the misfortune to contract whooping-cough. Great care is then needed in leaving off the binder, and the best method is to reduce it by strips.

13. What are the causes of a rupture at the navel? What ought to be done? Can the condition be cured?

A rupture at the navel is sometimes caused by a meddlesome nurse. She is anxious that the navel string should separate from the infant's body, more especially when it is longer coming away than usual, and before it is in a fit state to drop off she forces it away.

The rupture appears within the first few months of life, the bowel usually protruding just above the scar of the navel. A child who is constantly crying, without any assignable cause, should have his navel carefully examined.

Such a rupture should always be treated early, the earlier the better. It can readily be cured in infancy, but if it is left untreated or if it resists treatment, a cure is only possible by surgical operation.

The best plan is to inform your doctor. A very simple *method of treatment* is to take some adhesive plaster, 1½ inches wide and 6 inches long; place a penny in the centre and cover this with a 2-inch length of the plaster, adhesive side towards the penny. Now apply the band with the penny immediately over the navel; apply it firmly but not so as to stretch or pucker up the skin; this supplies gentle resistance to the bowel and ultimately the hole will close.

14. What can you tell me about groin rupture?

Groin rupture, or inguinal hernia, may develop at any age and may occur on one or both sides. It may be noticed soon after birth, but may not occur for some months or even years later. It is seldom seen in girls. *Should it become painful or unreducible*

your doctor should be informed immediately and no attempt should be made to press or reduce it.

15. If an infant has a groin rupture, can that also be cured?

Certainly; a perfect cure may take place in time. Consult your medical man; he will see that a well-fitting *truss* is provided, and this will usually effect a cure. It should be made under the direction of an experienced surgeon by a skilful surgical-instrument maker, and two trusses should be made for the child at the same time.

Treatment of groin rupture by means of a truss requires close attention and supervision. Before putting on the truss, the rupture (the bowel) must be completely returned into the belly, an event which is always accompanied by a gurgle. Never put a truss on unless you are quite sure the rupture has been returned. Every care should be used *to prevent chafing and galling of the skin* from an ill-fitting or neglected truss. The skin underneath must be kept in a healthy state by carefully and thoroughly drying it after the bath or when it has been fouled at stool, by swabbing it with a little surgical spirit to harden it, and then dusting a fine powder—boracic, zinc and starch—under the instrument. Should any signs of trouble from pressure ensue, apply an ointment of boracic or zinc and castor oil, and then place a thin layer of absorbent wool between the truss and the skin. Should the trouble not clear up in a few days your doctor should be consulted.

The truss should be made entirely of rubber and, when once adjusted, it must not be removed, but

must be worn night and day. The infant can have his bath in the usual way with the truss on. When it is necessary *to change the truss*, this must be done with the greatest care and precaution. The child must be placed on his back and soothed in every way. The finger should be placed underneath the old truss, on the canal in the groin along which the rupture descends, and then the truss should be removed and the fresh one applied immediately. *Should the rupture be allowed to come down, all the previous progress towards a cure will have been lost.*

In an infant, if the rupture can be kept up for twelve months the cure is usually complete; it requires longer in an older child. But the truss must not be left off until a perfect cure is effected; your doctor alone can tell you when that time has arrived.

Let me strongly urge you to see that my advice is carried out to the letter. Should this method fail, either a surgical operation will be necessary, or *a truss will have to be worn throughout life*—a source of perpetual annoyance and irritation. A boy with a rupture is ineligible for any of the Services or the Police, and for many other callings. He would have to be operated upon successfully before he could pass the necessary medical examination.

Clothing

16. Have you any remarks to make on the clothing of an infant?

It should be light without being too airy. Many infants' clothes are too long and cumbersome. It is really painful to see how some poor babies are loaded

with a weight of clothes. How absurd, too, is the practice of making them wear *long* clothes! Clothes to cover a child's feet, and even a little beyond, may be desirable; but to dress the child in clothes that reach to the ground when he is carried is foolish in the extreme.

It should be warm without being too warm. The parts that ought most carefully to be kept warm are the chest, bowels and feet. If the infant is delicate, especially if he is subject to inflammation of the lungs, he should wear a fine flannel vest, in addition to his usual wool one, which should be changed as frequently.

The dress should be loose about the chest and waist so that the lungs have free play in breathing; it should be loose about the stomach, so that the digestion may not be impeded; it should be loose about the bowels, that the wave-like motion of the intestines may not be interfered with; it should be loose about the sleeves so that the blood may course without hindrance through the arteries and veins. Indeed it should be loose everywhere, for nature delights in freedom from restraint, and resents any interference. Oh, that mothers would take common sense and not custom as their guide!

No pins should be used in the dressing of a baby, except to fix the binder and outer Turkish towelling. Here use rustless pins, the largest size you can buy. If a small pin is used the child may swallow it, with serious consequences. Some mothers use no pins, but tack every part that requires fastening with needle and thread. They do not even use pins to fasten the baby's diapers, but this is an unnecessary precaution.

17. What garments do you recommend that my child should wear?

Wool is preferable to linen as it is warmer and less absorbent—that is to say, it will not so readily absorb the perspiration. Silk should be used for children with an irritable skin, and flannel is the best protective for the child with a delicate chest. The essentials of judicious underclothing are that the material is light as regards weight, and warm, and the garments are loosely made, are fastened by tapes, not pins, have as few buttons as possible, and are properly aired and changed frequently.

The baby will need a wool or silk-and-wool vest, and over this a nightdress of flannel, nun's veiling, etc. For day wear he will have a dress of wool and a woolly coat or matinée jacket over this. He will need knitted socks. In addition, you will want a carrying shawl. Caps should never be worn indoors, day or night. As soon as the diapers are abandoned, loose woollen drawers must be worn, reaching from the knees up to the navel. Rubber or mackintosh knickers are unhealthy and are to be avoided; they are a frequent cause of sore buttocks. *Summer clothing* should never be put on till the spring is well over and there is settled warm weather; a lighter vest of silk is then required, and lighter outer garments.

Here is a list of the clothing your baby will need:

2 flannel bands
36 napkins or Harrington sqs.
36 Turkish towelling lengths
3–4 woollen vests
3–4 flannel nightdresses
2 day dresses
2 matinée jackets
4–6 pairs of woolly drawers
4 pairs of socks
2 carrying shawls
2 pairs of gloves } for
3 pairs woollen } outdoor
pull-ups } wear
2–3 woollen caps }
6 bibs
12 large safety-pins

Clothing should be in accordance with the means of the parents. Let me tell you a little secret. Whenever I see a showy dress with shabby gloves or bootees, I know what the underclothing will be, and I stamp the parents accordingly. You know the line: "Adorned the least adorned the most." This does not mean going back to fig leaves, but it does mean moderation and conscientiousness.

18. Is it necessary for a nurse to air an infant's clothes before they are put on? If she were less particular would it not make him more hardy?

A nurse cannot be too particular over this. A baby's clothes ought to be well aired the day before they are put on. It is well, where it can be done, to let him have clean clothes daily. Where this cannot be afforded, the clothes, as soon as they are taken off, should be well aired so as to free them from perspiration, leaving them ready to put on the following morning. It is truly nonsensical and *most dangerous* to endeavour to harden a child, or anyone else, by putting damp clothes upon them.

19. Have you any remarks to make on the clothing of an infant when, in winter time, he is sent out for exercise?

Be sure that he is well wrapped up. He ought to have on an extra matinée jacket and a cap, and he will need woolly panties over his feet and legs. Further warmth should be provided by the perambulator coverings, not by extra clothing. If the child is carried, which I do not recommend, a warm shawl will be needed. Provided the wind is not in the east or north-east, and there is no fog or snow about, he

may brave the cold weather. Rain in moderation is no obstacle to his daily walk, provided the perambulator has a good waterproof cover and hood. (*See* Section, 162.)

Breast-Feeding

20. Do you advise that all mothers should feed their infants from the breast?

It is one of the greatest privileges of maternity to feed its young from its own body. A woman who, for the sake of the contour of her chest or to escape the necessary abstention from gaiety, passes her offspring to the care of strangers for its nourishment, is unworthy of the holy office of a mother—is no good citizen. The very brute creation cries "Shame on her!" Every healthy mother ought to feed her young from the rich supply of food granted her for that purpose by Nature. Nursing is, moreover, beneficial to the mother—it stimulates the contraction of the womb to normal and is a great preventative of future harm to that organ.

All mothers should nurse their own babies. *There is nothing that binds a child to its mother, or a mother to her child, more than the feeding by means of which its very life is drawn from herself.*

21. Are there any cases in which you hold a different opinion?

Yes. As I condemn the healthy mother for not feeding her child, with equal emphasis I condemn the mother with an active infectious disease, such as consumption, for trying to perform this duty. Also in cases of insanity, unless the babe is suitably pro-

tected from violence, breast-feeding should not be permitted. There are other contraindications, such as malformation of the mother's nipple which prevents the babe from sucking, but even malformed breasts, if treated before baby arrives, can often be made to work. There are also cases in which breast-feeding is causing a mother seriously to tax her health and in which, in spite of treatment by her doctor, the quality of the milk deteriorates so that the child fails to thrive. But such cases are rare.

22. Has the mind any influence on the body of the mother and so on the child?

Yes; a great influence for good and for evil. The child's health may be marred and seriously damaged through colic, flatulency, diarrhœa and sickness, owing to the mother's want of control over her emotions. Women of a highly nervous temperament do not make good nurses. Fits of rage and temper, seasons of fasting, with their attendant emotional disturbance, the worries, anxieties and vicissitudes of daily life, if allowed uncontrolled sway, will induce such changes in the milk as to make it unfit for nourishing the babe.

"The child is poisoned."
"Poisoned! By whom?"
"By you, you have been fretting!"
"Nay, indeed, Mother. How can I help fretting?"
"Don't tell me, Margaret. A nursing mother has no business to fret. She must turn her mind away from grief to the comfort that lies on her lap. Know you not that the child pines if the mother vexes herself."

(*The Cloister and the Hearth*, by Charles Reade.)

When a mother has set herself the task of nursing her infant she must recognize that the undertaking

is a serious one, and must devote herself solely to that object and to the preservation of her health; otherwise it may be imperative to provide other means of rearing, which will be greatly to the child's detriment. *Breast-feeding your baby is a whole-time occupation.*

23. If the mother becomes pregnant again, should she continue to nurse her child?

If the baby is thriving and the mother's health continues satisfactory the baby need not be weaned. But if the mother's health commences to fail, there will be an alteration in the quality of the milk, and the child will commence to suffer from bowel troubles or to lose weight. There may be vomiting in the early stages of pregnancy, and with the added strain of feeding her child, this may cause the mother to miscarry, but unless there be vomiting the feeding should be continued. The old belief that to feed one's baby protects one from further pregnancy or causes miscarriage is an exploded one. You should be guided in these matters by your medical attendant.

24. If the mother's "courses" appear should she continue to nurse?

In very many instances the baby will suffer no ill effects, but in some cases he develops bowel troubles —colic, for instance, and diarrhœa or green stools— and the bowel disorders may happen at the recurrence of every period. Under such circumstances a little boiled water may be given to the infant before feeding. Your doctor may wish to make a chemical analysis of the milk if the disorder is severe or recurs, but the infant must not be weaned unless it is absolutely necessary, as the disturbance soon passes.

25. Do you advocate putting a baby to the breast soon after birth, or waiting, as many do, until the third day?

In the interest both of the mother and the child, the infant should be put to the breast as soon after birth as possible. It is advisable to wait until the mother has been washed and settled and is recovered from her shock and fatigue—about 12–24 hours. Then the baby must be put to the breast. He will generally take the nipple with avidity.

It might be said that at so early a period there is no milk secreted in the breast, but there is a little cream-like fluid. But the very act of sucking causes a "draught," as it is usually called; that is, it stimulates the breast and encourages the milk to form. The babe being put to the breast every four hours will help to further stimulate the secretion. If he is kept from the breast for two or three days and is given other food, such as a dried milk preparation or cow's milk, at the end of that time he will frequently refuse to take the nipple at all or will only take it after enticement. Besides, the fluid left in the mother's breast will cause discomfort and congestion and ultimately a "drying-up" of the milk. A new-born babe must not have "gruel" given to him, or any such old-fashioned mixture as butter and brown sugar; it disorders the bowels and causes a disinclination to suck.

26. If an infant shows disinclination to suck, or if he appears unable to apply his lips to the nipple, what ought to be done?

Immediately call the doctor's attention to the fact, that he may ascertain the cause. The points to notice

are: Is the mother's nipple normal? Has the child a deformed roof to his mouth? Can he move his tongue out? (*See* Section 94.) Is the mouth sore? (*See* Section 90.) Has he got a nose full of mucus? (If so, clean it out with wool.) Are the breasts too large so that they smother the child? Is the child being held properly to the breast? If there are none of these defects, encourage the infant, soothe him, express a little of the milk on to his lips, apply some glycerine or syrup to the nipple to make it sweet. Remember, a crying, restless child is not in a fit state to suck.

If still the baby will not suck, the nipple may be too large; get a *nipple-shield* and, after well sterilizing it by boiling for three minutes, apply it over the nipple, and get the babe to suck the teat. Should this method fail too, the milk must be drawn off with a sterilized *breast-pump* and given to the babe with a spoon, always offering the breast in the first place at each feed, because after a day or so he may take the breast naturally. *In breast-feeding, patience and persistence are the secrets of success.*

Another point—be careful how you hold the child; an uncomfortably held child may refuse the breast. Hold the infant firmly to give him confidence; allow him *to be* in your arms across your stomach.

27. Suppose there be no milk at first, what ought to be done?

Wait with patience, the mother meanwhile drinking water sweetened with glucose and fruit juices, or Ovaltine, Bournvita, cocoa or milk; the latter, hot or cold, should not be in excess. At least *three pints*

of water a day are needed. A glass of water before or during the feed helps the secretion of the milk. Mothers with their first children not infrequently have a scanty supply of milk for the first few days, but it need not be feared that the infant will suffer on that account.

The infant should be put to the nipple every four hours, but not more often than that, until he is able to find nourishment. If the child frequently wakes up crying, he should be soothed to sleep again; he may be given a little warm slightly-sweetened water in a teaspoon. If the child has been put to the breast for a few times and he is still unable to find nourishment, then, also, it will be necessary to give him a little water to assuage his thirst and enable him to wait until the milk is secreted.

As soon as it is secreted, he must be put to the breast with great regularity, *alternately to each breast* and for about 10 minutes to each. I say alternately to each breast. *This is most important.* Sometimes a child, for some inexplicable reason, prefers one breast to the other, and the mother, to save a little contention, allows him to have his way. And what is often the consequence?—an engorged breast (Section 44).

We frequently hear of a babe having no notion of sucking. The "no notion" may generally be traced to bad management, or to stuffing him with food and thus giving him a disinclination to take the nipple at all.

28. How often should a mother suckle her infant?

Feed him every four hours, during the day, starting at 6 a.m. or when the child wakes (but not later than 7 a.m.), namely, 6 a.m., 10 a.m., 2 p.m., 6 p.m., and 10 p.m. Between the hours of 10 p.m. and 6 a.m.

there is no need to feed him; in other words, *no night feed is necessary with a healthy, normal child.*

If a baby is suckled at stated periods he will only look for the breast at these times, and will be satisfied. An infant should be accustomed to regularity in everything—in times for suckling, for sleep, for having his bowels open, etc. No children thrive so well as those who are thus early taught. Some mothers are in the habit of giving the child the breast every time he cries, regardless of the cause of the crying, which only too frequently is that he has been suckled too often and is suffering from *over-feeding;* the little fellow is consequently in pain and he gives utterance to cries. How absurd is such a practice! One might as well endeavour to put out a fire by feeding it with fuel!

After feeding, great care should be taken that all the "wind" in the stomach is removed. (Section 79.)

29. When the mother is only moderately strong do you advise that the infant should have any other food than the breast?

Certainly not, if the child thrives, puts on weight, and has no vomiting or abnormal stools. Many delicate women enjoy better health while suckling their children than at any other period of their lives. The mother will, however, need extra nourishment in the way of drinks between meals of milk, cocoa, egg-and-milk, or egg-flip. Her meals should be regular and of nourishing quality, and she must get an adequate supply of vitamins, calcium and iron. These are found in such foods as butter, milk, fresh fruit, liver, vegetables, salads, fish and wholemeal bread; and the quantity can be augmented by taking Virol, cod-liver oil, or such fat-free concentrated preparations as

Ostelin, Radiostoleum or Seven-seas' cod-liver oil. A nursing mother should avoid all highly spiced foods, pork, shell-fish, mackerel and tinned foods, and any food that upsets her or gives her indigestion or wind. She should be extremely careful about alcoholic drinks. It is not true that ale or stout increases the milk or causes it to flow.

30. How am I to know that my baby is progressing favourably?

Is your baby happy and contented? Does he lie on your lap after his feed and after you have got all his wind up, gurgling, smiling and kicking? Then your baby is healthy. Weigh your baby once a week, always on the same day of the week; good, reliable kitchen scales, with a blanket on it, will be quite sufficient, or he can be weighed at the nearest chemist's or Welfare Centre. (*See also* Section 33.) If *his weight* corresponds with the table below he is gaining well.

AVERAGE WEIGHT OF A BABY

Week	lb.	oz.	Week	lb.	oz.
At birth	7	4	17	13	0
1	7	0	18	13	4
2	7	6	19	13	10
3	7	12	20	14	0
4	8	4	21	14	4
5	8	8	22	14	8
6	9	0	23	14	12
7	9	4	24	15 (to 16lb.)	
8	9	12	Year	lb.	
9	10	2	1	19–20	
10	10	8	2	25–26½	
11	10	12	3	30–31	
12	11	2	4	34–35	
13	11	10	5	39½–41	
14	12	0	6	43½–45	
15	12	4	7	48–49½	
16	12	12	8	52½–54	

Are his stools normal, as described in Section 73? If they are, you have nothing to worry about.

31. How should a nursing mother regulate her life?

It is most important that her daily round should be smooth and free from causes of anger, anxiety or distressing emotions (Section 22).

She should rise at a reasonable hour and take a warm bath of brief duration, followed by a good rub down. She should go to bed after the 10 o'clock night feed. Fresh air is essential to keep her body in good condition, and the house should never be overcrowded with visitors or allowed to become stuffy from lack of free ventilation, day or night. She should take regular outdoor exercise, and in the summer may well spend a great part of the day out of doors. All violent exercise should, however, be avoided.

Her food should be simple and nourishing. The table given in Appendix I (p. 305) can be used as a guide.

She should be very careful about *taking medicine* and take none that is not prescribed by her doctor, nor should she take purgatives such as salts, or mercury as in calomel or grey powders, as some of the drug gets into the milk. *Smoking* should be only indulged in in moderation, five or six cigarettes a day being the maximum; it may be advisable to give smoking up altogether.

The breasts themselves must be carefully attended to. The nipples are often tender at first and should always be washed with sterile water before and after each feed. If they are sore, a little borax and glycerine smeared on after the feed will heal them, and prevent cracks in cold and frosty weather.

32. I feel that my breasts are not giving the milk they should; can I do anything to increase the quantity and improve the quality?

Yes. You can massage the breasts by water-massage. Have two basins, one of hot and the other of cold water, and with a large wad of cotton-wool or a large clean sponge bathe the breasts with hot and cold water alternately. You can rub the breasts with sweet oil to improve the circulation. The diet must be looked into. Are you drinking enough water? Perhaps you need more than three pints. Are your meals sufficiently nourishing? (*See* Section 29.) If the quantity and quality of the milk do not improve your doctor should be consulted, as your general health may be needing attention. Do not worry or fret; nothing will affect your milk more surely than a troubled mind. (*See* Section 22.)

33. Should I supplement the supply of breast-milk with artificial food?

Only after consultation with your doctor, and if by test feeds, *i.e.* by weighing the child before and after each feed throughout the day, you find that he is not getting his proper quantity of milk. To find the correct quantity, in ounces, for the whole 24 hours, multiply his weight by $2\frac{1}{2}$; divide the result by the number of feeds in the day, *i.e.* five, and you get the number of ounces he should receive at each feed. For example, a baby weighing 8 lb. will require 20 oz. a day, that is 4 oz. at each feed.

If he is not getting sufficient over the whole day and is not thriving, then a *supplementary feed* may be necessary. After letting him suck the breast empty,

give him, after the 10 a.m., 2 p.m. and 4 p.m. feeds, a feed of cow's milk and water, or of milk food given by the spoon. (*See* Sections 38–9.) The quantity given should be enough to bring the feed to the requisite number of ounces. Take, for example, the baby weighing 8 pounds who requires 20 ounces of food a day. If he is only getting 14 ounces at the breast, he will need a 2-ounce feed of milk and water after each of the three feeds specified above.

If he is getting too much food, or is gaining weight too fast, lessen the duration of each feed at the breast.

34. Should the mother be totally unable to feed her infant, what is the best substitute?

If the mother has no milk, or through illness is unable to feed her infant, *a wet nurse* should be obtained through the doctor, who should examine her, test her blood, etc., and see that she is free from disease. The nurse should have her own child, not more than two or three months old, and her health and habits should be vouched for by the medical man. There is no better substitute, and the practice of employing a wet nurse is far less common in this country than it should be.

The Premature Baby

35. My baby was born before the time. What attention must I give it other than the attention I should devote to a normal child?

A premature baby is usually very small and may be extremely weak. He has not yet developed his powers of keeping warm, so that must be the first consideration. At birth he must not be washed, but smeared

all over with warm olive oil, and wrapped and tucked up in full thickness of the best hospital-quality cotton-wool. Special care should be taken with regard to the cleanliness of the wool, which should be changed as soon as soiling is discovered; extra care should be observed in drying the parts well and creaming them after excretions have taken place. If there is any redness, a little pure white vaseline should be applied to the parts, or zinc or boracic ointment.

It is advisable to get *an incubator*, which can be hired or bought from any reputable surgical-instrument maker. The incubator should be maintained at a temperature of 90–95° F. (32–35° C.), and a thermometer kept between the blankets should register 65–70° F. (18·5–21° C.).

An improvised incubator can be made by using a box or drawer or wicker cradle well lined with blanket or flannel, the whole surrounded by a clothes-horse on which blankets or rugs are hung. Inside, an electric lamp may be sufficient to maintain the heat. If not, this is the *one occasion when hot-water bottles may be left in the cradle*, but they must be left well away from the babe and under the blankets, several thicknesses of blanket lying between them and the child.

The *baby's temperature* should be taken every four hours. The best way to do this is to vaseline the end of the thermometer, and, holding the legs firmly, insert it in the back passage for a minute. The normal temperature is 98–100° F. (36 5–37° C.).

36. How should I feed a premature baby?

A premature baby may be too feeble to suck, but if strong enough, should be put to the breast more

frequently than a normal child—every three hours, or even hourly. If the child cannot directly suckle, the breast-milk must be expressed and given by means of a pipette, which is a glass tube with a rubber bulb at the end. A premature babe must have food from the first day. If human milk is unobtainable, ass's milk is an excellent alternative, although it may be difficult to get in this country, or the child may be given cow's milk and water. But here your doctor's advice must be taken. If the babe does not digest cow's milk, other forms of prepared milk must be tried, but here again your medical man must advise you. Such feeding is persisted in until the child can suck; but as soon as the milk comes into the mother's breast and is sufficient, and the weight of the babe is the correct one for his age (Section 30), all forms of feeding other than breast-feeding must stop.

Artificial Feeding

37. Should the mother be totally unable to feed her infant, a wet nurse be unobtainable, and the child not premature, what food would you recommend?

There is but one answer to this question, and that is *cow's milk;* but the subject cannot be dismissed in these few words. Chemical analysis of healthy human milk shows it to be composed of fats, carbohydrates (in the form of sugars), and nitrogenous constituents (or proteins); in addition, there are important chemical constituents—salts and vitamins (*see* Section 43), the latter being most important and necessary for the development and growth of the child. Now in cow's

milk these constituents are not present in the same proportion as in breast-milk. The proteins are greater in quantity, the carbohydrates less, and the vitamins may be deficient. The essential problem of artificial feeding is so to modify cow's milk that the infant will thrive on it as well as he does on breast-milk.

There are other points: a mother's milk varies in its quality from time to time to fit the growth and age of the child; the constituents are more digestible than the same constituents in cow's milk; also cow's milk may carry infection, *e.g.* of tuberculosis.

It is most important that you should know where your baby's milk comes from. Choose a reliable dairy, and be sure that the milk you obtain is certified milk—that is, milk from a tuberculin-tested herd. Failing that, be sure that the milk is pasteurized, and that that process is efficiently carried out as certified by your Public Health Authority. The Public Health Authorities, Medical Officers of Health, and Sanitary Inspectors do all they can to maintain *the purity of milk* by seeing that the cow-sheds are kept clean, and that those who milk the cows are not suffering from any infection; by seeing also that the cows are in good health, and that the utensils used in the various processes are maintained in a state of germ-free cleanliness. But much still remains to be accomplished to bring about a condition even approaching perfection. This applies more to milk obtained in the country than to that supplied in towns. There is no benefit in obtaining milk straight from the cow, unless you know that the cow has no disease, the milker has no

disease, the hands that milked the cow were scrupulously clean, and the receptacles employed were sterile. As such assurances can rarely be given, all milk received direct from a farm should be pasteurized by yourself.

To pasteurize milk, take a saucepan and fill it with water almost to the top, put a saucer or small piece of lint at the bottom, stand the bottle of milk upon it and gradually heat the water. A thermometer should be placed in the milk-bottle, and when it registers 145° F. (63° C.) this temperature should be maintained as closely as possible (145–150° F. or 63–65·5° C.) for 30 minutes. This will kill most of the germs, though not all. On removing the milk from the saucepan keep it corked or covered up in the same receptacle till it is used.

If you are unable to pasteurize the milk, *boiling* it for a few minutes will kill all bacteria. But you have, in the boiling, destroyed certain chemical properties and altered the constitution of the fats and proteins.

38. How do you advise me to feed my child when feeding with cow's milk becomes a necessity?

It will be necessary to give the child five feeds a day, at 6 a.m., 10 a.m., 2 p.m., 6 p.m. and 10 p.m.

As to the amount to be given and the degree of dilution, the following table will act as your guide, but no hard and fast rule can be laid down, as certain adjustments may be necessary for individual children.

TABLE A

Weight in lb.	*Average age in weeks*	*Cow's milk in tablespoonfuls per feed*	*Boiled water in tablespoonfuls per feed*	*Sugar in level teaspoonfuls per feed*
7	1–2	4	2	2
8	1–2	5	2	2
9	2–6	6	3	2
10	6–9	6½	3½	2½
11	9–12	7	3½	2½
12	12–14	7½	3½	3
13	14–18	8	3½	3½
14	18–20	8½	3½	4
15	20–24	9	4	4
16	24–	10	4	4

When giving cod-liver oil, the amount of sugar should be adjusted, as shown in the table below:

TABLE B

Weight in lb.	*Average age in weeks*	*Cow's milk in tablespoonfuls per feed*	*Boiled water in tablespoonfuls per feed*	*Sugar in level teaspoonfuls per feed*	*Pure cod-liver oil in teaspoonfuls 3 times a day*
7	1–2	4	2	1½	½
8	1–2	5	2	1½	½
9	2–6	6	3	1½	½
10	6–9	6½	3½	2	½
11	9–12	7	3½	2	½
12	12–14	7½	3½	2½	½
13	14–18	8	3½	2½	½
14	18–20	8½	3½	3	½
15	20–24	9	4	3½	½
16	24–	10	4	3½	½

Cod-liver oil should be given for three feeds only and should be added to the milk mixture. Of Radiostoleum, Ostelin or Seven-Seas' cod-liver oil concentrate, one drop three times a day is given in the early months, and no adjustment of the sugar need

be made, as these are concentrated vitamins with negligible proportions of fat; Table A should then be used.

It is only necessary to give fresh *orange- or tomato-juice* once a day, beginning with one teaspoonful and gradually increasing the quantity till a child of 16 lb. will be having half an ounce. The juice should be diluted with a little water and sweetened if necessary. The best time to give it is when the child wakes in the morning. It is advisable to prepare the orange-juice by putting two or three sultanas or seedless raisins to soak in it overnight. In the morning squeeze out the sultanas or raisins, but as soon as the child has teeth, he should be encouraged to chew and eat them. For sweetening, Demerara sugar, glucose or crushed honeycomb are all beneficial.

After the sixth month, or when the weight of the child becomes 16 lb., the diet must be supplemented with extra starch (carbohydrate). This is best given in the form of a *cereal* such as Robinson's Groats, Cream of Wheat, or Chapman's Food, which are prepared in the following manner:

Three teaspoonfuls of the cereal are mixed into a thin paste with a little water, and the paste is then heated in a double saucepan for 45 min., the heating breaking up the starch granules. A teaspoonful of the cooked paste is added to the 10 a.m. and 6 p.m. feeds. It is advisable to use a different cereal at each meal.

In addition, two tablespoonfuls of veal bone broth, prepared as directed in Section 45, are added to or may be given separately before or after the 2 p.m. feed.

39. Can you advise me about the administration and preparation of dried milk?

Choice of the make of the dried milk employed for your child should be left entirely to your doctor, because some children require a special milk, and some may have idiosyncrasies to certain brands. (*See* Section 119 and Appendix II.)

I would here impress upon you to watch the child's stool, because by its constitution and colour you can get an indication as to whether the food you are using is correct; a grey paste-coloured stool, for example, would denote a feed with too much fat in it, showing that a food with less cream in it is necessary. (*See* Section 73.)

TABLE C.—HUMANIZED MILK

Weight of child in lb.	*Average age in weeks*	*Level measures of powder per feed*	*Boiled water in table-spoonfuls per feed*
7	1–2	2	6
8	1–2	2¼	7
9	2–6	2½	9
10	6–9	2¾	10
11	9–12	3	10½
12	12–14	3¼	11
13	14–18	3½	11½
14	18–20	3¾	12
15	20–24	4	13
16	24–	4¼–4½	14

The so-called *"humanized" milks* are prepared from cow's milk and are so adjusted as to approach as nearly as possible to the composition of human milk; adjustment has been made in the protein and carbohydrate, the former being changed to a more

digestible form, and the latter increased, usually by means of milk sugar or lactose.

To prepare humanized milk, first mix the dried milk (for quantity see the table below) to a thin paste with a little water and then add the rest of the water and warm by standing in a basin of hot water. No addition of sugar is necessary in humanized milks.

When using dried milk other than humanized, the most suitable form of sugar to add is Demerara or cane sugar, or lactose.

The measure provided with these dried foods is equivalent to about two level teaspoonfuls.

TABLE D.—DRIED MILKS

Weight of child in lb.	*Average age in weeks*	*Dried milk in level teaspoonfuls per feed*	*Sugar in level teaspoonfuls per feed*	*Water in tablespoonfuls per feed*
7	1–2	3½	1–½	6
8	1–2	4½–4	1–½	7
9	2–6	4¾–4½	1–½	9
10	6–9	5¼–5	1–½	10
11	9–12	6–5¾	1–½	10½
12	12–14	6½–6¼	1–½	11
13	14–18	7¼–6¾	1–½	11½
14	18–20	7¾–7½	1–½	12
15	20–24	8½–8	1–½	13
16	24–	9–8½	1–½	14

The necessity of giving additional vitamins (Section 43), in the form of fruit-juice and cod-liver oil, with this dried milk feeding, whatever product you are using, cannot be too strongly emphasized. In hot weather fruit-juice is preferable to cod-liver oil, which may upset the digestion or cause spots on the skin. It is also necessary to see that iron is present in the

food in sufficient quantity. Most of the artificial dried milks have iron added, but it may be necessary to supplement this because children fed on dried milks sometimes become pale and anæmic. It is essential that you should consult your doctor about it, should this occur.

In Appendix II (p. 306) will be found a list of the various proprietary foods obtainable, with their principal characteristics. If you want further information about feeding, and medical advice is not obtainable, as it may not be in the Colonies, I advise you to get the book "Modern Methods of Feeding in Infancy and Childhood," by Donald Paterson and A. Forest Smith.

40. Can you advise me as to the choice and use of a bottle for feeding my baby?

Yes. There are some very important points. First, you may have either a boat-shaped bottle or an upright one, and you had better have two of the kind you choose. Be sure the teat has a good-sized opening, because if the baby has any difficulty in getting the milk he will suck in air, and will then be uncomfortable and unable to take his feed. The hole can be enlarged with a red-hot darning needle. Be sure, too, that the teat is not too large for his mouth. Before giving the child the bottle, see also that the valve on the rubber cap at the end of it is working properly.

Do not wet the teat with your mouth, a common and disgusting practice of some mothers, who overlook the fact that they may themselves have septic mouths or bad teeth; even if her mouth is healthy, since the cleanest mouth is teeming with germs, a mother may thus give her child all sorts of infections.

Scrupulous care should be taken in the preparation and *cleaning of the bottle.* After every feed it should be well washed out in cold running water, and placed in a saucepan of cold water upon a piece of lint or linen to prevent it from cracking, with the teat and cork or rubber end separated. It should then be brought to the boil and *boiled hard for five minutes.* Cover the saucepan with clean gauze or muslin and allow it to cool; *do not take the bottle out of the saucepan till you are about to use it.*

And another thing, *do not give the child the bottle in its cot or cradle,* leaving the teat in the babe's mouth, an unnatural and unhealthy practice. Take the child in your arms, as you would if you were breast-feeding him, and after he has had enough, take the bottle away. *Never leave your baby sucking an empty bottle.* The bottle should be emptied in 15–20 minutes.

The food should be given at body-temperature. The best way to warm the cold food is to place the filled bottle in hot water until it reaches the right temperature. To cool a hot preparation place it in cold water.

The bottle should be graduated so that you can see the exact amount it contains, and thus the amount that has been taken.

41. My doctor has ordered me to give predigested or peptonized milk. How do I prepare it?

Obtain a good brand of peptonizing powder from the chemist, and follow the instructions supplied. For instance, with Fairchild's Zymine Powder the procedure is as follows: Take one pint of milk, and add to it ¼ pint of water and one of the powders, The mixture should be kept at a temperature of

104° F. (40° C.) as a rule for 15 minutes, shaking it from time to time. After peptonization the milk should be heated to boiling point to destroy the rennin and so prevent further digestion. If the powder is left in the milk for too long before it is destroyed by raising the temperature, the milk will become bitter and the baby will refuse it. Feed the baby when the milk has cooled off to the right temperature. Do not keep your baby long on peptonized food; it is liable to defeat the object for which it was given if the administration is continued. Remember that all vitamins are destroyed in peptonized milk.

42. Is it necessary to give my baby lime-water?

Not if he is healthy, is gaining weight, and has normal stools. (*See* Sections 30, 73.) Lime-water corrects the acidity of cow's milk and breaks up the curds, thus making them more digestible. It is useful in certain cases of marked colic, when undigested milk curds appear in the motions, and in some constipations. Do not add the lime-water until the milk has been sterilized, and then put in about one tablespoonful to half a pint (10 ounces) of the milk.

43. What are these vitamins which, you so impress upon me, baby requires?

Vitamins are products formed by animals and plants, the absence of which in the diet causes such diseases as rickets, scurvy, successions of colds or nasal catarrh, and sore eyes. The vitamins important for your baby are:

Vitamin A, present in cod-liver or halibut-liver oil, cabbage, brussels sprouts, bananas, yolk of egg, tomatoes, etc.

Vitamins B_1 and B_2, present in egg-yolk, oranges, beef, carrots, yeast, and wholemeal flour.

Vitamin C, present in apples, green cabbage, bananas, lemons, oranges, grapefruit, spinach and tomatoes.

Vitamin D, present in milk, butter, egg-yolk and the fish oils.

Some vitamins have been isolated and prepared in pure form, and you can get them on the advice and prescription of your doctor.

Vitamins are most important for the growth of your baby, but all are supplied in the breast-milk of a healthy mother—the only really sufficient food and the best protection from all the ills due to vitamin deficiency.

Weaning

44. How would you recommend a mother to act when she weans her child?

She should do it gradually, giving him, by degrees, less and less of the breast and more and more of other food. A sudden entire deprivation of breast-milk would disorder the child's stomach.

When he has ceased to take the breast, the breasts may become hard, engorged and uncomfortable; they should then be tightly bound up, and water and other fluids in the diet of the mother should be reduced until she is only taking sufficient to quench her thirst. If the breasts become too uncomfortable, the milk can be drawn off by means of a pump, but this should not be done unless absolutely necessary. A saline purge may be taken in the mornings, half an ounce of Epsom or Glauber salts to begin with, the quantity

being gradually reduced, but there is no object in overdoing this. *All plasters are best avoided.* It usually takes two or three days to clear up this condition.

45. At what age should I wean baby, and how do you advise me to do it?

This, of course, must depend both upon the strength of the child and upon the health of the mother. As a rule, nine months is the proper time—that is, *the weaning should be completed when the child is nine months old.* If the mother is delicate, it may be found necessary to wean the infant at six months. Rarely, if the baby is weak or suffering from any disease, it may be advisable to continue suckling him for twelve months. After that time the breast will do him more harm than good, for the milk deteriorates in quality; moreover, continuing to give suck will injure the health of the mother.

As I have already said, weaning must be a gradual process. Start when the baby is about 5 months old, or when his weight is 15 lb., by giving him for his 2 p.m. feed one tablespoonful of vegetable purée or veal broth. Give it to him before the breast feed and with a small spoon. He may spit it out at the first trial, but persist each day and he will eventually swallow it; a little sugar added often helps.

The *vegetable purée* is prepared by taking a carrot, a potato (cut up) and a little cauliflower and green vegetable; cover them with water and simmer for 1 hour, then sieve them, and add milk to make a soup. If necessary, thicken it a little.

To make the *veal broth,* a pound of fresh veal bones (not imported), well broken up, are put in a

saucepan, covered with water, and allowed to simmer for 4 hours; a teaspoonful of vinegar is sometimes added, but is not necessary. Strain, then add your vegetables as above; simmer for another hour, sieve and cool. In a cool place it should keep good for three days.

When this has been well established (about a week or ten days), start dropping the 2 p.m. breast-meal, substituting *a milk and gruel food.* Robinson's Patent Barley, Allenbury's No. 3, Allenbury's rusks and milk, Chapman's or Benger's Foods are some of the most used foods. (*See* Appendix II.) It is advisable to give the babe a stale crust to bite on after the feed; this is especially useful when there are signs of dentition —the gums getting white.

Next substitute for the 10 o'clock and 6 o'clock breast-feeds, in that order, a mixture of milk 2 parts and water 1 part, with a heaped teaspoonful of one of the above foods or two tablespoonfuls of one of the broths. So by the ninth month we have only the morning and evening feed to eliminate.

In one meal a week, after the ninth month, you may give the yoke of a *coddled egg*, that is, an egg which has been put into boiling water for one minute, just sufficient to warm it through.

Any form of *white fish* may be given at this period once or twice a week; it should be steamed or boiled in milk, and pounded at first, till teeth are formed. A stewed or baked *apple* with custard or junket may be given.

Do not forget to give a drink of water with meals or when the child wants it. He will by now very forcibly make his demands known. Also do not

forget to continue the orange-juice, of which he can now take more, *e.g.* half an orange.

A bottle-fed baby is made accustomed to more solid food in the same way: broth at the fifth month, gruel to follow, etc.

Vaccination

46. Are you an advocate of vaccination?

Certainly. I consider it to be one of the greatest blessings ever conferred on mankind. It is the only safeguard against all danger of your babe getting smallpox severely, for even if a vaccinated child does later contract smallpox, he will only get a mild form of it. Before vaccination was introduced into the country, the disease ravaged the people like a plague, and one could not walk down the street without seeing people pock-marked and disfigured for life; this can still be seen in foreign lands where vaccination is not compulsory. It can be done by your doctor or, at no cost to yourself, the Public Vaccinator will come to your house and vaccinate your child with a serum supplied by the Government, a serum that has been tested and retested to ensure its purity and that it is free from the possibility of producing harmful effects. The best time for vaccination is when the child is three months old, if he is healthy; postpone it for a while if he is suffering from a cold or rash. Your child should be vaccinated every seven years to retain this protection to the fullest degree.

47. Will you explain to me what happens to my child's arm and how I can help him in his suffering?

With a sterile needle the vaccinator makes one little scratch on your baby's arm or leg, just enough

to remove the top layer of skin; only one place is found necessary these days. He then puts the serum, or lymph, on the scratch. After the serum has dried, it is covered with a piece of sterile gauze or a clean handkerchief. At about the fifth day you will notice a little blister arise; do not disturb this, but sprinkle it with boracic powder and keep it covered. If, as happens in some cases, the arm becomes acutely inflamed, you may apply a hot or Antiphlogistine fomentation, making very sure that it is not too hot. This will help *to relieve the pain.* Alternatively, boracic-lint fomentations may be used; make certain that the lint is wrung out well and that it is not too hot before placing it on the child's arm. (*See* Section 169.) If the glands swell and are painful, the same treatment may be applied to them. The inflammation may last till the tenth day and will then gradually subside.

Keep a watch on the child's general health. If he has a temperature do not let him get chilled, but keep him in bed, covered up, see that his bowels are acting normally, and give him plenty of water to drink, as he will be thirsty. If the pain is severe and the child is getting no sleep, there is no objection to his being given a quarter of an aspirin tablet; but, as a general rule, medicines are not necessary or advisable, except a mild laxative if baby is constipated.

After the eighth to tenth day the place scabs over. Now you must be very careful that the child does not scratch the scab off. Keep the arm covered and powdered. A splint of corrugated paper on the baby's sound arm will prevent him from scratching.

48. Should the vaccination not come up, is it advisable to have it done again?

Yes, it is. Three attempts at getting a pustule should be tried before you can be quite certain your child has an inborn protection against smallpox.

TEETHING

49. What is the number of teeth in the first set, and when and in what order do they appear?

The first or temporary set consists of twenty teeth and they appear in pairs. The period of commencement varies, but usually the babe begins to cut his teeth at seven months; some start at three months. The first teeth to appear are those in the centre of the lower jaw (lower central incisors); the other teeth do not follow in the same order in every child. Usually the first two are followed by the upper two incisors, then the upper lateral incisors; then often a double tooth is cut before the lower lateral incisors appear. Then follow the grinders or molars and it is not till several of these are through that the eye or canine teeth appear. The child usually takes two years in cutting his first set of teeth.

50. If an infant is feverish, irritable, or otherwise poorly, and the gums are hot, swollen and tender, do you advocate lancing the gums?

As a general rule there is no need for the gums to be lanced, and with suitable care in feeding—making sure that the child has sufficient vitamins and calcium—the teeth will come through, painfully perhaps, but normally. There are very rare conditions in which wasting or fits are relieved by lancing the gums.

51. If teething causes convulsions, what ought to be done?

Teething only rarely causes convulsions, but should it do so send immediately for a medical man. Meanwhile freely dash water upon the face and sponge the head with cold water. As soon as warm water can be procured, put the child into a bath of 98° F. (37° C.). If a bath-thermometer is not at hand, plunge your own elbow into the water; a comfortable heat for your elbow will be the proper heat for the water. The child must remain in the bath for a quarter of an hour or until the fit is at an end. He must then be wiped with warm, dry towels, and wrapped in a warm blanket; cold cloths can still be applied to the head.

You must remember, however, that convulsions may arise from many causes other than teething, *e.g.* they may mark the onset of a febrile illness; you must not assume too readily that because a child is teething that must necessarily be the cause. Other factors must be eliminated. That is why the presence of your doctor is so necessary. (*See* Sections 97, 98.)

52. A nurse is in the habit of giving a child who is teething either coral or ivory to bite; do you approve of this?

The natural desire of the baby to bite on something should not be discouraged. The only essential is that the article should be kept perfectly clean. That is why I am against the use of any form of teat or dummy. To keep them clean is almost impossible, and their use is unnecessary with a contented and happy child. I have no objection to a rubber ring, but an ivory or mother-of-pearl ring is far cleaner. It can be boiled and washed, and should be, frequently, especially

every time it has fallen on the floor. This should be prevented by attaching the ring to a ribbon round the child's neck. Never put the ring in your own mouth to wet it; remember what I said in Section 40 about wetting the teat of the bottle: the same applies here. *A crust of stale bread*, or bread baked hard in the oven, or a hard biscuit such as a Farley's rusk or Bickiepeg, is better than a teething ring if the child wants to exercise his gums. Watch to see that he does not get a big piece of the crust or biscuit in his throat. I do not advise that a child be left alone with any of the above.

53. Have you any objection to a teething baby sucking his thumb?

Certainly not; the thumb is the best "gum-stick" in the world; it is handy (in every sense of the word), it is of the right size and of the proper consistency—neither too hard nor too soft—it is usually clean, and there is no danger, as with some artificial gum-sticks, of its being swallowed and thus choking the child.

The sucking of the thumb causes the salivary glands to pour out their contents, and this not only moistens the mouth, but assists the digestion. The pressure of the thumb eases the pain and irritation of the gums while the teeth are "breeding" and helps, when the teeth are sufficiently advanced, to bring them through the gums. Sucking of the thumb will often make a cross infant contented and happy, and will frequently induce a restless babe to fall into a sweet and refreshing sleep. Truly may the thumb be called "a baby's comfort." By all means, then, let your child suck his thumb whenever he likes and as long as he chooses to do so.

54. But if an infant is allowed to suck his thumb, will it not be likely to become a habit and to stick to him for years—until, indeed, he becomes a big child?

After he has cut the whole of his first set of teeth, that is to say, when he is about two and a half years old, he might, if thumb-sucking is likely to become a habit, be discouraged, although it has been proved that thumb-sucking in the early stages does not deform the roof of the mouth or the teeth. In some cases, however, it makes the child sick or makes him eructate. *To break the habit*, make a paste of aloes and water or quinine sulphate and mucilage, and smear this on the child's thumb at bedtime. One or two dressings will suffice, as after just tasting the bitterness he will be so disgusted that the habit will at once be broken.

55. A child who is teething dribbles, thereby wetting his chest. What had better be done?

Have in readiness several padded dribbling bibs of soft material, which may be changed as often as they become soaked; or if he dribbles very much, the material may be padded with mackintosh or waterproofed silk, such as is procurable at any baby-linen shop.

Be careful in cold weather that his chin does not become chapped or rough. A little cold cream or white vaseline at night will put this right by the morning.

56. Is a child more subject to disease during teething, and if so, to what complaints? In what manner may they be prevented?

The tendency on the part of the mother and nurse is to cast on teething the blame for all the complaints

to which the infant may be subject during the progress of dentition. It is doubtless very convenient to have such an explanation of the cause of various disorders, but not infrequently the assumption that it is the true explanation proves disastrous to the infant. As long as the teeth are being blamed, the old idea of the inadvisability of interfering with Nature's efforts is submitted to and thus the real and much more obnoxious causes for ill-health are either ignored or not detected.

The babe is teething—of course he has *diarrhœa and sickness* and is feverish, though there is not a tooth in sight. The obvious explanation—that his diet is unsuitable—is not for a moment thought of, although often at the period of teeth-cutting the dietary is being altered. When the bowel troubles arise, *inflammation of the mouth* is not uncommon. Those wretched teeth again!—although there is no sign of the imminent appearance of a tooth. The inflammation is, of course, an effort on Nature's part to "get rid of bad humour"; you must not interfere with Nature's workings. RUBBISH! The correct view to take of these complaints is to treat the inflammation of the mouth and the bowel disturbances and pay particular attention to the feeding.

But children often cut their teeth with a "bad cold" or "bronchitis"? Certainly they often do. There is another explanation of these attacks. *When a tooth is near the surface and the gum is swollen and sore there is irregular fever*, often lasting for several days, the temperature varying between 99° and 100° F. (38° C.). Owing to the lowering effects of fever on the system, the baby is then in a condition in which

his stomach and bowels are more easily upset, and dyspeptic attacks are more readily induced, and in which he will catch any cold or infection with which he comes in contact. This is why I am very much against the kissing of small babies, especially on the mouth. A wise mother keeps her baby away from all effusive visitors, thus protecting him from colds and influenza. Sudden changes of temperature are to be avoided. Do not send him out if an east or north-east wind is blowing, or leave him in a draughty place.

Discharges from the ear are not caused by teething. The child has probably caught an infection in his ear while he was in a state of fever. Your doctor should at once be informed of the occurrence, and the condition should receive prompt attention lest serious disease of the bone or brain should follow.

Eczema and red-gum have been laid to the door of teething; but both complaints are due to other causes.

To ascribe all *attacks of fever* to some supposed tooth disturbance, when there is no sign of such disturbance on looking into the mouth, is rash. The fever may indicate a lung disease—pneumonia, for example.

57. Please tell me the symptoms and the treatment of painful dentition.

The symptoms may be very slight, some children having little pain and no general health upset. But in general, the gums are red, swollen and hot, and the babe cannot bear to have them touched; hence if he is at the breast he is constantly loosing hold of the

nipple. There is flushing of the cheeks and a dryness of the mouth in spite of there being an increased flow of saliva and, consequently, dribbling. He is feverish, restless, and starts in his sleep, and his head is heavy and hot.

The fever is irregular and the temperature ranges from 99°–100° F. (38° C.) and may be at its highest point, unlike that of other diseases, in the morning.

Treatment of the milder symptoms includes gentle friction of the gums with a little glycerine and borax on the finger; a tepid bath of 92° F. (33° C.) at bedtime will often have a soothing effect if there are restless nights. Attention must be paid to the diet, sufficient fruit-juice (to provide vitamins) and calcium in the form of milk or calcium lactate being supplied.

The bowels need watching, though an occasional green stool, if unaccompanied by straining or colic, is nothing to worry about. A laxative such as Virolax or Cristolax may sometimes be useful, or if there is fever and flushing of the face, magnesia or $\frac{1}{6}$ grain of grey powder in a tablet from the chemist will often relieve a lot of congestion. Fresh air and exercise are essential. When there is continuous diarrhœa, or when convulsions occur, your doctor should immediately be sent for.

I have no objections to your giving the babe who has severe pain in his gums *half an aspirin* (five-grain) tablet crushed up in milk at bedtime. After all, we do not suffer pain ourselves without seeking to allay it; why should we allow our children to have days and nights without relief when there is such a simple remedy as aspirin? "Teething powders," however, should be avoided, as they may contain

opium, which is poison to the baby and likely to lead to lung complaints.

If you are living in the town and your baby suffers excessively from teething, take him into the country. It is wonderful what country air may do for him.

Remember, keep away all friends, neighbours and relations who are suffering from colds or catarrh.

58. A child may be subject during dentition to a slight cough, not bad enough to justify consulting the doctor; please tell me if there is any objection to a mother giving a little paregoric to ease it.

A cough is an effort of Nature to bring up any excessive secretion from the bronchial tubes; hence it ought not to be interfered with.

Paregoric or any patent cough mixture has the effect of stopping the cough and thereby preventing the expulsion of the phlegm, and is therefore dangerous unless administered by a judicious medical man. *It ought not to be given by a mother.*

But there is no harm in giving loosening remedies, such as a little honey and glycerine or cod-liver oil, which have also nutritive properties.

59. A child who is teething is subject to a "breaking out," more especially behind the ears, which is most disfiguring and frequently very irritating. What would you recommend that I should do?

Skin eruptions used to be looked upon "as an effort of the constitution to relieve itself." This has been proved to be a fallacy, and skin rashes should be treated.

To treat the rash, pay attention to the diet. If the babe is artificially fed, carbohydrates, *i.e.* sugar

or cereals, that have been added to the food should be reduced or stopped. A carefully regulated dose of magnesia will help to clear the system, and a local application of boracic and zinc ointment will allay the irritation.

60. Are the teeth to be cleaned during infancy and childhood?

Certainly. Do all you can to preserve them by using, night and morning, a soft toothbrush dipped in a little salt and water (a pinch of salt to half a glass of water), or in a tumblerful of water to which a teaspoonful of hydrogen peroxide has been added. It is a good plan for the child to chew a quarter of an apple after every meal and last thing at night. By preserving your child's teeth you preserve his health. Cleaning the teeth is as important as washing the body. See to it that your child forms a habit of regularly washing his teeth, and a dirty mouth will then become as objectionable to him as a dirty skin.

If the teeth are not cleaned, food collects about them, forming a medium in which germs readily grow. There is fermentation, and acid secretions are produced which eat into the enamel and quickly expose and destroy the sensitive tooth-pulp and so the life of the tooth. Should the temporary teeth show signs of decay the child must be taken to the dentist at once to have them stopped. Foul discharges in the mouth are prejudicial to his health. A visit should anyway be paid to the dentist twice a year to get the child accustomed to having his teeth looked at.

Here let me give you a word of warning. *Never threaten a child with doctor or dentist.* One often hears

a mother or nurse say, "If you do that again I shall tell the doctor." A wicked habit! The doctor or dentist should be looked upon as a friend to whom one goes in one's troubles; his friendship is to be cultivated. (*See* Section 172.)

Exercise

61. Do you recommend exercise in the open air for a baby, and if so, how soon after birth?

I am a great advocate of his having exercise in the open air. The infant in arms makes known his desire for fresh air by restlessness and crying; when taken out of doors he is quiet. The age at which he ought to commence taking the air will, of course, depend on the weather. If it is summer, and the weather is fine, his cot should be carried out into the open the day after he is born, especially if there is a garden. But in winter he can only go out on a sunny day until he is three weeks or a month old; at the end of two months he should be taken into the open air more frequently.

I do not approve of a child being carried. There is no need to walk him about in his perambulator in the early days, if you are in the country. Let him lie in it, or in his cot in the garden, under a light muslin cover and with his head well in the shade; that is all that is needed till he is a month old. Then he can be wheeled about. See that the perambulator is well warmed by a hot-water bottle, *but remove the bottle before putting the baby in.* Wrap him up well (Section 19), tucking in the sides of the covers, but leave his head uncovered; no bonnet is needed unless the weather is cold.

In a town outdoor exercise is more difficult and baby has to be wheeled out, if no garden or balcony is available, once or even twice a day. Choose the warmest part of the day. There is no reason why he should not be left in his cot by the open window, when there is no garden or balcony. The only *contra-indications to taking your baby out* are: a nasal cold, when I do think a day indoors in the cot often works a cure; fog or cold east winds; and, of course, an illness.

Fresh air will make the child strong and hearty and will give the skin that bloom which is characteristic of health. He must, of course, be well clothed, but the practice of smothering up an infant's face with a veil or shutting out the air by putting up the hood of the pram, or by letting him lie at the bottom of too deep a perambulator cannot be too firmly condemned.

62. Can you advise me about the choice of a perambulator?

Yes. The choice of a perambulator is a very serious affair. Go and choose it for yourself. See that there are good springs; look at the tyres on the wheels and see they are in good condition and of solid rubber. See that the body of it is not so deep that the child lying in it will get no light or air. Inspect the hood to make sure that it works well and easily, that the edges and corners are well finished, and that the whole is either detachable or able to have a summer cover fixed to the attachments already there. See that there is a good mackintosh cover for wet weather, and that there is a brake or chain to hold the perambulator

when stationary. Go to a reliable stores and do not spend more than you can reasonably afford; don't load yourself with a debt you may not be able to pay off for years.

A word as to the advisability of choosing *a second-hand perambulator*. If you know the family from whom you are purchasing it, there is no reason why you should not have it, if it is in good condition and has been kept clean. Before using it, it is advisable to put it out in the air or sunlight for a few days, and to have the inside well scrubbed with hot water with a drop or two of lysol in it. When dry, have the woodwork repainted or varnished.

63. Can you suggest any method by which a babe himself can be induced to take exercise?

He must be encouraged to use his muscles; for this purpose he should daily be laid on the floor, upon a rug or the carpet, well away from any draughts, that he may stretch his limbs and kick. It is a pretty sight to see a little fellow kicking and sprawling on the floor, crowing with delight and thoroughly enjoying himself. Such exercise is the best kind a very young child can take. It strengthens his back, and enables him to stretch and to use his muscles. His diaper, if he wears one, should be loosened so that movements may be unhampered.

By adopting the above plan the babe enjoys himself, but his brain is not over-excited—an important consideration. *A baby requires rest, not excitement*, which is injurious to his brain, making him jumpy and nervy. How wrong it is, then, for mother or nurse to excite or dandle a new-born babe! In the early

period of his existence his time ought to be almost entirely spent in sleeping in his cot and in sucking.

64. Do you approve of tossing an infant about?

Certainly not. Violent tossing of a young babe ought never to be allowed; it not only frightens him but may lead to injuries to bone or joint, or even to death.

He should be gently patted or rubbed on the back when he is held looking over the mother's or nurse's shoulder after his feed; such exercise promotes digestion and a proper circulation of the blood, and soothes him so that he sleeps when he is laid down. But he must be kept quiet when the wind has been got up. Excessive movement is likely to produce vomiting or hiccough.

Sleep

65. Ought the room that the infant sleeps in to be kept warm?

The night nursery or lying-in room is generally kept far too warm, and this is most unhealthy for both mother and baby. But we must not, of course, run into an opposite extreme. The chamber should be kept at a moderate and comfortable temperature. Except when mother or child are being washed or having their toilet performed, the windows should be widely open—if they are sash windows, open to the full, top and bottom. Even in the winter, providing there is no fog or rain beating into the room, the windows should be wide open. but a fire or stove is needed to keep the room temperature even at 60° F. (15.5° C.).

The door should be kept shut to avoid draughts. The cot must not be placed immediately between door and window or between window and fireplace, as even when the door is shut there is always a draught in such a position. On days of fog or storm, when the window cannot be opened, however, then the door must be. This applies, day or night, summer and winter. When the child is out of the room, the window and door should be left wide open that the bedclothes may be well aired. (*See* Section 142.)

A new-born baby ought to be kept comfortably warm, but not overheated. It is very foolish to attempt to harden a very young child by allowing him to be in a bedroom without a fire in the winter time, or by dipping him in cold water, or by keeping him with scant clothing on his bed.

An infant should not be allowed to gaze at the glare of a fire or light, as this tends to inflame the eyes and also to keep the child awake. In speaking to or noticing a baby you ought always to stand before and not behind him.

66. Ought a babe to lie alone from the first?

Certainly. A baby will sleep quite happily and comfortably in his own little cot. The danger of overlaying a child is a very real one, as the published records of death from this cause only too clearly show. Apart from this danger, the movements of the mother or nurse in the bed are likely to disturb him; also the child breathes purer air when alone. If he lacks warmth, the cot can be well warmed with hot-water bottles before he is put in. But *never leave a hot bottle in the bed with a baby* except in cases of prematurity. (*See* Section 35.)

Not only is it right for a baby to sleep alone, but he is better in a separate room, as long as his mother or nurse is within call. If he shows any fear of the dark, give him a night-light. (*See* Section 149.)

67. Do you approve of rocking a child to sleep?

I do not. If the rules of health are observed he will sleep soundly and readily without rocking; if they are not, the rocking might cause him to fall into a feverish disturbed slumber, but not into a refreshing sleep. Besides, if you once take to that habit, he will not go to sleep without it. All rockers, on chairs or cradles, should be forbidden.

68. While the infant is asleep, do you advise that the head of the crib be covered with a handkerchief to shade his eyes from the light and, if it be summer time, to keep off the flies?

If the head of the crib is covered the baby cannot breathe freely, and if his sleep is to be refreshing he must breathe pure air. I do not even approve of a head to a crib. A child is frequently allowed to sleep within closely-drawn curtains, as though it were dangerous for a breath of air to blow upon him. This practice is most injurious. An infant must have full benefit of the fresh air entering the room (Section 65) when he is warm in his cot.

If flies annoy him while he is asleep, let a veil of net or wide-meshed muslin be thrown over his face. If he is lying in a garden a strong net can be obtained, to keep any animals such as cats from jumping into the perambulator or leaves from falling on to him. He can readily breathe through net, but not through a handkerchief.

69. Have you any suggestion to offer as to the way a babe should be dressed when he is put down to sleep? And as to how he should be placed in his cot?

Let him be more than ordinarily free and unrestrained. Be more than usually particular that his dress be loose in every part.

> "Whilst in cradle's rest your infant sleeps,
> Your watchful eye unceasing vigil keeps,
> Lest cramping bonds his pliant limbs constrain,
> And cause defects that manhood may retain."

It is better to change him from his day attire, so that it can be aired and made fresh for the morning. A simple flannel nightdress is all that is needed. In winter a knitted vest might be added.

Place him *on his side in the middle of the bed, never on the same side twice.* In the winter time see that his hands and arms are covered with the bedclothes; in summer his hands may be allowed to be outside. In putting him down to sleep, you should ascertain that his face is not muffled up, and it is always advisable to go and have a look at him a quarter or half an hour after he is asleep, to see that he is covered properly and in a comfortable position. It is advisable before laying him in his cot to fold up the bottom of the back of the nightgown clear of the napkin, so that it does not become wet at night.

70. Is it a good sign for a young child to sleep much?

A babe who sleeps a great deal thrives much more than one who does not. I have known many children who, born small and delicate, slept the greatest part of their time and became strong and healthy. On the other hand, I have known those who, born large

and strong, slept but little and became weak and ailing.

Here let me impress upon you the good habit of putting your baby to bed for the night after the 6 o'clock feed, and not disturbing him, except for the 10 o'clock night feed, until next morning. The common practice of a nurse allowing a baby to sleep upon her lap ought never to be countenanced. He sleeps more comfortably and soundly in his crib.

The younger the infant, the more he should sleep, so that during the early months he is seldom awake except to take the breast.

Do not lift him out of his cot for admiring neighbours or relations. If they want to see your baby, make them come just before or just after feeding times. Remember what I said in Section 56 about kissing, and people with colds.

71. If sleep is of such advantage and an infant sleeps but little, would you advise that composing medicine be given him?

Certainly not. *The practice of giving* composing medicine or *sleeping draughts to a young child cannot be too strongly condemned.*

If a child does not sleep enough, his mother should ascertain whether the bowels are in a proper state, *i.e.* whether they are sufficiently opened and the motions are the right colour, free from slime, and, in a breast-fed baby, odourless; in an artificially-fed babe they should be free from bad smell. (*See* Section 73.)

Slight febrile attacks, colds in the head or chest, ear, mouth, or throat troubles, irritating skin disorders, etc., will all tend to make him restless and sleepless.

Here your doctor is your best adviser. Or the child may have wind (Section 79).

Attention to the clothing is very important. Is he too hot or too cold? Are the bedclothes too heavy? Is the cot too small or too large? Soiled diapers and clothing changed with insufficient frequency will induce sleeplessness, for clothes rendered sticky by perspiration are a source of irritation and discomfort. A change of diaper or clothing and a warm sponge down may, especially if the child is feverish, quickly promote comfort and quiet slumber.

Try to discover the cause of the sleeplessness and the appropriate remedy will be readily found. Patting his back gently may, if he is teething, act as a sedative.

Do not over-excite your child before putting him in his cot by talking to him, or permit visitors to make ridiculous noises at him.

72. We often hear of coroners' inquests upon infants who have been found suffocated in bed. What is usually the cause? Do you believe in a pillow for the cot?

The calamity is brought about either by ignorance or by carelessness. From ignorance, in the mothers not knowing the common laws of life and the vital importance of free and unrestricted respiration, not only when babies are awake, but when they are in bed and asleep; from carelessness, in their allowing young and thoughtless nurses or maids to have the charge of infants at night.

A foolish mother sometimes goes to sleep while allowing her child to continue sucking. The unconscious babe after a time loses the nipple and

buries his head in the bedclothes, and the mother when she awakes finds, to her horror, a corpse by her side! Obviously a mother ought never to go to sleep until her child has finished sucking and is returned to his own cot, and ought never to keep the child in her own bed. Put it into a crib or lined box or drawer —anything rather than the same bed as the mother!

Never leave a baby in a full-sized bed. I know of an infant so left who worked itself down to the bottom of the bed and was suffocated.

For the cradle or cot use a basket lined with soft material and, as *bedding*, a firm mattress of hair, two sheets, two blankets, a light feather eiderdown and a mackintosh to go under the bottom sheet are all that is needed. A pillow may be used, but let it be small and flat so that the babe cannot bury his face in it, even if he does turn over in the night. Many babies lie quite comfortably without a pillow, or with the pillow placed under the mattress.

When the child gets too big for the cradle and a larger cot is needed, it is advisable to put him in one of those blanket bags, which will prevent him from working himself down the bed; you can buy these with armholes. Or he can wear webbing reins which are secured by tapes under the mattress or to the head of the cot, with the knot out of reach. These keep him, without too much restraint, from getting down beneath the clothes.

Should the child be suffocated, *immediate artificial respiration* must be commenced by gently pressing the chest with both hands slowly, eighteen times to the minute, keeping the body covered with relays of warmed blankets. Apply brandy to the lips and send

at once for the doctor. Artificial respiration should be continued till the doctor arrives. (*See also* Section 274.)

Bowel and Bladder Action

73. Have you any hints to offer respecting the bowels and the bladder of an infant during the first three months of his existence?

At birth the stool is green and remains so for two or three days; then it becomes yellow. The babe should have three or four motions daily up to the second month, and then only two till the third year, when one is natural. The motions change to brown at the second year.

A mother ought daily to satisfy herself as to the state of the bladder and bowels of her child. She herself should inspect the motions and see that they are of a proper colour (bright yellow, inclining to orange) and consistency (that of thick gruel); that they are neither slimy nor curdled; neither green nor grey. If in a breast-fed babe they should be thus abnormal, it suggests that the mother has been imprudent in her diet, and that she must be more careful in what she eats and what she drinks—also in how much she smokes and what she does! In the case of a bottle-fed baby there may be excess of fat in the stool, shown by a grey colour, or there may be curds; yellow-brown curds mean excess of calcium; yellow-green ones, excess of sugar, starch, or fat; This means that the milk mixture that is being given needs readjusting. (*See* Section 39.)

The mother ought also to satisfy herself that *the*

urine does not smell strongly, that it does not stain the napkins, and that there is a sufficient quantity.

A breast-fed child has odourless excretions; only in artificially-fed babies is there a slight odour with both.

74. Is it advisable to give an infant an opening medicine as soon as he is born?

It is now proved that the giving of medicine to a babe immediately after birth is unnecessary—nay, that it is hurtful. The advice to *give no aperient to a new-born infant* ought to be strictly followed. If the baby is costive, try the effect of a little Demerara sugar or honey dissolved in a little water, or a teaspoonful of orange-juice with sugar. Or a little boiled water after the feed, with or without sugar, may be sufficient. If in four hours it should not have taken effect, repeat the dose. Crushed honeycomb is sometimes used to open the bowels of a new-born babe, and where there is costiveness it answers the purpose exceedingly well, being far superior to castor oil.

If after twelve hours a new-born babe has not made water, the medical man ought to be informed. Be particular in attending to these directions, or evil consequences will inevitably ensue.

75. How soon may an infant dispense with napkins?

A baby of three months and upwards ought to be held out before and after each meal over a small chamber or dish. There is no reason why this should not be started on the day after its birth, providing the child is not held out too long, *i.e.* longer than a quarter of an hour, or allowed to get cold. If such a plan were adopted, napkins might be dispensed with at

the end of twelve months, anyhow by day, and the child would be induced into clean habits, a blessing to himself, a comfort to all around, and a great saving of dresses and of furniture.

A dirty child is the mother's disgrace.

Ailments, Disease, etc.

76. A new-born babe frequently has a collection of mucus in the air passages, causing him to wheeze; is this dangerous?

No; not if it occurs *immediately* after birth. It generally leaves him as soon as the bowels have been opened, or even before if he gives a good cry, which he usually does as soon as he is born. But if there is any excess of mucus either in or about the mouth, impeding breathing, it must be removed with a soft cloth, or wisps of cotton-wool.

77. How would you prevent "stuffing of the nose" in a small babe?

Applying a little vaseline or cold cream on the bridge of the nose (the old-fashioned remedy was tallow) answers the purpose. It should be applied every evening just before putting him to bed, but make quite sure the nose is clear first.

If the "stuffing" is severe, dip a sponge in hot water, as hot as he can comfortably bear, and put it for a few moments to the bridge of his nose. Ascertain that it be not too hot by previously applying it to your own face. As soon as the hard mucus is within reach it should be carefully removed with a silk handkerchief or a little spill of cotton-wool. "Stuffing" of the noise is occasionally a sign of constitutional

disease, and if persistent a medical man should be consulted.

78. Some people say that new-born female infants have milk in their bosoms and that it is necessary to squeeze them and apply plasters to disperse the milk. Is this true?

The idea of there being real milk in a baby's breasts is refuted, the squeezing of the bosom is barbarous and the application of plasters is useless. The breasts of a new-born infant, whether male or female, are sometimes considerably swollen, but nothing should be done, as the swelling disappears in the course of a few days.

79. What are the causes of flatulence, and what are the remedies for it?

Flatulence most frequently occurs in bottle-fed infants, especially if they are over-fed. This is an additional reason, if one were required, for breast-feeding a child and keeping him entirely to the breast for the first four or five months. If that be found impossible, then care in the method of feeding and the right kinds of artificial food and those which are least likely to cause wind must be resorted to, *i.e.* those with reduced starch contents. (*See* Sections 38, 39, and Appendix II.) It must be realized, however, that flatulence in an artificially-fed babe can be due as much to the manner in which the child gets his feed as to the contents of that feed.

Flatulence in a breast-fed baby is nearly always present in a minor degree, and is due to the babe sucking air with the milk, or getting the milk too fast, the mother failing to hold it back at the beginning of

the feed. This holding back of the milk is necessary where the mother has an excessive supply, in full and large breasts; it is done by holding the breast in a clean hand and pinching the base of the nipple to reduce the stream.

The symptoms come on soon after food. The child becomes restless, cries fretfully and kicks its legs; its stomach is swollen and it cannot sleep, or, should it sleep, its slumber is disturbed. Wind in a short time is passed either by the mouth or the bowel; if expelled by the mouth acid sometimes comes with it. If the attack is at all severe the little sufferer turns pale, the legs are drawn up, the abdomen is hard and distended, and he gives a piercing and a long harsh scream; relief is only obtained by expulsion of the wind.

If he is put to the nipple to comfort him he turns away from it and cries bitterly. I merely mention this practice to condemn it, because *giving a child food when he has stomach-ache is one of the worst things you can do.* Your nerves are relieved at the expense of his stomach.

What to do.—Breast-fed and bottle-fed babies must be held upright after their feed, looking over the mother's shoulder, and gently rubbed or patted on the back. This should be continued for at least 20 minutes when the baby is subject to wind, and never for less than 10 minutes in a normal child.

If, notwithstanding these precautions, the babe should suffer from flatulence, three drops of brandy in a little boiled warm water, or half a teaspoonful of dill-water, aniseed water or sal volatile may be given separately or added to the food.

Warm olive oil, well rubbed by a warm hand over the bowels for a quarter of an hour at a time, will frequently give relief. Turning the child over so that his abdomen may press on the nurse's lap will often afford great comfort. When he is suffering severely a warm bath generally gives immediate ease in flatulence, for it acts as a fomentation to the bowels. But after all, a dose of mild aperient medicine, *e.g.* magnesia, may have to be resorted to when the baby is suffering severely from an attack of wind.

Remember at all times prevention is better than cure, and I would remind you of the importance of getting up as much wind as possible in your child after his feed before placing him in his cot, of seeing he does not get his feed too fast or too slowly, and of realizing that an adjustment of diet in an artificially-fed babe may be needed.

What not to do.—Beware of giving quack medicines. All such must be banished from the nursery. They may contain opium, a most dangerous drug to give an infant.

80. What are the symptoms, the causes, and the treatment of "griping" of an infant?

The child draws up his legs, screams violently, and if put to the nipple turns away from it and cries bitterly; he strains as though he were having a stool; if he has a motion it will be slimy, curdled, and perhaps green. If, in addition, he passes a large quantity of watery fluid the case becomes one of "watery gripes" and requires the immediate attention of a medical man.

The causes of gripings or gripes may arise either

from the infant or from the mother. If from the child, it is generally a consequence of unrelieved flatulence due to improper food or to over-feeding; if from the mother, it may be traced to her having taken either some highly indigestible food or some drastic purgative. (*See* Section 31.)

What to do.—The treatment must of course depend upon the cause. If the griping arises from over-feeding or improper feeding, I would advise stopping all food and giving boiled warm water, with one or two drops of brandy or dill-water in it. Give the boiled water, slightly sweetened, instead of one feed, or, if the disorder is severe, at every feed-time for 24 hours. A mild laxative, such as olive oil or paraffin, may be given, but give no drastic purgative without your medical man's advice. Warm fomentations may be applied to the bowels, and the mother or nurse may gently rub the stomach with some warm olive oil.

If the cause arises from the mother's imprudence in eating, or from her taking violent medicine, a warm bath usually affords instant relief. The baby will generally soon fall into a sweet sleep and awake quite refreshed.

What not to do.—Do not give opiates, astringents, chalk, castor oil, or any quack medicine whatever. To make sure that your child will not suffer from your indulgence in unsuitable diet, beware of all food containing "pig" in any form; beware, also, of shell-fish, pears, and alcohol, and do not smoke to excess. You may find that there are certain foods which give your baby gripes but do not affect you. Cut these out of your diet at once. (*See also* Sections 29, 209.)

81. What occasions hiccough, and what is its treatment?

Hiccough is a disorder of such a trifling nature as hardly to require interference. It may generally be traced to taking the feed too fast or to over-feeding, or is due to flatulence (Section 79). Should it be severe, four or five drops of dill- or aniseed-water or brandy and attention to feeding are all that will be necessary. But if hiccoughs persist, call in your doctor.

82. What are the best remedies for the costiveness of an infant?

If every babe, from birth, were held out at regular intervals and later on were put upon his chair, costiveness would not so frequently be found. It is wonderful how soon, in the generality of cases, the bowels may thus be brought to work regularly. I know many careful mothers who have accustomed their children to do without diapers altogether after the first months. The little trouble entailed is amply repaid by the good consequences that ensue.

I am strongly against the frequent administration of opening medicines, which only increases the mischief tenfold, but it may sometimes be necessary to give a single dose. The following should be given a good trial before resort is made to aperients, however:

Gently rub the stomach, starting from the right side and massaging to the left, after his bath in the morning and again when preparing him for bed. The hand may first be anointed with a little olive oil to prevent injury to the skin. When a breast-fed child is constipated, if the mother takes stewed fruit it may set matters straight. In a bottle-fed baby the

milk mixture may need adjustment, and you must take note of the appearance of the stool. (*See* Section 73.) Insufficient food is a frequent cause of constipation.

Whether the child is bottle-fed or breast-fed, increase the fluid by giving boiled water, and increase sugar little by little at each feed. This increase has a definite aperient effect. The juice of an orange, in which sultanas and a little brown sugar have been soaked overnight and strained away in the morning, is a homely remedy; start by giving a teaspoonful of it, increasing the amount gradually. (*See* Section 38.) Honeycomb, crushed up and given in teaspoonful doses, is also effective. Should these measures fail, give a laxative in the form of olive oil or liquid paraffin. This is provided in palatable form by such proprietary products as Semprolin, Cristolax and Virolax, or the pure oil can be mixed with red-currant jelly.

Should stronger measures be called for, an aperient that can safely be administered by a mother to her baby is one or two teaspoonfuls of fluid magnesia (Dinneford's or Phillips's), made palatable by the addition of a little sugar.

An excellent remedy for costiveness in a baby is a *soap suppository*. It is made by paring off a piece of white curd soap the size, in circumference, of a date-stone, and about half an inch long, and rolling it round and round in the fingers. This is administered by dipping it in a little warm water or sweet oil and then gently introducing it up the bowel in the same manner as you would an enema pipe. It must be left there, and in a minute or two will be expelled and instantly the bowels will be comfortably and effectively relieved.

Where a babe has been constipated over some days an initial *enema* is advisable. The right person to administer this is a hospital-trained nurse, but you may have to do it yourself. All you will need is a Jacques's rubber tube or catheter, and a funnel. Vaseline the end of the tube and very gently insert this into the back passage of the child; no force should be used. When it has gone in 2–3 inches attach the funnel to the other end and run in about 3 ounces of olive oil. As alternatives you can use 3 ounces of saline, made in the proportion of half a teaspoonful of salt to one pint of hot water (100° F. or 30° C.), or of hot water and soap, just enough to make the water soapy. After running in the fluid, withdraw the tube and hold the buttocks together for a few minutes and then place the child on the chamber. After this an aperient may be indicated, such as a tablet of grey powder, $\frac{1}{6}$–$\frac{1}{4}$ grain, crushed up and given in honey or fruit-juice.

Should the baby appear to be in pain, it is imperative you should consult your medical man before trying purges, as there are conditions when a drastic purge will spell disaster. Remember that a very common cause of constipation is that the baby is not having sufficient food. (*See* Section 33.)

If it is absolutely necessary to give further opening medicines, it will be well to vary them, that is to say, to give at one time confection of sulphur or senna, or a mixture of fruit juices such as Leniva; at another, fluid magnesia, sweetened; and at another, administer the soap suppository. But wait at least two days, the bowel being costive all the while, before resorting to another aperient.

Let me, at the risk of wearying you, again urge the importance of avoiding as much as possible giving a baby purgative medicines, especially castor oil. Look instead to the quantity and quality of the feeding.

83. But may not constipation be due to causes other than sluggish bowels or unsuitable foods, and be of a very serious nature?

Certainly. There may be a fissure inside the back passage, or some mechanical obstruction to the bowel dating from birth. Very rarely there is a condition where the large bowel is greatly enlarged and weakened.

If there is constipation associated with vomiting, your medical man must see the baby, who may have a rupture which will not return, or one part of the bowel may have doubled itself into an adjacent part—an intussusception—bringing about a stoppage. Constipation also may be due to tuberculosis of the abdominal organs.

You will see, therefore, that costiveness may be a very serious matter indeed. This is more likely to be the case if there is *blood from the back passage* or *persistent vomiting*. You can therefore understand why the administration of purgatives may prove a disastrous blunder.

84. Will you explain to me the condition of "looseness of the bowels" in a baby, and its significance?

Diarrhœa, or "looseness of the bowels," may be due to a minor indisposition or indiscretion of diet in a bottle-fed baby, to irregularity in feeding, or to insufficient attention to the cleanliness of the bottles

and other utensils in the food preparation. If it persists, and the colour and odour of the motions change, it may mean the onset of the serious condition known as gastro-enteritis, which is described below.

In a breast-fed child a loose stool may be passed if the mother has taken a saline aperient, or has eaten an article of food which was tainted or of an indigestible nature (Sections 29, 31). The mother may not be well in herself; she may be suffering from an infection. The menstrual periods of some mothers may upset their baby's bowels, as may also any mental upset, such as worry, anxiety, anger or grief, which she may be experiencing.

It is well to miss one of the child's feeds and give him boiled water, drawing off the mother's milk with a breast-pump. Should the looseness not be repeated, and the condition in the mother have passed, breast-feeding can be restarted. It may be necessary to prolong this period of abstention for a whole 24 hours. If the looseness persists for more than 4 to 6 hours after ceasing the breast, if it becomes more frequent, or if vomiting is added and the motions become green and contain mucus, then medical advice should be sought without further delay.

The source of the trouble may, however, be in the child himself, not in the mother. Take the baby's temperature, and should it be raised, your doctor must be immediately sent for. Similarly, if there is violent pain and straining with rapid loss of weight, and the stools become rapidly green, with the appearance of jelly-like material or of blood, there must be no delay in sending for him.

A frequent cause of loose motion is insufficient food, the amount then being always small. See that the baby is getting from the mother the requisite quantity of milk for its weight and size. This can soon be ascertained by means of a "test feed" (Section 33).

Then there is, during the hot weather, the condition of *gastro-enteritis*, which is a serious matter. The symptoms include frequent slimy and frothy green stools resembling frog-spawn, much straining, and a temperature of 99°–100° F.; the baby rapidly loses weight and becomes sunken-eyed, with a dry skin, and there is vomiting from the first. In the end the motion is purely mucus and blood. This is a condition you should never tackle yourself; your medical man must immediately be sent for. Meanwhile stop all feeding and give the baby as much as he will drink of salt and water (a level teaspoonful to 2 pints) in a bottle. Three ounces per pound weight of the child in twenty-four hours is a useful guide as to amount.

In the case of the bottle-fed baby an occasional loose or green stool is not of rare occurrence, and unless repeated, or associated with temperature, vomiting and straining is not to be worried over. A loose motion or green stool may occur through a change of milk or food, or a change of air, during teething and during the course of a cold. The food he is being given may not suit him; you may not be giving him sufficient, or you may be giving him too much; the ingredients may not be in the right proportions. Should the loose stool persist or be more frequent, should the straining be more severe, and

should blood appear in the motions, then he is suffering from the serious condition of gastro-enteritis which I have already described.

In countries abroad there are other infections of which diarrhœa is a symptom, and by which the baby may be affected—dysentery, typhoid, cholera, etc.—all conditions which your medical man alone can attend to.

In bottle-fed babies there is one thing about which a mother cannot be too careful—the maintenance of absolute cleanliness and sterility in all utensils used in the preparation of the feeds. The purity of the milk, the maintenance of that purity once the bottle or tin has been opened, its freshness, and the suitability of the place in which it is kept are most important matters. It is impossible to overstress their vital importance.

85. What is the correct treatment of "looseness of stools"?

The immediate treatment, in both breast-fed and artificially-fed children, is to stop the next feed and give saline instead (a heaped teaspoonful of salt to 2 pints of boiled water) in amount equivalent to the feed you are giving. Keep the child warm; if he is very young and under weight, apply olive oil all over and wrap him in wool. If the child is older, put a flannel band round the stomach. Of course, place him in his cot and light a fire in the nursery. Place hot-water bottles round the cot between the blankets. Take scrupulous care with the toilet of the buttocks; do not allow the child to lie in a green motion, but change him with as little disturbance as possible, cleaning the parts thoroughly with warm water, drying them with a piece of soft nun's veiling or

a soft towel and vaselining them. Should the "looseness" not be repeated, return to normal feeding with the breast-fed child. For the bottle-fed baby a fat-free food or one low in fat is indicated for a day, or one with a high protein content. (*See* Appendix II.)

Should the "looseness" continue, however, and become more frequent, should blood appear, the motions become jelly-like and resemble frog-spawn (Section 84), you must immediately send for your doctor. The child may collapse. Should you fear that there is danger of this a few drops of brandy in the saline, or in a little water given in a spoon, will soon revive the child. The great aim of your treatment should be to maintain the fluids in the body of the child and to keep him warm. Do not give any drugs yourself.

Should the diarrhœa be due to unsuitable food, the appearance of the child's stool will be of assistance. If there is excess of curds, that is, visible milk-clots, the child is having too much casein or milk protein, and either a food with less protein in it is indicated, or else the food should be given in greater dilution. Should there be a greasy-looking stool with grey specks or grey masses in it, the fats of the food are not being digested, and a diet with little or no fat should be tried. The sugars are less likely to cause diarrhœa than the proteins or fats, but when they do, the stools show fermentation, with much gas on passing, and cause soreness of the buttocks. (*See* Appendix II.)

When the diarrhœa has ceased, it is not advisable, with the artificially-fed child, to return immediately to the previous strength of feed even if it was not the

food that was at fault; weak dilutions should be given at first, and a gradual return made to the previous strength.

In children who have been weaned and are on more or less solid food, the same treatment is carried out, that is, the food is stopped and fluids are given; a little glucose may be added to the water, a teaspoonful to half a pint. If medical aid is difficult to obtain, grated fresh apple and well-mashed over-ripe banana can be given, one to four tablespoonfuls every two hours. Then as soon as the symptoms abate, the child may take a cereal, cocoa, purée soups, potato gruel, beef-tea, or glucose jellies; milk should not too quickly be reintroduced, and is best administered at first in the form of milk puddings and broths.

86. Is there such a condition as chronic diarrhœa in a child?

Yes; there are certain conditions which may cause a chronic looseness of stool, the commonest being an insufficient amount of food. Also, there are children who are unable to digest certain constituents of the milk, especially the proteins or the fats, and there are children with irritable bowels.

You can do nothing to treat or rectify these conditions, except, of course, the first, without your doctor's assistance. (*See also* Section 232.)

87. Of what condition may vomiting be a sign?

Many thriving babies frequently vomit after taking the breast. Nevertheless, we cannot look upon such sickness otherwise than as indicating either a disordered or an overloaded stomach. If the child vomits and yet thrives, it is a proof that he overloads

his stomach or takes the feed too rapidly. The mother must then only permit him to suck for a shorter time, and not so fast, so lessening the quantity of milk taken. Another frequent cause of a little of the food returning is failure on the mother's part to hold the babe up long enough after the feed (Section 79).

If he vomits and does not thrive, she must first of all look to the amount of milk the child is getting at each feed, for he may be getting too much. If it is correct, the child's disorder may be due to some digestive trouble of the mother, such as flatulence, heartburn, constipation or, less directly, decayed teeth, which should immediately be put right.

Make sure that the baby's motions are normal both in quantity and in quality (*see* Section 73), and, if he is bottle-fed, make sure that his food agrees with him. Should the vomiting be associated with diarrhœa then a more serious view must be taken (*see* Section 84). In any case, if the vomiting persists you must consult your medical adviser.

88. My child has been vomiting and the vomit is projected right across the cot. What does this signify?

This is the one type of vomiting about which it is most important your doctor should be informed *at once*, as it signifies a serious abnormality in the formation of the child's stomach and the sooner he has attention the better chance of his recovery. It is not a condition you can deal with yourself.

89. What are the symptoms, the causes and the treatment of nettle-rash?

Nettle-rash manifests itself by several irregular, raised wheals, red at the base, white on the summit,

on different parts of the body; it seldom attacks the face. The child appears to have been stung by nettles, hence the name. *It is not contagious*, but it may occur in a child of any age and may recur many times. It comes and goes, remaining only a short time in one place, and produces great heat, itching and irritation, sometimes to such a degree as to make the child feverish, sick and fretful. He is generally worse when warm in bed or when the surface of his body is suddenly exposed to the air. Scratching the skin, too, always aggravates the itching and tingling and brings out a fresh crop of wheals.

Nettle-rash in the case of a breast-fed infant may follow the mother's indulgence in fried fish, shell-fish, mackerel, or tinned foods, especially if tainted. If there is a family tendency to or a family history of asthma, hay fever, or eczema, the milk he drinks, the presence of animals in the house, or the material stuffing the bed on which he lies may be the cause. (*See* Section 178.)

What to do.—Nettle-rash is not a serious complaint and may readily give way to a mild cooling mixture or laxative—magnesia, kaolin, or bicarbonate of soda—and attention to diet. There is nothing better to relieve the irritation of the skin than a warm bath (98·4° F. or 37° C.) with a drop or two of lysol in it, just enough to make the water cloudy, or bicarbonate of soda, 2 ounces to 10 gallons. Powdering with fuller's earth or an application of a calamine lotion after the bath helps to allay the irritation.

Reduce the carbohydrates in the child's diet, if he is weaned; if he is bottle-fed a special food may be indicated. (*See* Appendix II.) Always stop all

chocolates if the child is old enough to have them. If it is a severe attack of nettle-rash call in a medical man.

90. What are the causes and symptoms of thrush, and how can it be prevented and treated?

Thrush is a disease frequently seen in bottle-fed infants, and is due to lack of cleanliness, especially in the feeding-bottles. A child brought up for the first three or four months entirely on the breast seldom suffers from this complaint if the nipples are kept properly clean. (*See* Section 31.) Thrush manifests itself in several irregular, roundish white specks on the lips and tongue, and on the inside of the cheeks and the angles of the mouth, giving the parts affected the appearance of being smeared with curds. Thrush may be mild or very severe. Sometimes the mouth is hot and painful and the child is afraid to suck, beginning to cry the moment the nipple is put into his mouth. Sometimes, although rarely, the disease affects the whole of the alimentary canal.

What to do.—If the child is at the breast keep him, for a time, entirely to it, but do not let him be always sucking, as that will not only fret his mouth, but likewise make the mother's nipple sore and cause cracks.

Destroy all dummies. See that the nipples are well washed once a day with soap and water, and wiped, both before and after a feed, with sterile water. See that there are no cracks or sore places on them; it is well to anoint the nipples with a little glycerine and borax before giving the babe suck.

If the child is bottle-fed, look into the preparation of the milk and the cleaning of the bottles (Sections

37, 40). If he has been weaned, then keep him for a few days entirely to a milk diet—that is, on pasteurized, tuberculin-tested milk. Boil the milk, if the weather is hot, and store it in a cool place, properly protected from contamination.

The best application for the baby's mouth is the old-fashioned one of glycerine and borax, one part borax to five parts of glycerine by weight. As an alternative, clean the mouth out with a weak solution of Milton, or hydrogen peroxide (a teaspoonful to the pint).

The general hygiene of the child should be carefully scrutinized.

91. Are there any forms of paralysis which date from birth?

Yes. Sometimes an infant develops an abnormality of the brain while yet within the mother's womb. Such a child may suffer from stiffness and contraction of the limbs and body, and the head is thrown back. It can never develop mentally if the mischief is great or affects certain parts of the brain.

If the labour has been difficult and prolonged, the infant's brain may have been injured by the instruments which had to be used to give him birth. Little may be noticed for some months—perhaps not until it is time for him to walk. A birth injury of this kind causes stiffness or weakness of the legs or arms, usually the legs. Both legs and arms may be affected, or the paralysis may be on one side of the body only. The capacity for mental development varies, and in some cases mental development may be absent without any paralytic symptoms being shown.

Treatment.—Send for your doctor when you first notice anything abnormal. The child's general health requires attention. Wrap the paralysed arm or leg in wool and keep it still; see that it does not get twisted or cramped when the baby's position is altered. No rubbing or massage must be attempted; massage and exercises may be ordered by the doctor, but this must be done by him alone.

On the birth of a child, *one side of the face* may appear drawn up, this being due to pressure during birth on the nerves supplying the muscles of the face. In two or three weeks the child will recover; no treatment is needed.

An arm may appear useless and immobile after birth. Your doctor should at once be told, for this may be due to a broken bone or to dislocation at the shoulder. If not, it is probable that some injury has been done to the big collection of nerves that supply the arm. Nothing must be done in the way of treatment. The arm must be loosely bandaged to the side, and allowed to rest for several weeks that the injury may be repaired by Nature. Later your doctor may order massage or electrical treatment, and he will certainly want an X-ray examination.

92. Soon after birth I noticed a lump in the muscles of my child's neck. What is it?

This is due to a hæmorrhage into the muscle during birth, causing a swelling generally about the size of a pigeon's egg. It will gradually disappear with gentle expert massage under the supervision of your doctor. If neglected it may not be absorbed and will cause a shortening of the muscle and so lead to permanent

"wry-neck," which later on will require operative treatment.

93. What is a nævus, or birthmark, or "port-wine stain"?

It is an over-development of the smallest blood-vessels situated in the skin, and generally appears in the head or neck. If it is very small it often disappears, and should be left alone. But if it is large or disfiguring or appears to spread rapidly, it should be shown to your doctor, as such marks can successfully be removed, as long as they are not *too* large.

94. My child is tongue-tied. What ought to be done for him?

If he cannot suck from the nipple on account of it, tell your medical attendant and he will easily remove the cause, but as a rule no treatment is necessary. It should be realized that this is a rare condition; a mother should not let herself be worried by ill-advised neighbours or friends who tell her that her child is tongue-tied, but should immediately consult her doctor.

95. My baby cries when he passes his water. What is the cause?

Your baby may have inflammation of his bladder, or he may have a sore in or near the opening where the water comes out. In the case of a girl, if this orifice is red you must be sure, when changing the napkins, that you dry the parts well. If sore, smearing on a little pure white vaseline may be sufficient;

but if there is a yellow discharge you must immediately inform your medical man.

In the case of a boy, his penis may appear swollen and sore, and if you are unable to draw the outer skin back without hurting him, he may need circumcising. Now the question of *circumcision* is a very important one, and if the operation is done it may save the child a great deal of trouble in the future. So seek the advice of your medical man at once. The earlier the operation, the less the babe will suffer.

If the skin is free but the penis is sore, bathe it in a little cold water each day, seeing that it is perfectly clean, and that no yellowish-white specks remain after it is gently cleaned with wool.

If none of the above causes are present to account for the pain, it is most important that you should consult your doctor. It will be a great help to him if you send him a specimen of the child's water to examine.

96. Is anything to be learned from the cry of an infant?

A babe can only express his wishes and his requirements by a cry; he can only tell his aches and pains by a cry; it is the only language of babyhood. To a mother, however, it is the most interesting of all languages and one that can well be interpreted.

The cry of passion is a furious cry; the cry of sleeplessness is a drowsy cry; the cry of grief a sobbing cry; when roused from sleep a shrill cry. The cry of hunger is a hoarse passionate cry, ceasing when the hunger is appeased. The cry of teething is a fretful cry. Pain cries, when referring to the ear, are a continuous, often screaming cry, the head being moved

about from side to side, the little hand often wandering up to the affected side of the head.

The cry of stomach-pain is an interrupted straining cry, not so piercing as that of earache; it is accompanied with a drawing up of the legs to the belly. The cry of exhaustion is a whine; the cry of bronchitis is a gruff and phlegmatic cry; the cry of inflammation of the lungs is more a moan or grunt than a cry. The cry of croup is hoarse, rough and ringing, or is whispering, and is so characteristic that it may truly be called the "croupy cry." The cry of inflammation of the membranes of the brain, or meningitis, is a piercing shriek in the intervals of silence, a danger signal most painful to hear. The cry of a child recovering from a severe illness is a cross and wayward, tearful cry. He bursts out without rhyme or reason into a passionate flood of tears—into a "tempest of tears." Tears are, in a severe illness, to be looked upon as a good omen, as a sign of amendment; when a child is dangerously ill, tears are rarely, if ever, seen. An infant does not shed tears, however, until he is four or five months old.

A frequent cause of a child crying is that he is wet and uncomfortable, and wants drying and changing. Crying may indicate, too, that he is suffering from wind (Section 79).

97. What are the causes of convulsions in an infant?

They may be associated with the onset of any acute illness, *e.g.* a fever, and are sometimes associated with disturbance of the bowels, severe constipation, or worms. They may occur during an illness such as whooping-cough, measles, influenza, or inflammation

in the ear. On the other hand, there may be no obvious cause of their origin.

If your child has convulsions, send immediately for your doctor and apply the treatment described in Section 51.

98. Are there other conditions resembling convulsions or fits?

Yes. There are varying degrees of purposeless movements which you might think to be fits or to be heralding fits, several causes of which are here enumerated.

St. Vitus's dance.—(*See* Section 216.)

Breath-holding.—A child may hold his breath from temper or naughtiness till he goes blue in the face, but he does not lose consciousness and the attack never lasts long. This condition is usually seen in the pampered child, and the cause is too much attention. The treatment is a cold douche or, in older children, a slap on the back.

Child-crowing or croup.—(*See* Section 174.)

Tetany.—This is very rare. The thumbs are clenched in the palms and the fingers closed over them, or the thumb-tips are placed between the middle and ring fingers, the fingers being bent at the knuckles but otherwise extended. The soles of the feet are hollowed and sometimes turned in, the toes being flexed and the heels drawn up. The hands alone may be affected, or the hands and feet together; in severe cases the muscles of the limbs are stiff. The hands and feet are often swollen. The body muscles may be involved, and the head may be thrown back; even the jaw muscles may be in a state

of spasm. *The babe is not unconscious.* The affliction is a painful one, causing the child to cry out. This is a general condition due to error of diet, the child needing more calcium and vitamin D. Your medical man must be sent for to give treatment.

Head-nodding.—This movement may be up and down or from side to side, and is often associated with peculiar sideways oscillations of the eyes when the child glances to the side. This too is a condition for your doctor to attend to.

Masturbation.—A child may play with his private parts and then go into a rigid state. This is not a true fit, but the condition is one for your doctor to attend to. Much can be accomplished by watching and care.

Head-retraction.—The head is thrown back and rigidly fixed, the onset being often accompanied by a ghastly scream. This is a very serious condition and no time should be delayed in sending for your doctor as it may herald the onset of inflammation of the brain.

A word about *epilepsy.* This rarely starts before the child is a year old, and all the other factors should be eliminated before a child has the awful stigma of "epilepsy" attached to it.

In all fits, no matter how slight, the doctor should be consulted.

99. My baby's ankles are very weak; what do you advise as a means of strengthening them?

If his ankles appear to you weak or *show any sign of deformity or lack of movement,* you must get advice immediately from your medical man. If there is

only slight weakness but full movement, every morning after his bath let the ankles, after drying, be well rubbed with turpentine or camphor liniment or, even better, with pure olive oil.

Do not let him be put on his feet early. Until the babe is two years old there is no need to "teach him to walk" (Section 157); he will get on his feet of his own accord when he needs to.

If you see that the bones of his legs are deformed or bowed, that the movement of any limb causes him to cry, or that a limb fails to move, immediately consult the doctor. (*See* Sections 214, 215, 233.) Without having competent advice on the subject, do not, on any account, use instruments or any mechanical supports.

Let the child wear shoes with straps over the insteps, not boots; boots will only increase the weakness of the ankles.

PART II

CHILDHOOD

100. At twelve months old, do you still recommend a child to be put in his bath to be washed? And should he be bathed night and morning?

Certainly I do, that his skin may be well and thoroughly cleansed. But once a day will be sufficient. It is better now to bath him in the evening, as he will be up to all sorts of mischief and into every scrap of dirt he can find during the day. If he is poorly, however, wash him in the morning.

Do not use very hot water. The head must be wetted before he is placed in the tub, and just before taking him out pour a jugful of water over him and down his loins. The bathing should be done rapidly, and he must be quickly dried with soft towels, dressed, and put to bed. He must not be allowed to remain in the bath longer than five minutes or to stand about and get chilled. Take care that the soap does not get into his eyes; if it does, quickly bathe it out with clean water.

A morning wash of hands and face is recommended, and it is never too early to start the habit of washing hands before meals; as soon as he "sits to table" this should be instituted.

101. When the child is a year old do you recommend that cold or warm water be used?

If it is winter, a little warm water ought to be added so as to raise the temperature of the bath to that of new milk *i.e.* 90–98° F. (32–36° C.); in the

summer the water should be tepid, 86–95° F. (30–33·5° C.). If the bath is too cold the washing will not be efficiently completed, and the discomfort will cause the child to take a dislike to bathing.

102. Do you recommend that the child, after he has been dried with a towel, be rubbed with the hand?

I do, as the friction encourages the circulation and causes the skin to perform its functions properly. The back, chest, belly and limbs are the parts that should be well rubbed.

103. Does washing the child's head make him more liable to catch cold, and does it not tend to weaken his sight?

It does neither one nor the other. What it does do is to cleanse the scalp and prevent scurf, and by that means cause a more beautiful head of hair. As the child gets older the head may be washed separately, over a basin; this prevents too long dawdling in the bath or bathroom in cold weather. Remember that rubbing strengthens the hair and makes it grow. After each washing the head should be well dried and brushed with a soft brush, the brushing causing a healthy circulation in the scalp.

If there is *excessive scurf* use an olive-oil and soft-soap shampoo. I have found the rubbing-in of a little olive oil, white vaseline, or macassar oil, after the head has been well dried, to be beneficial. Let it be rubbed well, for five minutes at a time, into the roots of the hair.

In the case of a very young child, in whom the bones of the top of the head are not yet closed, a little egg yolk applied to the scalp will help to remove

scurf and prevent its formation. Rubbing the scalp is not advisable with so young a child, and no soap should be used. White vaseline may be used instead of egg.

104. How should the toe-nails be cut?

The right way of treating a toe-nail is to cut it in a straight line; the wrong way is to cut the corners of the nail—to "round the nail" as it is called—which frequently produces "growing-in" of the nail, a painful condition which may necessitate its removal.

CLOTHING

105. Have you any remarks to make on the clothing of a child?

His clothing should be loose and full in every part, and free from tight strings, as advised in Section 16, so that there may be plenty of room for the unhampered development of the rapidly-growing body.

A boy of two years old needs a vest of knitted wool with short sleeves, knickers, a woollen jersey, a pair of woollen socks and broad-toed shoes—quite half an inch wider than the width of the foot. In the cold weather the vest must be of thicker wool or a small bodice can be worn. For outside wear in winter a knitted or woven wool jacket and trouserette suit is advisable.

There is no necessity to clothe girls differently till they are two or three years old; then a dress should be worn instead of jersey and trousers, although knickers should be worn under the dress.

In summer thinner vests should be worn and lighter dresses when a child has become acclimatized to the heat and there is no risk of sunburn. (*See* Section 280.) Sun-suits are healthy and cooling for

holidays by the sea, with sandals for the feet. But in town a white dress or coat and knickers made of cotton or drill will be most cooling for the body.

Here I am going to plead on behalf of my younger brothers and sisters. Do not clothe all your children, as regards their outside garments, in the same material, colour and style. Each child is a separate individual, differing from the others, maybe, in outward form, feature and complexion. *Make a separate study of each.*

Lists of the clothes that will be needed by a toddler and by a child of 3 to 5 years of age are given below:

For the Toddler

3 or 4 woollen vests
4 pairs of knickers
2 to 4 jerseys
4 to 6 cotton crawlers
2 knitted jacket and trouserette suits with gloves
4 to 6 pairs of socks
2 or 3 woollen bonnets
1 dressing-gown
3 flannel nightgowns
4 to 6 feeders
6 to 12 handkerchiefs

For the Child of 3 to 5

3 or 4 day vests
2 liberty bodices } for girls
4 pairs of drawers } for girls
4 dresses } for girls
4 pairs of knickers } for boys
4 to 6 shirts } for boys
2 or 3 cardigans, overalls or pinafores
2 or 3 flannel nightgowns
2 night vests
1 dressing-gown
6 pairs of socks (or stockings)
2 pairs of outdoor shoes
1 pair of indoor shoes
1 pair of bedroom slippers
1 outdoor coat and hat
1 pair of leggings
1 mackintosh and hat
1 pair gum boots
gloves

106. What are the best kinds of hats for a child?

In winter, a knitted cap to cover the ears; in summer, a linen or light straw hat, with a brim to shade the eyes. Be sure the hat is light and loose-fitting, allowing free passage of air for evaporation of the perspiration; tightness around the forehead or temples

will cause a headache. It is not advisable to cover a child's head with felt or any such impervious material, which allows no air to escape or enter.

A child should not be permitted to lie in the glare of the sun without his hat, as this is likely to cause sore eyes, or worse—sunstroke. (*See* Section 280.)

107. Have you any remarks to make on keeping a child's hands and legs warm when he goes out in winter time?

When a child either walks or is perambulated in winter weather, be sure and see that both his hands and legs are well protected from the cold. There is nothing better for this purpose than woollen gloves and woollen "pull-ups" coming well up to the stomach. If stockings are used they should come well over the knees.

108. Do you approve of children wearing flannel night-gowns and using a dressing-gown?

Children frequently throw off the bedclothes, and have occasion to be taken up in the night, and if they have not flannel shirts on are likely to take cold. On this account I recommend *that their nightgowns be of flannel*, and *sufficiently long* to cover the feet. When the children are older, flannel pyjamas are recommended. Knitted socks are advisable till the child is two years old. A flannel dressing-gown should be provided.

109. Do you advise that a child be lightly clad, that he may be hardened thereby?

A child should never be clothed so lightly that he is unhappy and blue with the cold; it is like exposing a tender plant to frost and wind to harden it. But no two children have the same reactions to heat and cold, and more people overclothe their children than

underclothe them. Follow the instructions in the previous sections and watch the reactions of your child to the weather. It is mostly a matter of common sense.

110. At what time of the year should a child leave off his winter clothing?

Winter clothing ought not to be left off until the spring is far advanced. It is best to be on the safe side and allow the winter clothes to be worn until the weather is settled and warm. The old adage, "Ne'er cast a clout till May be out," is very good and should be borne in mind.

111. Have you any remarks to make on the stockings and shoes of a child?

The child should wear, during the winter, lamb's-wool stockings that will reach above the knees, as it is of the utmost important to keep the lower extremities warm. Where a child uses pull-ups to go out in, socks may be used for indoors. The flannel knickers, or girl's drawers, should reach to the knees. *Garters should not be worn*, as they impede the circulation; stockings may be secured by means of suspenders attached to the bodice or a belt.

Be particular that the sock or stocking fits nicely—that it is neither too small nor too large. If it is too small, it will bind up the toes painfully and cause them to rise one over the other; if too large, it will wrinkle, and it may have to be lapped over or under the toes, and will thus give pain and annoyance, or cause blisters. If the toes are cramped, the normal action of the foot in walking is interfered with. Do not let the toe part of the sock or stocking be pointed; let it be made square to give room to the toes.

Let me urge upon you the importance of not allowing your child to wear *tight shoes;* they cripple the feet, produce corns and bunions, and interfere with the circulation and the correct development of the arches of the foot. A shoe ought to be made of soft leather and be of the same shape as the foot; the inner side should be straight. The toe part of the shoes should be broad and square, to allow plenty of room for the toes to expand in the action of walking.

Make sure, then, that there is no pinching and no pressure, and throw the shoes aside the moment they are too small. In the matter of shoes, you ought to be particular and liberal. See that they are sound and of good leather, for if not, they will let in the damp and, if the damp enters, disease follows. Shoes are preferable to boots for healthy children, and they should have a narrow strap buttoning over the instep.

It is impossible for either a stocking or a shoe to fit nicely unless the toe-nails are kept in proper order. (*See* Section 104.)

DIET

112. When he is twelve months old, how shall I feed my child?

The bottle should by now be discarded, and he should become accustomed to the digestion of undiluted cow's milk, instead of modified cow's milk or proprietary foods. Scrutinize the motions whilst the change is being made, and watch for curds in them. Remember, you may get a green stool or two during the change; if these persist, the milk must be temporarily diluted with water or barley water, and he must be accustomed *by degrees* to the digestion of

pure cow's milk. The daily quantity of milk, whether taken in liquid form or used in the preparation of gruels or puddings, is not now to exceed a pint. Food should be given by a teaspoon, or drunk from a cup or glass.

The following diet is suggested for the child of 1 to 2 years of age:

On waking (7 to 8 a.m.).—A tablespoonful of orange-juice with sultanas or raisins soaked in it overnight, or a like quantity of grape-fruit juice, or about two teaspoonfuls of tomato-juice, with sugar or glucose or honey.

Breakfast (8.15 to 8.30).—Half a cupful of gruel made from cornflakes or digestive biscuits, or some cereal made with milk and sugar, but do not overdo this. He may have the yolk of a coddled egg twice a week—that is, an egg just dipped in boiling water for a minute—or bread fried in bacon fat. Give him also bread or toast and butter, with shredded or peelless marmalade, golden syrup, Marmite, or honey, and a cup of milk to drink.

At 11 *o'clock* he may be given part of an apple.

Dinner (1 p.m.).—Pounded steamed fish, breast of chicken or turkey, liver, rabbit, or underdone, scraped beef or steak; mashed potatoes and sieved carrots, greens, cauliflower, or spinach; as a second course about 8 tablespoonfuls of milk pudding—tapioca, ground rice, sago or custard—baked apples or apple snow, purée of apricots or prunes, or jellies, *e.g.* glucose jellies. To drink, he should have water or lemonade, and stale bread should be given with the meat.

Tea (4 to 4.30).—Eight ounces of milk, bread and butter, sponge or plain cake (home-made and stale). Give him jelly, honey, golden syrup, or Marmite with the bread and butter.

Supper (5.30 to 5.45).—Four ounces of hot milk or a bowl of bread and milk, or a cereal food, with a biscuit, rusk, or bread and butter.

The following foods are *absolutely forbidden:*

Pork, veal, sausages, salt meat, haddock, bloater, kipper, mackerel, onions, new potatoes, plums, new bread, tea or coffee.

113. What alteration and additions to the diet would you recommend when he is two years old?

Breakfast (8.15 to 8.30).—He may be given crisp bacon in addition to the previous diet.

Dinner (1 to 1.30).—He may also have a slice or cutlet of mutton or lamb, cut up in small pieces, baked potatoes, peas, French beans, suet or steamed puddings, and stewed fruit, that is, fruit not made into a purée, though well cut up.

Tea (4 to 4.30).—He may have plain cakes with cherries or seedless raisins, and jam of any kind without pips or skins.

Supper (5 to 5.45).—He may like a mashed ripe banana, or a glass of milk and a biscuit or bread and butter, or, in winter, soup or a cup of Bovril or bread and milk.

But remember, if he is gorged with food, it will cause overloading of the stomach and constipation, making him irritable and cross.

See that during the winter months your child has cod-liver oil, pure or concentrated (Seven Seas), or a vitamin D preparation such as Ostelin or Radiostoleum or Virol, to help his bones and his teeth to form properly, and to build up his resistance to winter infections such as colds, coughs and influenza.

114. What puddings do you advise for children?

He ought every day to have a pudding of some kind for his dinner—a ground-rice, arrowroot, sago, tapioca, suet or batter pudding. Yorkshire pudding, mixed with crumbs of bread, and a gravy that is free from grease, may be given him in lieu of meat once or twice a week. A well-boiled suet pudding with plenty of suet in it is one of the best puddings he can have. It is meat and farinaceous food combined, *i.e.* includes both proteins and carbohydrate.

Pastry should be forbidden. The objection to fruit pies is the pastry, which is often too rich in fats and not cooked long enough to break the starch granules. But there is no objection to the fruit, which, cooked and free from stones, large pips, or seeds, is most wholesome.

115. Is it necessary to give a child "lunch"?

If he wants anything to eat between breakfast and his midday meal, let him have a piece of raw apple or a small glass of milk or a cup of cocoa, Marmite, or Bovril, with a biscuit or piece of bread and butter at 11 a.m. I do not believe in giving children sweets or food between meals; they should eat their fill and be satisfied at the table.

116. What do you advise me to do if my child is difficult over his food?

No two children are alike; some will eat anything and everything, and others will be difficult to suit. Some children are unable to take fats in any form. If your child is difficult about his food, *do not let him see you fussing over him.* Place the food in front of him and feed him with it; if he refuses, do not force him but, after a little coaxing, remove the plate and pass on to the next course. Do not overload his plate. You may have difficulty in making him eat vegetables, but often if he sees you eating the greens he will try them; a little sugar with the greens often assists. Be sure the food is well and properly cooked; taste it yourself. Do not let it get cold and greasy. Common sense and patience are the sec ets of success in the feeding of a difficult child.

117. Have you any remarks to make on the continued giving of cow's milk to a child?

It is an indispensable article of diet for the young, being most nourishing, wholesome, and digestible. The finest and healthiest children are those who, for the first four or five years of their lives, are given *a pint a day* of undiluted milk. There is no substitute for it, for milk contains every ingredient needed to build up the body, which is more than can be said of any other substance. To realize the fattening and strengthening qualities of milk, consider the growth of a young calf, who lives on milk and milk alone.

Do not let me be misunderstood. I do not mean that the mixing of farinaceous food with milk is not an improvement; but I want to impress upon you the fact that a child requires milk, and requires it for a long period.

I would here remind you again about the importance of choosing your dairy or milk supplier carefully. (*See* Section 37.)

118. But suppose my child has an aversion to milk, what ought to be done?

Sweeten the milk to suit his palate, or add just enough cocoa or chocolate to give it a flavour. A child will often take milk this way, when he will not otherwise touch it. After he has become accustomed to it thus, reduce the sugar and flavouring, until at length it is dispensed with. If a child still will not drink milk, you must try one of the proprietary foods, Allenbury's Milk Cocoa, Trufoods "Follow-on" Food, Cow & Gate's Chocolate Milk, Glaxo's Farex, or Robinson's Patent Groats.

If there is still difficulty you should consult your doctor.

119. Supposing milk should not agree with my child, what must then be done?

There are rare cases in which milk in any form does not agree with the child. This is called an idiosyncrasy (Section 132). Your doctor should be consulted, and he will make sure that it is not caused by, for example, maldevelopment of the stomach and intestines. You may have to use a special food such as Benger's Food, Cow & Gate's Lacidac, Allergilac, or whey or peptonized milk, but these should not be persisted in for longer than a few weeks.

120. Can you tell me of a way to prevent milk from turning sour in hot weather?

The souring of milk is always due to the growth of bacteria in it. So if the milk is fresh and pure, pasteurized or sterilized, it should keep for 24 hours or longer providing no contamination is allowed to occur. Be sure your receptacles are clean and boiled. *Keep the milk corked or covered with a muslin cover,* and keep it in a refrigerator or ice-box, or standing in cold water, which, to retain its coldness, must be frequently changed.

121. Have you any objection to pork, veal, or salted meat in the diet?

I have the greatest objection. Pork is rich and indigestible, and therefore an unwholesome food for the delicate stomach of a child. I have known it in several instances to produce violent pain, sickness, purging and convulsions. Bacon, however, if it is cooked until it is dry and crisp, is a valuable food

for a child at breakfast, acting as a greaser of the bowels and tending to give a good motion. It should not be given, however, until the child is at least two years old. Veal is difficult to digest and is therefore inadvisable, and the same may be said of salt beef, unless it is only very lightly salted.

122. Suppose that there is nothing on the table which a child may eat with impunity, what then shall I give him?

He should then have either a grilled mutton chop or a lightly boiled egg. An egg contains protein, fat, iron and phosphorus, constituents which are most valuable, indeed essential, to health. An egg at any time makes an excellent change, being very suitable for a child's dinner.

123. About vegetables—are potatoes unwholesome for my child? And what other vegetables do you recommend?

New potatoes are not good for him, but old ones of the mealy kind, well cooked, are the best vegetables he can have. They should be well mashed, as I have known lumps of potato cause indigestion.

Any vegetables, as long as they are sieved or mashed, are definitely beneficial and are strongly recommended for children at all ages. Green peas, however, must be very young, thoroughly boiled, and mashed with a fork on the plate. Undercooked or unmashed peas are not fit for a child's stomach, being very difficult to digest.

124. Do you advise that my child have variety in his food?

Yes. Variety in a child's food is necessary, though this does not apply to that of an infant. Do not

seek, however, to vary the food by adding spicy sauces or vinegar; a child does not need such relishes. He should be taught to like the natural flavours of simple food. Give him variety by changing the kind of meat you put before him, giving him on different days beef, mutton, poultry, flat fish, etc. Change the method of cooking it also, by boiling, roasting or grilling it, and so on, and ring the changes with his vegetables and puddings as well.

125. What ought a child to drink with his dinner?

Plain water, as long as it is pure. Let him have as much water as he likes. Nature will tell him when he has had enough, but be careful of the quality of the water and the source from which you procure it. If you are in any doubt, filter it, or boil it and then allow it to cool. This is especially important in rural districts and foreign countries. When abroad, unless you have an examination made by a professional chemist and repeated once in six months—an expensive process—it is always advisable to boil water before cooking with it or drinking it. You may cool the child's drink with ice, but I do not consider iced drinks beneficial if given persistently.

Some parents are in the habit of giving their children beer with their dinner—"making them live as they live themselves!" This practice is truly absurd and fraught with great danger. It will injure the child's inside and upset his liver. *All alcoholic drinks should be forbidden.*

126. Have you any general remarks to make on a child's meals?

Yes. Do not forget salt. A child's food should not be tasteless, and salt in moderation is a necessity.

Remember that some children are inclined, through greed, to overload their stomachs. When you think a child has had enough, if he still asks for more, give him dry bread or a crust. If he is really hungry he will eat this. If this unnatural hunger persists you should consult your doctor. Your child may have worms or diabetes, or excessive acidity.

127. If a child suddenly loses his appetite is any notice to be taken of it?

If a child cannot eat well, depend upon it there is something wrong. If he is teething, examine his gums and mouth, and if the gums are not inflamed and no tooth appears near the surface, look at the throat. If it is inflamed, swallowing causes pain and therefore the child does not want his food. Look well to the state of the bowels; ascertain whether they are sufficiently open and whether the stools are of a proper colour and smell. If the gums are cool and the bowels working properly, and the child's appetite remains poor, call in medical assistance.

If a child refuses his food, neither coax nor tempt him. *Nature is a very sure guide* and will tell us when to eat and when to refrain, if we let her. There is always a cause for loss of appetite, and food that is not wanted will only aggravate the condition. A request for something to eat is frequently the first favourable symptom in a severe illness.

128. When a child is four or five years old have you any objections to his being given tea to drink?

Some parents are in the habit of giving their children strong tea. This practice is most hurtful. It acts injuriously upon their delicate nerves, stomach

and intestines, and thus weakens the whole frame. Cocoa may be given if milk is not liked, but tea should only be allowed—and then no more than a dash in a cup of milk—when the child is 7 or 8 years old.

129. Have you any objections to a child occasionally having cakes, sweetmeats or biscuits?

Plain home-made cakes containing seedless raisins, sultanas, or cherries may be given at tea, and plain sugar icing is not harmful. *Currants or caraway seeds are to be avoided;* they are not digested and they may irritate and disorder the bowel.

The proper times for a sweet are after the midday meal and before bedtime. Only plain boiled sweets or good plain chocolate should be offered; barley sugar and butterscotch are also harmless when given at the right time, and not given in too big a quantity. There are children, however, who cannot assimilate chocolate. (*See* Section 132.)

As to biscuits—there are objections to biscuits, which, owing to their crumby nature, get in the crevices of the teeth and if not cleaned out ferment and may cause decay. But providing the child cleans his teeth after the meal, there is no reason why he should not have a rusk or biscuit, the plainer the better, for breakfast, lunch, tea, or supper.

But never feed a child between meals. A child who is constantly stuffing is a nuisance to himself and those about him, and a great trial to the doctor.

130. Do you advise new or stale bread, and what is the best flour to use?

If bread is at all heavy, children should not be allowed to eat it, for heavy bread is most indigestible.

They should not be allowed, either, to eat bread until it is a day or two old. Bread made with wholemeal flour is more suitable than white bread made with the refined flour used by most large bakeries.

131. Is there any objection to butter for children?

No. Bread and butter is certainly more nourishing than dry bread. If too much butter be given, however, it will disorder the child's stomach and produce a grey stool and sickness. Great care is needed in the choice of butter, since besides supplying fat to the body, it should supply vitamins, which vary in quantity according to the source, treatment, and freshness of the butter. Fresh dairy butter, produced in spring and summer under the good conditions prevailing in a reliable dairy, is the best you can procure. If butter is preserved or frozen for any length of time the vitamins deteriorate or disappear. In the winter, when the cows are mainly stall-fed and when even fresh grass, through lack of sunshine, is deficient in vitamins, it is advisable to supplement the butter with a vitamin preparation.

132. My child has an antipathy to certain articles of diet; what would you advise to be done?

The child's antipathies should be respected; do not force him to eat what he dislikes (Sections 118, 119). He may have an "idiosyncrasy," that is, a peculiarity of the constitution which makes the food unsuitable for him. Such an idiosyncrasy may be manifested, not by dislike, but by indigestion; the child may eat the food and enjoy it, but it ultimately causes vomiting or diarrhœa. The articles of food for which idiosyncrasies are most commonly manifested

are fats, chocolate, milk, some fruits and fish. (*See also* Section 207, on Acidosis.)

133. When should a child commence to dine with his parents?

As soon as he is old enough to sit up at the table, provided the mother and father take a meal in the middle of the day. It makes him a member of the family, and helps him to learn good manners. The child will see the way you eat food and will imitate you. Remember, manners should be taught by example from the first; never snatch a thing from a baby's hand, but gently remove it, saying "thank you." Let baby's first words be "please" and "thank you." *A good-mannered and polite child is a joy to you and an honour to your house and family* and will be everywhere welcomed and appreciated.

Where new articles of food are being introduced, such as green vegetables or a new pudding, "a little bit off mother's plate" will give the baby confidence and he will then eat what is on his own. His food should be cut up small, and he must not be permitted to bolt it. If he bolts his food the meat will pass through his bowels undigested and his appetite will not be satisfied.

The Nursery

134. Have you any remarks to make on the selection of a nursery?

As a rule the nursery should be on the top floor of the house, below the attics. Ideally, it should consist of two good-sized rooms—a day and a night nursery. The aspect of the day nursery should be south, a

north or east aspect being avoided if possible. The ideal rooms are large with plenty of windows to let in the sunlight. The entrance door should not face a bath-room, sink or lavatory; a bathroom adjoining will be of great convenience, but it should be shut off by a door.

It is also advantageous to have *a water-closet* near at hand, a properly acting closet, with independent ventilation. For a small child a seat closet is required with back and sides, but *as soon as the evacuations are passed they should be removed;* some nurses are rather slack about this, and it should be watched for. When he gets older he may use the ordinary closet, with a small seat attachment which can be obtained from any good stores.

No house should be selected that has not an efficient drainage system. Before taking any house you should, for the protection of your children, have drains and lavatories inspected and tested by a reliable and fully qualified surveyor, sanitary engineer or architect, and passed by the Medical Officer of Health for the district.

135. Can you give me any advice about the way a nursery should be ventilated?

Ventilation of a nursery is of paramount importance. (*See* Section 65.) There ought to be a constant supply of fresh air. Many nurseries, however, are nearly hermetically sealed—the windows seldom, if ever, opened; the doors kept closed; and in summer time the chimney carefully stuffed up or the "register" closed, so that not a breath of air is allowed to enter! As a consequence the poor unfortunate children are delicate and constantly catching cold.

To permit life the air must circulate. As you

know, hot air is lighter in weight than cold and therefore ascends like a feather when cold air comes in. This is the law on which are grounded the various methods of ventilation. The simplest is to open the window at least a foot, top and bottom; the hot air then goes out at the top, as the fresh air comes in at the bottom. Where windows cannot be opened, fresh air can be admitted by perforations in a pane and a revolving circle of perforated glass outside.

See that there is good ventilation up the chimney; this sometimes has to be augmented by a revolving chimney-pot. A fire assists in the ventilation of the room by drawing the air towards it and up the chimney. Have the chimney swept at least twice a year. The mat outside the door of a nursery should not be permitted to block up the crack under the door so as to prevent the air from coming in.

But though ventilation is a wholesome thing, you are not to fly to the opposite extreme and make the room draughty or like an ice-house. Exposure of the child to draughts brings liability to colds. There is nothing so sad as to see little children standing or sitting about, all huddled-up and blue with cold, because their mother or nurse is a "fresh-air fiend."

The floor-boards should be close together; wide cracks between are a source of draughts, and also tend to collect dirt. They must be stopped with wax or putty, or the floor relaid. Parquet flooring is the ideal form of flooring.

I would here advise you to *have rails put across the nursery windows* to prevent any possibility of a child's falling out. It is a *precaution which should never be neglected*

136. Have you any observations to make on the lighting of a nursery?

Let the window or windows of a nursery be very large, so as thoroughly to light up every corner of the room; there is nothing more conducive to the health and happiness of your child than an abundance of light. See, therefore, that the windows are frequently cleaned. Some think that they should be made of special glass, known as quartz glass, which lets in certain rays of the sun which are stopped by ordinary lead glass. This is an excellent idea, but one precaution must be taken. In sunlight there is a very powerful ray, known as the ultra-violet ray, and if a child is kept too long under it, or goes to sleep under it, serious burns or skin reactions may result unless he has previously been gradually accustomed to it. (*See* Section 280.) Unless kept scrupulously clean the benefit of the quartz glass is also defeated.

By night the nursery should be brightly lit; for a child should never have to strain his eyes to look at a book or toys. But you can overlight a nursery, and provide a "glare" which will cause sore eyes; this is especially likely with electric light. Where there is no electric light, lamps are better than gas. If gas is used, see yourself that it is turned off before you go to bed.

Lighting of the night nursery, when the child is asleep, should be dim.

137. What is the best means of warming the nursery?

There is nothing like an ordinary coal-fire in an old-fashioned fireplace, with a good-sized chimney which will not only carry off the smoke but assist ventilation.

I do not recommend a gas stove or electric fire, except possibly in the night nursery, and I absolutely condemn a coke or anthracite stove. Those of you who have travelled on the Continent or in America will agree with me that rooms warmed by such stoves are stifling. There is not the same objection to hot-water pipes or under-floor heating, but I do not recommend them, as they tend to give the greenhouse atmosphere which is so enervating for children.

Be strict in not allowing your child to play with fire. *The nursery fire must have a large fireguard* that goes all round the hearth and is sufficiently high to prevent a child from climbing over it. In England, failure to provide this brings one in jeopardy of the law. Not only must the nursery have a guard, but every room where the child is allowed to go should be furnished with one. Matches should never be left about but should be kept out of reach of the child; remember that not only is there the risk of fire if the child plays with them, but they may poison him if he places them in his mouth. If a gas fire is used, be sure there is a bowl of water in front of it.

A nursery is usually kept too hot. *The temperature* in winter time ought not to exceed 60° F. (15·5° C.). This should be checked by a wall thermometer, a very necessary article of equipment of the nursery, which should be hung over the mantelpiece or between the windows. A child kept in a hot close nursery is languid and, weakened and enervated by the heat, readily falls a prey to disease; if he leaves the room to go to one of lower temperature, the pores of the skin are suddenly closed and, in consequence, colds and feverishness may follow.

Here I would offer a word of warning. In the winter, when the weather is very cold, the night nursery should be warmed, either by a small coal fire or by a gas or electric fire, before the child leaves his warm nursery to enter it.

138. Can you tell me what air-space is necessary in the nursery for each child?

To have the air requisite for the healthy maintenance of the functions of life each child requires, as a minimum allowance, 8 feet of air space in every direction. If there are several children they will want correspondingly more, the total giving you the minimum size of the room your children should occupy. A child needs at least 1,500 cubic feet of air every hour, which means the entire air of the room should be changed three times every hour.

139. How shall I decorate the ceiling and walls of the nursery?

The ceiling should be white and clean. The best surface is a painted one; the next best is papered and varnished; and after that a whitewashed one. As regards *the walls*, have them painted or distempered in a soft colour, with possibly a coloured frieze. The advantage of paint or distemper over paper is that you can wash it. If paper is preferred—I don't recommend it, however—choose one of a restful colour, light blue, primrose, or French grey. Do not have outrageous patterns or drawings of gaudy wild flowers or large animals; this applies especially to a night nursery, where a flickering night-light or fire might so transform the figures that they cause terror to a feverish or nervous child. A varnished paper

is to be preferred, as dust does not cling to it, and it, too, can be cleaned. In a sick-room a distempered wall is certainly preferable. Decorate your walls with pictures and anything that is pretty and instructive, but let such objects be so placed that they are readily movable and easily dusted.

Let me give a word of advice to those who are able to build their own house and provide a nursery. Have all the angles of the room "rounded"—floor, ceiling and corners; dirt does not collect, and the room is made easy to clean.

140. Do you approve of a carpet in a nursery?

No. Only a rug for a child to roll upon. I look upon carpets or druggets as abominations in the nursery; they are dust and dirt receivers, a source of constant danger to the health of the child and of never-ending labour. The floors are best stained and varnished, or polished. Best of all floors are those of parquet. In these there is complete absence of open joints in which dirt can collect, and it can thus be removed when the floor is simply swept.

If the floor of a nursery must be covered, let cork or rubber be laid down, right up to the walls. If none of the above is procurable or can be afforded, use linoleum; it has, however, the disadvantage that it may give out a pungent smell.

Cleaning floors with soap and water entails a moist atmosphere while they are drying. This moisture clings to furniture and soaks into bedding and curtains. Where scrubbing has to be done, do it once a week only, and send the child or children into another room until it is dry. During the drying the window must be wide open; a good fire helps to dry it out.

Every morning floors should be swept, the mats taken outside and shaken, and the room dusted.

141. Will you give me some hints on how to furnish a nursery?

The furniture in the nursery should be as scanty as possible, of the plainest character, strong, easily cleaned, readily movable on castors, and inexpensive. Of course you must have cupboards and drawers. Let the child have its own cupboard for toys and playthings. Teach him at an early age the elements of tidiness by making him put his toys away when he has finished with them.

Let the furniture be placed methodically round the walls, and so arranged that the eye of the nurse can command every corner.

Let a child's "home" be the happiest home to him in the world. Around him all should be merry and cheerful. He ought to have an abundance of playthings to help on the merriment. But here let me say a word about toys. (*See also* Section 159.) Children do not want expensive or elaborate toys; they soon tire of playing with any particular one, their interest wandering to the next. This is natural and should not be interfered with. Indeed, interfere as little as possible. So often one hears a mother or nurse constantly interfering with a "Don't do this" or "Don't do that." My advice is, if a child wishes to do something and there is no danger or damage incurred, the less you interfere with him the happier and more contented he will be.

Clear colours, plenty of light, clean windows, an abundance of good coloured prints, and toys without number, are the proper furnishing of a nursery.

Nursery! Why, the very name tells you what it ought to be, the home of childhood, the most important room in the home—a room that will tend to stamp the character of your child for the remainder of his life.

142. Have you anything to say about the night nursery?

The minimum breathing space for each child should be, as I have already stated, 8 feet in every direction. Each child should have a separate bed, which should have a wire mattress. Here is the bedding suitable: Horsehair mattress, mackintosh sheet, sheets, blankets, pillow and overlay. The mackintosh is a great aid in preserving the mattress in the case of "accidents" during sleep; it should be well aired, and cleaned with a scrubbing brush and soap, with a drop of lysol or sanitas in the water, when it is soiled or dirty. Abolish it as soon as the child is old enough.

There should be no curtains to the cots or beds, except perhaps gauze ones at the head. Shall the cots for the little ones have rails? Yes.

I beg you to keep the babies in their own bassinettes or cots until they have grown too large for them. Do not let them lie in the bed occupied by their mother. (*See* Section 66.) If the child is cold, let him have a light eiderdown or knitted wool cot-cover. Put a hot-water bottle in the cot, but be sure to remove it before putting the child to bed.

When purchasing a cot, choose one the sides of which can be let down. Such a contrivance is most convenient for the nurse and a great comfort, too, to the doctor. It is not easy to make a thorough examination of a little child when the sides of the cot are not movable. If the child is sick, a board which

fits the sides of the cot is useful, for upon it the little one can take his meals and play with his toys.

The bed should not be in a draught, nor facing the light, nor under the window. If possible, the head should be either north or south. There should be no waste water allowed to stand in the night nursery. All utensils should be kept strictly clean and should be emptied immediately after use. The room should be well ventilated, and a fire should be allowed in very cold weather or if the child is sick.

The moment a child leaves his bed, turn back the bedclothes to the fullest extent, so that the air can get well over the mattress, which should thus be ventilated and sweetened for at least an hour. Do not forget, also, to throw open the windows as soon as he has left the bedroom. The windows should have been open all night, but it is advisable to close them while the child is getting up.

Sleep

143. Do you recommend that a child be put to sleep in the middle of the day?

Yes. He should be put to bed after his mid-day meal, and after he has been sat on his chamber to empty his bowels, if he needs to. He may sleep or he may not; it is better that he should, so the room should be kept quiet and the light lessened, but he may be allowed one book or a toy to play with. He may cry, but if you persevere he will, without any difficulty, submit to the rule. This practice should be continued till he is six years old. I consider rest after meals to be preferable to rest before.

Thanks to his afternoon rest, he will be of good temper and refreshed to enjoy the rest of his day, and will not be over-tired when put to bed at night, and will then sleep well.

144. At what hour ought a child to be put to bed in the evening?

At all times of the year *a child under four years old should be in bed by* 6 *p.m.* After that, in the summer, an extra half-hour may be added each year. But no child should sit up for late dinner till he is nine or ten years old. Regularity ought to be observed, as regularity is very conducive to health. It is a reprehensible practice to keep a child up until nine or ten o'clock at night. If this be done, he will become worn and irritable, and the strain and stress of life will wear out his little frame before it is developed, and render him liable to catch all sorts of diseases.

145. Should a child be washed and dressed as soon as he wakes in the morning?

Yes, if he awakes in anything like reasonable time. Always let a child sleep as long as he can, but when he awakes let him be held out. Do not wait, as many nurses do, until he has wetted his bed or until he is cold and miserable. Don't let him doze again after he is once awake, unless he has had a restless night, or is sick, or had a "trying day" with a late hour to bed the day before, or has woken very early; it is better to get him up at once, as lingering inculcates lazy habits. Most children are awake as soon as it is light, and this in the summertime is very early. Take him up, then, and place him on his chamber, then return him to his cot till you dress. Some

children seem to need more sleep, however. Do not wake them, unless they are babies, when regularity of the feed is very important.

146. If my child has cold feet at bedtime, how should they be warmed?

I have seen a lazy nurse sit before the fire with a child on her lap, rubbing his cold feet just before putting him to bed. Now this is not the right way to warm the feet. Let every child before going to bed have exercise. Do not let him get over-excited but let him romp, dance and play games. If a child's feet still remain cold, see that there is an extra covering over the foot of the cot. In extreme cases I have no objection to bed socks; they can be taken off when the child is asleep.

147. Supposing a child should not sleep well, what ought to be done? Would you give him a dose of composing medicine or drugs?

Never, on your own initiative, give a child medicine to make him sleep. If a child does not go to sleep, or has a restless night, there may be something wrong with his daily routine. He may be having too heavy a meal last thing, or he may need more food than you are giving him. He may be over-tired or over-excited from having been put to bed too late or from playing too boisterously beforehand. He may, on the other hand, be not tired enough, having lacked exercise during the day. Does he lie comfortably? Has he enough or too many bedclothes on his bed? Are his feet cold? Is the bed too small for him? If all these are correct consult your medical man, as the child may be suffering from some minor ailment.

148. Do you advise that the bedroom be darkened at night?

A child sleeps more soundly in a dark than in a lighted room, and will not wake so early. If the curtains are left wide, the cot or crib ought not to face the window. Some children will not settle to sleep without a light, and if they wake during the night are in terror to find the room dark. Should that be the case, there is no benefit to be obtained by refusing a night-light, or a door open to show the comforting gleam of a light in the passage. You will not make the child less terrified by denying him this; on the contrary, you may make him worse and ruin his nervous stability.

149. What are night terrors?

They are the equivalent of nightmares or bad dreams with "grown-ups." They may be caused by the frightening tales told by a silly nurse. (*See also* Section 151.) The child wakes up suddenly, soon after going to sleep, screaming violently, crawling over the bed, and declaring that he has seen either some gruesome animal, or ghosts, or thieves. The little fellow is the very picture of terror and alarm. He hides his face in his mother's bosom, the perspiration streams down him, and it is some time before he can be pacified. At length he falls into a troubled, feverish slumber, to awake in the morning unrefreshed. Night after night these terrors harass him, until his health materially suffers, and he looks forward to the approach of darkness with dread. Night terrors occur in children of nervous temperament and indicate a highly excitable condition of the brain.

What to do.—If they have been brought on by the

folly of the nurse, deal with it at once, even to the point of discharging her and selecting a more discreet one. (*See* Section 151.) When the child retires to rest, leave a night-light burning, and let it burn all night; sit with him until he is asleep, and if he should wake up in one of his night terrors, *go to him at once.* Never delay for anything, and make sure, if you cannot be handy, that some kind person is within call.

Do not scold or jeer at him for being frightened; he cannot help it. But soothe him, calm him, fondle him, take him into your arms, and let him feel that he has someone to depend upon, someone to protect him.

His terrors may possibly be due to his taking too heavy a meal before going to bed, or his tonsils and adenoids may be unduly large and cause a sense of suffocation to the child in his sleep. It would be wisest for you to consult your doctor. It may be necessary to let the child have change of air and change of scene. Let him live for the greater part of the daytime in the open air, and be free as possible from all emotional disturbances.

Any time a baby cries for several nights on being put to bed, for no reason assignable to ill-health, stay with him till he sleeps. This will soon reassure him, and your presence can soon be dispensed with. This is *not* spoiling him.

150. What are the usual causes of a child's talking or walking in his sleep, and what measures ought to be adopted to prevent him from then injuring himself?

In a perfectly natural state, sleep should be dreamless and absolute unconsciousness. In some highly

nervous children, generally the offspring of nervous parents, sleep may be accompanied by dreaming. In an unstable nervous system, which is improperly controlled and is in a state of irritability ready to be set going by the most trifling provocation, the ideas in the dream state bring into action the nervous centres presiding over the organs of speech, over emotion (when the child cries or screams), or over walking or other muscular movements.

The sleep-walker may execute complicated muscular feats that would be impossible in waking moments. Mental activity may be exceptionally acute; lessons are repeated; exercises written on paper, sums and other problems correctly worked out. On waking, the child has no knowledge of the occurrences of the night.

Errors of diet in a child so predisposed may excite an attack, but the usual incitements are over-pressure at school, over-excitement, mental and emotional, coupled with a morally unhealthy or an unhappy environment, or physical weakness from unhealthy surroundings.

To prevent any risk of injury, have bars put to the nursery window. Arrange that a trusty person who is a light sleeper sleeps in the child's room, with directions not to rouse him from his sleep but to lead him gently back to bed. This may frequently be done without waking him.

Consult a medical man, who will examine him and exclude any possibility of disease, and will give you sound advice. A trip to the coast and sea-bathing are often of great service.

Choice of Nurse

151. Have you any hints to offer regarding the nurse of my child?

You yourself must be head nurse, and never let anyone take this post from you, or usurp your position in the mind of the child. Certified "Nannies" are inclined to take too much upon themselves, which is to be discouraged. A child should look upon his parents as the "High Court of Appeal." I am not suggesting that you should undermine the discipline of the nurse by letting him have his way when she has told him to do something he does not wish to do. If you have to make criticism of your nurse, never do it before the child. And, remember, a child is born with absolute trust and faith in grown-ups, so *never lie or break a promise to your child.*

You should be particularly careful in the selection of a nurse. She should be steady, lively, truthful, good-mannered, well-spoken and good-tempered. She should also be pleasant to look upon, in that she is free from any bodily imperfections such as a squint, for a child is such an imitative creature that he is likely to acquire her defect.

A nurse should be strong and active and should not mind hard work—for hard work it is. She ought not to be too young or she may be thoughtless or careless, but she should not be too old, and so not understand the child's mind and his idea of play. She should be able to play happily with the child and enter into his life. If she is bored with her charge, and the child is unhappy, it is time to change your nurse.

A nursemaid should never, on any account whatever,

be allowed to whip or slap a child. Any nursemaid or domestic who has been discovered to have lifted her hand against a child, ought to meet with severe rebuke and on repetition of the offence, instant dismissal.

No nurse or anyone else should be allowed to "dress up" as any frightening object, for a child is naturally timid and full of fears, and something that would not make the slightest impression upon a grown-up person might ruin a child's nerves for ever. She should never be permitted to tell her little charges stories of ghosts, or hobgoblins, or of things "being eaten up," or of cruelty. If this be allowed, the child's disposition may become timid and wavering, and continue so for the remainder of his life.

General Advice

152. Have you any further hints to offer conducive to the well-being of my child?

Let the child be busy. Take an interest in his employment and let him fancy he is useful. And so he is useful, much more usefully employed than many grown-ups, for he is laying in a stock of health. Happy he should be, as happy as the day is long. Kindness should be lavished on him. Make a child understand that you love him; prove it in your actions—these are better than words. Look after his little pleasures, join in his little sports; never let a morose or angry word rankle in his heart.

Have no favourites and show no partiality. Children are very jealous, sharp-sighted and quick-witted, and take a dislike to a favoured or over-petted one. Let them be encouraged to share each other's toys and playthings and to banish selfishness.

A child should be taught to give up his playthings when necessary "without a scene"; gently remove what he has, and then attract his attention to the meal, or washing, or clothes, whatever it is that made it necessary for him to give up the toys. Never snatch them from him, or remove them without good reason. (*See* Section 133.)

One often sees children brought up in the nursery and the nursery only. This is wrong. At certain times of the day they should enter into the life of the parents; this is good for all and conducive to that "family feeling" which it is so necessary to inculcate in children. Join then in their play, but never play down to them; they want you to be yourself and not a fool. If they are curious, do not check their curiosity but rather encourage it, for they have a great deal to learn, and how can they know if they are not taught? Make sure that your facts are correct, however, because if they later find you to be wrong, their faith in you will have a nasty little jar. *Speak truthfully to your child;* if he finds you have deceived him, he will not believe you in the future.

Fun, frolic, and innocent play ought to be encouraged; but do not let a child indulge in wilful mischief and dangerous games. He should not be allowed to have playthings with which he can injure either himself or others.

Painted toys are often highly dangerous in the early days, especially to a child who puts everything into his mouth; toys can be obtained, however, the paint on which is non-poisonous or does not come off. It is not advisable, either, to allow a young child to play on a sand-heap lest he swallow some sand,

for enteritis, *i.e.* diarrhœa, may result. Paint-boxes are sometimes dangerous toys, and should never be allowed unless the child is under surveillance. And, remember, a child should never be allowed to put the paint-brush into his mouth, for paints contain poisons such as lead and arsenic.

Here let me say a word about children's books. Always look through them before the child sees them or has them to read. I consider some of the books most indiscreet, especially those where animals are depicted eating up children; all animals should be exhibited for their beauty and response to kindness. (*See* Section 160.) If a little fellow were not terrified by such stories, the darkness would not frighten him more than the light. A child must never be placed or shut into a dark cellar or room, nor frightened by tales of rats, etc. Instances are related in which fear thus induced influenced the mind for the rest of life.

Permit me here to address *a word to the father.*

Let me advise you to be careful how you converse, what language you use while in the company of your child. Bear in mind that a child is very observant, thinks much and seldom forgets what you say and do. You are his "hero." Let fall no hasty word or unfavourable criticism of other people within his hearing, for "Childhood is like a mirror catching and reflecting images."

Never talk secrets before a child. If you do, and he discloses them, you have only yourself to blame, and it would be unjust to scold him for your own imprudence.

Study your child as an individual. Let the deep love you bear him be your guide. Be quick to praise, firm to be obeyed, and tardy to punish. Let justice

clear your path as regards favouritism. The charge of the young is a terrible but wondrously happy responsibility.

To you both I would say: Let love be his pole star; let it be the guide and rule of all you do and all you say to him.

153. If a child is peevish, yet apparently in good health, can you suggest any way of allaying his irritability?

A placid, well-regulated temper is frequently indicative of good health and, similarly, a disordered or an overloaded stomach is a frequent cause of peevishness. To treat peevishness, be solicitous, and if the child resents that, leave him alone; he may need entire isolation. Never press your affection on a child if he or she quite obviously resents it.

A child's troubles are soon over, his tears soon dried, if they are not prolonged by improper management.

> "The tear down childhood's cheeks that flows
> Is like the dew-drop on the rose;
> When next the summer breeze comes by,
> And waves the bush, the flower is dry."
>
> SCOTT.

Never allow a child to be teased; it may permanently spoil his temper. If he is in a cross humour, take no notice of it, but divert his attention to some pleasing object. Do not combat bad temper with bad temper, noise with noise, slap with slap. Only pleasant words ought to be spoken to a child; there must be no snarling, or snapping, or snubbing, no loud contention towards him or between others in his presence. Remember that a child has a nature very easily hurt, some more so than others, and such treatment as mentioned above may ruin his temper and

disposition, and make him unhappy, hard, harsh, morose and disagreeable. Be firm, be just, be kind, be gentle, and be loving; speak quietly, smile tenderly and embrace him fondly, but insist upon implicit obedience. Never tell a child to stop doing something unless it is harmful or wrong; interfere as little as possible with his life as he wants to live it, and then you will have, with God's blessing, a happy and affectionate child.

Do not continually tell your child how wicked he is, what a naughty boy he is, that God will never love him. By such measures you will ultimately cause him to feel that it is no use trying to be good—that he is indeed hopelessly wicked. Instead, give him confidence in himself; find out his good points and make him dwell upon them; praise him where and whenever you can, and make him feel that, if he perseveres, he will make a good man.

Speech

154. When will my child start to talk, and how should I teach him?

A normal child usually begins to speak when he is about 12 months of age, but some do not speak for two years. If after two years he makes no attempt to form or utter words, it is necessary to consult your doctor.

When a child begins to form his words, let him first be taught to say "please" and "thank you" (Section 133). *Never teach a child "baby talk";* it is foolish. Teach him good sensible English, with no slang and no clipped words; he may clip them or mispronounce them—let him, but never let him hear

such mispronunciations from anyone else. His first words are usually "Mummy" and "Daddy"—it is right that they should be—but let that be the end of slang. Never teach him to say "ta-ta" for good-bye, or "ta" for thank you; it is unnecessary and a waste of time.

155. My child stammers. Can you tell me the cause and suggest a remedy?

A child who stammers is generally nervous, quiet and impulsive. His ideas flow too rapidly for speech. When he is alone and with those he loves he often speaks fluently and well, and he stammers more when he is tired or out of breath—when the nerves are weak or exhausted. When he is in a passion or is excited through either joy or grief he can scarcely speak, and what words come are broken and disjointed. Overwork at school or illness will often accentuate the defect.

Now as to cause. In the first place you must be quite certain it is a true stammer. A lot of children when they begin to talk have strange mannerisms or mispronunciations of words which, as soon as they talk well, will pass away; the less notice taken of them, the sooner they will pass. If a "stammer" truly appears, there may be a hereditary factor to account for it, or it may be imitative or of psychological origin, arising, for example, from jealousy or the suppression of a natural instinctive desire. But all this should be dealt with by your medical attendant; he will possibly advise you to take your child to an elocution class or speech clinic.

It is an interesting fact that a child who is born "left-handed" and is brought up to use his right hand, may later develop a stammer, but if he is allowed to lapse into his left-handed ways his stammer will disappear.

Much can be done by the mother to cure stammering. Make the child speak slowly and deliberately, forming each word without clipping it. Let him, alone with you, exercise himself in elocution. Teach him to collect his thoughts and weigh each word ere he gives it utterance. Make him practise the singing of simple songs or rhymes; a stammerer seldom stammers when he sings.

Never jeer at him or tease him for stammering, or allow others to do so, for it will make him ten times worse. For this reason it is sometimes wise to take him away from school or from his usual playmates. Never comment upon his defect in his presence, or allow others to do so. Be patient and gentle with him. Endeavour to give him confidence, and encourage him to talk to you as quietly and gently as you speak to him. Demosthenes is said to have stammered in his youth, but to have cured himself by putting a pebble in his mouth and declaiming slowly on the seashore, the fishes alone being his audience. His patience and perseverance ought, by all who stammer, to be borne in mind and imitated, but the pebble in the mouth is not to be copied.

156. Are there other causes for defects of speech or even absence of speech?

Yes; there are several. A child may be born with a malformed mouth, *e.g.* a hare-lip or cleft palate. He may be born with defective hearing or completely deaf, or some serious inflammation may affect his ears, leading to deafness, before he commences to talk. He will then become a deaf-mute, and he may become one if his ears are seriously involved any time up to seven years old. (*See* Section 226.) A skilful teacher

under the instructions of a doctor will often work wonders and by means of signs and movements will teach him to speak. Deaf-mutes from birth cannot be taught to speak with success, however, until they are six years old.

The child may fail to hear sounds because his brain is unable to receive them. If he does not attempt to talk by the time he is five or six years old, there is probably a defect of the brain, which may have followed disease.

Sometimes a child has not the full use of his lips, tongue, or both, owing to a defect in the nerves supplying these organs. He then experiences difficulty with letters like P, B, L or T; or he lisps in a pronounced manner.

Defective speech may be due to tongue-tie (Section 94) or to a very high vault of the mouth, to cleft palate, hare-lip, or enlarged tonsils and adenoids, to obstruction due to disease inside the nose, or to paralysis of the palate which may occur after diphtheria.

The treatment of all these conditions should be left in the hands of your doctor.

Walking

157. Should a child be early put on his feet to walk?

No! let him learn to walk himself. As a rule a child begins to crawl well about the ninth month; but he may not walk till he is 18 months to two years old; he will pull himself up by means of a chair at about a year to 18 months.

Place him upon a rug or carpet in a play-pen, if possible. It will be found that when he is strong enough he will hold on to the sides of the play-pen

and will stand up; when he can do so and attempts to walk, he should then be supported. You must thus, as regards first putting him on his feet, be guided by the inclination of the child himself. A child is generally put on his feet too soon, which, the bones in infancy being flexible, causes bending of the legs, especially if there is rickets. This results in bowed or bandy legs. (*See* Sections 99, 233, 236.)

I strongly insist on the importance of not putting a child too early on his feet. Many mothers, through their ridiculous anxiety that their young ones should walk early, before other children of their acquaintance have attempted to, cause lamentable deformities in their child, deformities which remain a reproof to them during the rest of their lives. If a child moves all its limbs while crawling, yet does not stand, there is no cause for anxiety until he is two years old; if he appears then to have no desire to get on his feet, it is time to consult your doctor. (*See* Section 215.)

158. In the winter, when the weather is very cold, should a child be sent out for his walk?

Decidedly, provided he is well wrapped up. The cold will brace and strengthen him. If, in frosty weather, the roads are slippery, put a pair of large old woollen stockings over his boots or shoes. This will not only keep his feet and legs warm, but it will prevent him from falling down and hurting himself. Thus equipped, he may even walk on ice without falling.

Even when the child can walk, it is advisable to take a folding perambulator or push-cart out with him, so that when he gets tired he can rest. There is no object in over-tiring a child.

AMUSEMENTS

159. Have you any remarks to make concerning the amusements of a child?

Let him play out of doors as much as possible. Let him, also, exert himself as much as he pleases; his feelings will tell him when to rest and when to begin again. Let him be what Nature intends—a happy, laughing, joyous child.

He ought to be encouraged to engage in those games wherein the greatest number of muscles are brought into play, but let him choose his own sports. Do not be always interfering with his pursuits and finding fault with him. Remember, what may be amusing to you may not appeal to him. I do not, of course mean that you should not constantly have a watchful eye over him, but do not make it apparent that he is under restraint or surveillance; if you do, not only will you never discover his true character and inclinations, but he will not acquire self-confidence and personality, but be a spoilt, unpleasant whining child.

When, therefore, he is in the nursery or on the playground, let him shout and riot and romp about as much as he pleases. His lungs and his muscles want developing, and his nerves require strengthening; and how can such be accomplished unless you allow them to be developed and strengthened by natural means?

If he chooses to blow a whistle or to spring a rattle, or make any other hideous noise which to him is sweet music, he should be allowed to do so. If any members of the family have weak nerves let them keep at a respectful distance. A child who never gets into mischief must be sly or delicate or idiotic.

160. Do you approve of children having live pets?

Yes! by all means let your children be brought up to love animals. Do not frighten them with the worst side of animal life—lions that eat you up or dogs that bite—but let there be a dog or cat or both in the home, and let him see you fondling and feeding them.

I do not approve of letting animals get up on the bed, or of allowing them to lick children's faces or hands, or to breathe on them. If children have been playing with a dog or cat, be sure and wash their hands before they eat a meal. (*See* Section 247.)

A child should never be allowed to hurt animals, or be cruel to them; there is a streak of cruelty in human nature which should be dealt with in early years, if it is to be eradicated. A child should own a pet of his own as soon as he can feed it and look after it himself.

A home without animals is a home with something lacking. "God made the animals first," was a very good reply I once heard given to a disapproving parson, by a lady whose dog walked into the church after her.

161. Do you approve of children's parties?

Yes. But here moderation should be your guide. The benefits of parties arise from the fact that children meet fresh faces and personalities, take pride in their dress, learn to play together sensibly and practise their good manners and sportsmanship. I have no objection to parties or picnics, as long as the children are treated as children, playing simple games, and given simple food and not extravagant presents. But I do condemn the extravagance of some children's parties, where children are dressed like grown-up people, are encouraged to eat rich cakes and pastry, to drink wine, and to sit up late at night.

Sunday in the Nursery

162. How do you advise me to observe Sunday for a child?

Do not make Sunday a day of gloom. Let it be a cheerful, joyous, innocently happy day. Let the children have toys, if possible a different sort from those used on a weekday, and suitable books on some subject related to the story of the Bible. I do not consider it advisable to take children of tender age to a long morning service. It is better they should start with Children's Service or Sunday school; then if they ask to come to Church with you, take them. Never drive them to Church to a service they do not understand. It is my firm conviction that many men and women of this era have been made irreligious by the ridiculously strict and dismal way they were compelled, as children, to spend their Sundays. You can no more make a child religious by gloomy asceticism and constant attendance to church services they do not understand, than you can make people good by Act of Parliament. *I say, lead them to religion, and do not neglect to do so.*

Starting Lessons

163. At what age do you advise that my child begins his education?

Education should not be systematic until the seventh year. Until then it should be of the kindergarten nature, progressing from toys and pictures to simple books, drawing and painting, and organized games or play. The brain, if forced, will undoubtedly

respond; but this premature intellectual development will be obtained at the cost of a debilitated constitution. At the age of seven or eight, lessons at home or someone else's home, with a few children of the same age, under a governess, preferably French, German or Spanish, is preferable to school education.

At school the brain is apt to be overworked and the stomach and muscles underworked. The effects of the former are shown in restless nights, talking in the sleep, sleeplessness, and bad dreams (Sections 149, 150), and of the latter in the child's sitting about, with no desire to play and no appetite, and with a pasty face.

164. Do you believe in the value of singing lessons and dancing classes?

Singing should have a part in the child's education, for it expands the walls of the chest, strengthens and invigorates the lungs, gives sweetness to the voice, improves the pronunciation and is a great pleasure and amusement.

Dancing should not be taught when children are very young, but when they reach the age of seven or eight it is a good form of exercise and teaches them rhythm, poise and manners.

But let me advise you about the selection of the place where your child is taught. Have the dancing class in your own or a friend's house. Do not let any "slop" or sentiment be introduced. Do not let exhibition or tap dancing be taught; it is inclined to encourage the development of a vulgar, self-possessed, precocious child, who will be thoroughly disliked wherever he goes.

Second Dentition

165. When does a child begin to cut his second set of teeth?

From the sixth to the seventh year. He first cuts the back teeth, or molars, and then the front teeth. It should be borne in mind that the second set of teeth is actually being formed from the very commencement of life, and is present beneath the first set of teeth. The milk teeth are sometimes cut with a great deal of difficulty (Section 57), but the second set comes easily and is unaccompanied by any disorder. The fangs of the first teeth are nearly all absorbed or eaten away before the teeth fall out, leaving little more than the crown.

The first set consists of twenty, the second set of thirty-two teeth, including the "wisdom-teeth" or third molars, which may be cut between the fifteenth and twenty-fifth year.

Pay particular attention to the teeth of your children, who should early get into the habit of cleaning them night and morning or, better still, after every meal. I recommend that a soft brush be used, with one or two drops of hydrogen peroxide upon it, and then a powder of chalk and cuttlefish bone, or a paste made by some reliable firm. Cleaning the teeth can be very efficiently done by eating a piece of raw apple after every meal and before going to bed.

To ensure good and regular teeth, the child, from birth, needs an adequate supply of calcium and vitamins, especially vitamin D, both of which are present in milk. If there is any irregularity in the teeth, lose no time in consulting an experienced dentist. I

recommend you to take your children early to see the family dentist. (*See* Section 60.)

Nursing a Sick Child

166. Have you any remarks to make on the management of a sick-room, and directions to give on the nursing of a child?

For a sick-room select a large and lofty room. If you live in town, one at the back of the house is preferable, that the patient be kept as much as possible from noise and bustle; for the same reason it is better to have a room at the top of the house. One with a southerly or westerly aspect is to be preferred. Let the windows be large, so that the chamber may be flooded with light, for sunlight, and plenty of it, is the great purifier and life giver. *Do not shut out the sun* (Section 136), but select a situation for the cot that is away from the glare and out of reach of draughts. The room should only be darkened, as your doctor will tell you, in certain diseases, *e.g.* measles or meningitis.

When a child is sick, put him in his cot and do not fuss over him. *Leave him alone.* You will only retard his recovery and worry him by fondling him and nursing him on your knee or in your arms. Speak in a natural, cheerful voice and hide your anxieties from the child. *Never discuss his ailments in his hearing.*

The cot must be plain, with one or both sides capable of being let down, and must be easily movable on rubber castors. It should have no curtains or valances. Choose one with a woven wire mattress, place on this a hair mattress, next a thin under-blanket, a mackintosh sheet, sheets, a Witney blanket

or two, and a cover. The hospital drawsheet is a useful appliance, because it can be so easily moved without disturbing the child. It is one and a half yards long by three-quarters of a yard wide, and is easily slipped in under the child, the ends being tucked under the mattress. A mackintosh can be used under it, if necessary. Children are inclined to leave their shoulders and chest uncovered by the bedclothes, therefore they should wear a woollen bed-jacket over the nightgown.

The furniture of the room must be as simple as possible; no dust-traps of any sort can be tolerated. When dusting, do not flap about with a duster or brush, but remove the dust with a damp cloth which is to be removed from the sick-room as speedily as possible after use.

The floor must not be scrubbed, but sprinkle carbolized sawdust or tea-leaves upon it, then sweep it and remove the sweepings immediately. The floor should be of polished boards or parquet, or, failing that, of rubber linoleum, with only a few mats by the cot and chairs.

The best way *to ventilate the room* is to shut the door, keep up a brisk fire (if the weather is cool), and open the windows top and bottom, night and day. Remember that fresh air is not obtained by coaxing it in from the stairs and passages; fresh air is to be let in from the outside by the window. In fever, free and thorough ventilation is of vital importance; the idea that the patient will then catch cold is one of the numerous prejudices and baseless fears that haunted the nurseries of the past. The sooner it is exploded the better it will be for human life. You

cannot have too much fresh air—that is half the battle. But the air will not remain fresh long if there are too many people in the room, or the room is left untended and undusted, with dirty linen unremoved and with foul excreta poked away under the bed in a chamber or bedpan.

The *temperature* of the sick-room should be maintained, night and day, at not lower than 60° F. (15.5° C.), whatever the nature of the illness, unless the doctor directs otherwise. *A thermometer is indispensable in a sick-room.* Whether or not there should be a fire depends upon climatic conditions. Small fires encourage ventilation but *a large fire in a sick-room is to be condemned* as it is likely to make the room too hot and stuffy. Be sure, even if you have no fire, that the chimney is not stopped up by having the register down, and that it does not require sweeping.

Let the *evacuations from the bowels* be instantly removed to the water-closet, which should be provided with a plentiful supply of water in a large jug, unless there is a tap there, which is preferable for nursing purposes. Chambers and bedpans should be made of white glazed earthenware, and provided with well-fitting lids. Glass urinals with wide necks are useful, for they are easier to keep clean than the narrow-necked kind; a glass jam-jar makes an inexpensive urinal. Before using the bedpan, urinal or chamber let 1-in-20 carbolic acid, izal or lysol solution, or 1-in-1,000 corrosive sublimate, be put in it to the depth of one or two inches or more, in order to disinfect the motion and prevent any of it from adhering to the vessel. *Never use a slop-pail.* Carry

the utensil to the closet immediately after use, empty it at once, wash it well and leave it there until it is wanted again. *If the illness is an infectious one, the motions should be completely covered by, and incorporated with, the disinfectant for half an hour before being emptied down the closet.* If you detect anything abnormal in the motions or urine, such as worms or blood, save the specimen, in the closet, for the doctor's inspection, but keep it covered up. Keep the door of the closet shut and the window wide open. Use plenty of liquid disinfectant.

Here I would like to comment on the common practice of putting bowls of disinfectant about the sick-room and passages, also upon the custom of hanging a wet carbolized sheet over the door. Neither is any protection against the spread of infection. The sole value of the sheet over the door lies in the fact that it is a reminder to those entering the sick-room to don their white overalls (*see* below).

Let there be frequent change of linen. This is even more necessary in sickness than in health, especially if the complaint is fever. In an attack of fever with sweating, clean sheets ought to be put on the bed every other day. All soiled linen must immediately be removed from the sick-room, and in an infectious illness must be treated as recommended in Section 189. It is certainly desirable to change the nightgown and bed-jacket at the usual bedtime except when the child is extremely ill; then it is bad nursing to disturb him.

No matter what the illness may be, *scrupulous personal cleanliness is most important.* The sick child should be washed all over at least once, and sometimes twice, a day; anyhow, his hands and face and between

the legs should be washed at bedtime, if his bath has been given in the morning. In washing the child, pay most careful attention to the appearance of his skin, and report to the doctor anything unusual you may observe, such as a rash, spots or sores. Before starting to wash the child, it is advisable to shut the window. The child must be carefully dried and a little dusting-powder applied, but do not scamp the drying because you are using powder. A child can be rapidly washed under a blanket if thought advisable and dried without any risk of his taking a chill.

The doctor may order *sponging* to reduce the child's fever. It is done as follows: Take the child's temperature, and prepare water of the same degree of heat unless your doctor orders otherwise, checking it with a bath-thermometer. Slip a flannel sheet or towel under the child, over a mackintosh, cover him with a blanket and remove his clothes. Then sponge the body all over for five or ten minutes with the water at the specified temperature. But be careful not to expose the child while doing it; expose only the limb or part you are sponging, then cover it again with the blanket. Roll him on to his side to sponge the back. Then dab with a soft towel, leaving the skin moist. Remove the flannel sheet and mackintosh, clothe him in a warmed gown and replace the blanket over him with a warm dry one.

If hot fomentations or poultices are ordered (Section 169) be sure to test them to make sure that they are not too hot. It is as well to vaseline the skin before application, as otherwise it gets sodden and sore.

In certain diseases, *e.g.* typhoid fever, cleanliness in those in attendance is of vital importance if the

nurse herself is not to contract the disease. Excrement on the sheets or on the patient's buttocks—a disgusting evidence of careless nursing—will readily convey the disease. A white coat and white cover to the hair should always be worn in the sick-room; they should be taken off and hung on the door whenever the nurse leaves the room, however, unless she is merely going to the nearby closet.

Everyone nursing, whether she is bathing an eye or mopping a throat, administering an enema or cleansing a child after an action of the bowels, *should carefully wash her hands before and afterwards with soap and hot water*, rinsing in such disinfectants as one-in-sixty carbolic or dettol. This if frequently done, tends to make the hands rough; such roughness should be treated with glycerine or cream at bedtime. Do not forget the nails; they should be kept short and well scrubbed. If there are any sores, scratches or abrasions of the skin on the fingers or about the nails, rubber finger-stalls or gloves must be worn. Should such a sore or scratch come into contact with "matter," whether from ear, eye or wound, the finger is very likely to fester or become septic.

If the child sleeps at night it need not be roused for food unless the doctor gives special orders, for a good night's rest is better than food. But should the powers flag in the early morning hours then a feed may be administered. If the child is taking a stimulant, such as brandy, this is to be administered with his milk. If he is thirsty at any time, give him some lemonade or barley water sweetened with glucose. *Never deny a sick child drink.*

Food must not be kept in the sick chamber. A

convenient place should be found on the landing or elsewhere, where it can be kept cool and free from contamination. It should not, for instance, be kept near the lavatory. All feeding-cups and utensils required for use in the sick-room must be thoroughly cleansed immediately after use and put away, separate from those used by the rest of the household, until again required. In infectious illnesses, all unconsumed food should be destroyed; it should not be carried down again to the household larder.

You must pay *attention to the child's mouth*, and keep the teeth clean. If the teeth and gums become covered with black crusts and the tongue is very foul, cleanse them by wiping them with cotton-wool on which is a mixture of glycerine and lemon juice in equal quantities, the swabs being immediately burnt. If the child is old enough to be trusted not to swallow the fluid, a mouth-wash of permanganate of potash, 1-in-1,000, glycothymoline, or weak peroxide of hydrogen helps to keep the mouth healthy.

Some diseases, *e.g.* typhoid fever, diphtheria, or rheumatic disease affecting the heart, require that the child should be fed lying down, all exertion being dangerous. Your doctor will tell you when there is danger in propping the child up. You will then have to use a feeding-cup. This can be improvised by using a small tea-pot, the spout being the mouth-piece. In such cases, also, a bedpan will be necessary.

If you are nursing, or assisting in the nursing, wear a washable dress and an overall as previously mentioned. Wash your hands before meals and do not begin nursing on an empty stomach. If you have a reliable *trained nurse* attending your child, do not

interfere with her or be continually watching her. Make sure that she is doing her work to the satisfaction of the doctor and *leave her alone.* The nurse is responsible to the doctor for the efficient execution of his directions, and he will soon inform you if anything occurs that should not be. If you are taking part in the nursing, be very particular, when taking over duty from the nurse, that you listen to her instructions. See that her bodily comforts are looked after, that she has her proper hours off, and that she gets fresh air and good, nicely served food. Never allow the nurse to interfere with your servants or *vice versa*, however. *If she wants anything she is to ask you.* Let there be only one nurse in charge of the sick-room.

Do not let visitors see the invalid. Creaking shoes or a rustling silk dress ought not to be worn in a sick chamber. If the child is asleep or dozing, perfect stillness must be enjoined. If there are other children, let them be removed to a distant part of the house or, in infectious illness, sent away from home after they have passed their quarantine.

In head affections, *e.g.* meningitis, darken the room either by painting the window or by using dark blue or green calico blinds. Keep the sick-room more than usually quiet by putting more mats on the floor; let what talking must be done be carried on in whispers, but the less there is the better; other conversation should take place outside the sick-room.

It is often a good sign for a child who is seriously ill to become cross. When he begins to feel his weakness and to give vent to his feelings, convalescence and recovery are not far off. If a sick child is peevish,

seek to win him over to good humour by love, affection, and caresses. (*See* Section 153.)

Bear in mind the following most important advice: *In all illnesses a child must be encouraged to make water at least four times during the twenty-four hours.*

If you are nursing the child yourself, it is a good plan to have an exercise book in which to keep a record of everything that happens from hour to hour.

You will find in Appendix III (p. 309) a list of suitable contents for your medicine cupboard.

167. What is the best method of administering medicine to a child? And should a child be roused from his sleep to be given physic when it is time for him to take it?

If he is old enough, appeal to his reason; for if a mother endeavours to deceive her child and he detects her, he will for the future suspect her. If he is too young to be reasoned with and will not take his medicine you must compel him to take it. Lay him flat on his back across your knees and hold both his hands, getting someone else, if possible, to hold his head; then, with the teaspoon, gently lever his mouth open, and pour the medicine into the back of the throat. If it is very unpleasant, hold his nose tightly, and he will be obliged to swallow it.

Whether or not to wake a child for his dose of medicine is a point to be decided by the medical attendant. You cannot be too particular in administering the dose at the stated times, but in the case of a child who sleeps little, or is hard to get off to sleep when once awakened, common sense may tell you that a long peaceful sleep may be more important than one dose omitted.

168. Do not the pulse and temperature give indication as to the health of a child?

Yes, and every mother should have an idea of what the rate of the pulse of children at different ages should be, both in health and disease. An infant's pulse is 140, a seven-year-old child's about 80, and an adult's about 70 beats a minute. If the pulse exceeds the normal by 10 to 20 beats a minute when the child is at rest, there is fever or inflammation somewhere. In an infant the act of sucking, muscular movements, and crying increase the rapidity of the pulse; during sleep it is decreased. Fever accelerates the pulse, brain diseases often slow it.

With regard to *taking a child's temperature*, until the child is six or seven and fully understands what you mean, never take the temperature in the mouth. It is safer always to place the thermometer under the arm or in the folds of the thigh, holding it firmly there for five minutes. In a very small baby you can take the temperature by inserting the thermometer, after vaselining the end, into its back passage and holding it there for half a minute. Be sure you have shaken the mercury down, before taking the temperature, to below the little arrow, which is the normal. If you are unable to read the thermometer, leave it for your doctor; do not shake it. Be sure and wash the thermometer after each use, even if reserved for one child. The normal temperature of a healthy child is 98·4° F. (37·2° C.), or, in back passage, 99·4° F. (37·5° C.).

169. When a child is in pain, what is the best way of applying external heat?

In pain either of the stomach or bowels nothing usually affords greater or speedier relief than the

external application of heat and, therefore, if you are in doubt or beyond the reach of aid, it is a very good maxim to apply a fomentation or plaster; you can do no harm, and may do much good.

The following are some of the methods of applying heat. In every method test before applying on your bare arm.

Salt bag.—Powdered salt is put into the oven or into a frying-pan over the fire, and when hot is placed in a flannel bag, which is then applied.

Hot-water bottle.—It should be half filled with hot, not boiling, water. Make sure you have squeezed all the air out before screwing the stopper in; also be very certain that the bottle does not leak.

Hot fomentation.—Take a piece of lint, wool or flannel of the size required to cover the part. Fold it and place it on a towel; roll up the towel, and place it in a saucepan of boiling water, with the ends sticking out. After the fomentation has boiled for five minutes, wash your hands thoroughly and shake the excess moisture off, but do not dry them, seize the ends of the towel and remove it to a basin or over a sink and wring it as dry as you can. Carry it to the bedside, open the towel, shake out the lint or wool, and, as soon as you can bear the back of your hand upon it, gently apply it to the part. Cover with a piece of jaconet or greaseproof paper and a good wad of cotton-wool and secure the whole with a towel, a broad bandage, or a many-tailed bandage. Turpentine can be added to the water if ordered.

Remember, when *you are applying a hot fomentation you are also applying a sterile dressing.*

When a hot fomentation has been applied over an

extended period, a cotton-wool pneumonia jacket (Section 171) should be worn.

Hot bran or linseed-meal poultice.—Put on the fire, in a clean saucepan, a handful of linseed meal or bran, and enough hot water to make it into a thick paste, keeping it stirred with an iron spoon; it comes away from the side of the pan when it is ready. If a large poultice is needed use more of the bran or meal. Have a cloth or towel ready on a hot plate, cover this with butter-muslin or gauze of the size required and spread the hot mixture quickly and evenly on the muslin. If the poultice has to be carried some distance to the patient, put it between two hot plates. After applying, cover the poultice with a piece of jaconet to keep in the moisture and heat, and then apply wool and a bandage or towel to retain it in position.

Plasters of medicinal chalk.—Ferris's Flammeline, Antiphlogistine or kataplasma kaolini may be used, preparing it thus: Loosen the lid and stand the tin in a saucepan of water, the water coming three-quarters up the sides of the tin. Bring it to the boil and allow it to simmer gently till the cream is liquefied all through. *Then continue to heat,* gently stirring with an iron spoon or spreader *for another quarter of an hour,* to be sure there is an even temperature all through. Then spread it upon a piece of flannel or lint the size of the area you want to cover, a quarter of an inch thick. After having vaselined the part that is to be poulticed, and making sure you can bear the back of your hand over the whole area of the plaster, apply it gently. Cover with jaconet or greaseproof paper and a wad of cotton-wool and maintain it in position by means of a towel or broad bandage.

Electric pad.—Be careful this does not get overheated or become fused.

Electric cradle.—A special spinal cradle can be obtained or one can be improvised by means of a box with the sides and bottom knocked out, electric lights being attached inside to the top. The heat can be regulated by the candle-power. If you are not skilled in the use of electricity do not attempt this method, as there are risks of electric shock and burns.

170. How should a hot or cold pack be made and administered?

Prepare the bed as follows: Place two blankets on the mattress, cover these with a mackintosh and then another blanket. One-half of the blankets and mackintosh should be on the bed, the other half hanging over the side. Wring a fourth blanket out of boiling water with a wringer, and when at a temperature you can just bear your elbow upon, quickly envelop the child in it up to the neck. Then cover him with the blankets and mackintosh, tucking him in well. The pack should be changed every hour, the patient being dried each time by dabbing with a soft towel. *During its administration the mother or nurse should never leave the patient.*

The temperature should be taken every half-hour, as the pack may induce a high fever. If the temperature rises above 100° F. (38° C.) report the occurrence to your doctor, and await his instructions before continuing the treatment. Hot packs are often ordered in diseases of the kidneys.

Cold packs are made in the same way, using a blanket soaked in cold water. Apply 20-45 minutes, and stop if signs of shivering appear.

171. How would you make a cotton-wool jacket?

Take two pieces of cotton-wool, one for the back of the chest and the other for the front, and cut them to fit the body, the shape of breast and back plates. Tack the sides and shoulders together with cotton, and stitch loosely over the centre. Such a jacket is worn until it gradually falls to bits. More substantial forms can be made with gamgee tissue, which is cotton-wool between pieces of gauze, or by tacking cotton-wool on to flannel, but these are unnecessarily substantial.

172. Have you any advice to give me as to my conduct towards my medical man?

Give him your entire confidence. Be truthful and candid with him; if there is anything you dislike, have the courage to tell him, and give your reasons.

When you call him in, give him, as near as you can, a plain straightforward statement as to the symptoms or occurrence of the disease or accident. Do not magnify and do not make light of any of them. State the exact time the child first showed the symptoms of illness; if he has had a shivering fit, however slight, or if there was a "breaking out" on the skin, however trifling, tell the doctor of it.

Ascertain the quantity and the appearance of the urine, and have a little of it saved, in case the doctor should wish to examine it. Take notice, too, of the state of the motions—their number during the twenty-four hours, their colour, their smell and their consistence—keeping one for his inspection. Never leave any of this information to be given by a servant.

A medical man has arduous duties to perform; therefore smooth his path as much as you can and you will be amply repaid by the increased good he

will be able to do your child. Strictly obey a doctor's orders—in diet, in medicine, in everything.

If the case is severe and your anxiety is increasing as to whether all that can be done is being done for your child, never call in another physician without first consulting your own medical man. It would be an act of great discourtesy to do so. Remember you are a free agent to call in what doctor you like, but when you have called him in, your interests are entirely his. If you are dissatisfied and want another doctor, there is a right and wrong way of making the change, and why use the wrong one? Be honest and candid with your doctor and the happiest relations will exist and he will be a great help to you.

In the presence of your child, speak with respect and kindness of your family physician, so that the child may come to regard him as a friend who will strive to relieve his pain and suffering. Consider how increased are the doctor's powers of doing good if the child has affection for him instead of fear or dislike. Not only be careful yourself, but see that your nurse and servants are careful likewise, and do not frighten your child, as some silly servants do, by threatening to send for the doctor, who will either give him nasty medicine or will hurt him.

When possible, send for your doctor early in the morning, as he can then make his arrangements accordingly. Also, by daylight he can better ascertain the nature of the complaint, especially if it is a skin rash, than he can by artificial light. If, however, illness comes on at night, particularly if it is ushered in with a severe shivering fit or severe pain, no time should be lost in sending for him.

"A little fire is quickly trodden out
Which, being suffered, rivers cannot quench."
SHAKESPEARE.

DISEASES, AILMENTS, ETC.

173. When is a child most likely to contract whooping-cough? What are the symptoms and how should it be treated?

Whooping-cough can attack children of any age, but is commonest between the first dentition and the second. It is an epidemic disease due to bacteria, and usually occurs at the end of the winter, through the spring, to the early summer. In the early stages, before the whoop, a typical cough is developed; it is highly infectious and contagious. Any child inhaling the breath of a child who has it is liable to catch the disease. Once a child has had whooping-cough, it rarely gets a second attack, but recurrence is by no means unknown.

At the onset there is catarrh associated with a little dry hard cough which ends with a long intake of breath. This develops into definite attacks of "coughing out," without taking an inspiration till the end, followed by vomiting. The child may be hot and fretful, with a temperature at this stage of 99–100° F. (37–38° C.), and with a running nose and inflamed eyelids. After a week or ten days the disease takes on its typical manifestations, *i.e. paroxysms of coughing*, each preceded by a long inspiration, the "coughing out" being continuous until the breath is exhausted, when there is again a long-drawn inspiration, this time with the characteristic "crow" or "whoop"; this may be repeated till the child vomits or spits a little phlegm. He becomes first red

in the face, then blue or purple, perspiration standing out on his brow; he throws himself about, the veins of the neck standing out and the eyes seeming to start from their sockets. The paroxysms may be very frequent or may only occur occasionally, this depending on the severity of the attack. They are usually worse at night. The child may never "whoop" the whole way through, but he will still have the characteristic paroxysms of coughing. Cold air, or dust, or highly seasoned food precipitates an attack.

The child becomes exhausted and emaciated through not getting enough sleep and food. He may be terrified of the attacks, as he knows when they are coming on, and may scream with fear. He may pass his water and motion in the attack. His breathing has a hissing sound; the voice becomes hoarse and gruff, and the throat red and swollen. The cough may be so frequent and so strong that an ulcer may form under the tongue.

What to do.—As soon as there is the slightest suspicion of the disease send for your medical adviser. The child should be kept in bed in a room of even temperature (60° F. or 15·5° C.), as long as he has a raised temperature. He should be warmly clad and never feel cold. He may have his usual bath, or if the temperature be high, a sponge-down morning and evening in bed.

If he is frightened, he should never be left, but should have someone within easy call to comfort and support him when the coughing attacks come on. Hold his forehead with your hand and support his body, and wipe the mouth clean of phlegm after the attack. His mouth should be kept scrupulously clean

by means of a mouth-wash, and any sore place there should be touched with glycerine and borax.

Whooping-cough is a particularly serious complaint in babies, owing to the vomiting and rapid emaciation it causes. A breast-fed baby should be kept at the breast. An older child should be given plenty of warm drinks and a light diet of nourishing food—milk, eggs, butter, fish, chicken, vegetable soups, fresh orange-juice and glucose water (2 heaped teaspoonfuls of the glucose to the tumbler). If there is *difficulty in getting him to keep his food down, give him small and frequent meals.* Give one *immediately after each attack of* vomiting; there is then a chance of some of the food being retained and digested.

The *complications* most likely to occur are bleeding from the nose, breaking a blood-vessel in the eye, chest affections (if his breathing becomes at all rapid or laboured, your medical man should be at once informed), emaciation and convulsions.

If no doctor is obtainable, you must keep the child in bed till the temperature has been normal three days; then he may be allowed up, and if the weather is favourable, and there is no east or north-easterly wind, he should be out in the air as much as possible. There is no medicine that will cure whooping-cough, but a mild linctus, or glycerine-and-honey, helps to keep the air-tubes lubricated and the cough less harassing.

The disease takes 7-14 days to develop after the time of infection, lasts three weeks and the quarantine of contacts lasts three weeks. The child should be isolated for at least six weeks from the first whoop or paroxysmal cough; infection was formerly thought to last as long as the cough was present, usually seven

to twelve weeks, but this is now considered doubtful. Your medical man is your best adviser as to this.

When the cough is resistant and continues long after twelve weeks, a change of air to the seaside or country will often clear it up. Convalescence should, anyhow, be long, as whooping-cough is a disease that weakens the strongest of children and causes loss of weight. Cod-liver oil in some form, or Virol, is therefore indicated for all ages.

174. Can you tell me something of the form of cough known as croup? How should I treat it?

True croup, or child-crowing, is a spasm of the glottis occurring in nervous children, and sometimes associated with rickets. It is becoming a rare complaint. The paroxysms may occur frequently, at any time of the day or night, but as a rule the child goes to bed apparently in perfectly normal health, but during the night loses breath and fights for air, the face becoming bluish or livid. On recovering, he makes a noise very much like that of crowing, hence the name. There is no "cold," cough, or temperature, and between the attacks the child appears perfectly well.

There is grave danger in a severe attack that the glottis may close entirely, and the child, not being able to breathe, may be suffocated.

What to do.—The first thing to be done, of course, *is to send immediately for a doctor.* Have a plentiful supply of cold and hot water at hand, whenever possible, for use at a moment's notice. The instant the paroxysm comes on, plentifully and perseveringly dash cold water upon the child's head and face, and put him into a warm bath (98° F. or 36·5° C.), still applying the cold water to his head. If he does

not come round, slap his back and buttocks. Also pull the tongue forward if you can get hold of it, for by this means you open the windpipe, and air is admitted to the lungs. When you have done this for 10–20 minutes, place the child into a warm bed and apply heat to the back and front; this can be done by hot fomentations; or a hot plaster will often defeat the attack. (*See* Section 169.)

This is the immediate treatment of an attack; treatment is also needed to remove the cause, but here your medical man will advise you.

Other *conditions of which a croupy cough may be a symptom* include diphtheria, enlarged internal and external glands of the throat, nose and neck, and foreign body in the windpipe (Section 272). These can only be dealt with by your doctor.

175. What are the symptoms and treatment of inflammation of the lungs or pneumonia?

The onset of pneumonia may be a shivering fit, followed by a hot flush and sweating. This is called a rigor. Or it may start in a convulsion or with sickness, diarrhœa or hæmorrhage, or may occur during a disease such as influenza, measles, scarlet fever, or whooping-cough. The *skin is hot and dry*, the lips parched; the temperature soars up to 103–104° F. (39–40° C.), and the pulse is rapid; the *breathing also is rapid, with panting short breaths and grunting, and is often painful; the nostrils move with the respirations, the cheeks are flushed and have a slight bluish tinge; there is a short hacking dry cough.*

The child is dull and heavy, wishing to be quiet in his cot or crib, with no desire for food but with a great thirst. The tongue is furred and the mouth

hot and dry. The water passed is scanty, and is highly coloured, staining the napkins or chamber.

If a child shows these symptoms there is then no doubt that inflammation of the lungs has taken place, and no time should be lost in sending for medical aid. This is vitally important, since if pneumonia were treated at the onset a child would scarcely ever succumb to the disease.

What to do.—The treatment commences by immediately putting the child to bed, propping him up on pillows. There should be a good fire and, except when the invalid is being washed or his toilet is being attended to, *the windows should be kept wide open, top and bottom.* The child is suffering because part of his lungs is out of action; he cannot, therefore, get enough oxygen into his system, so *he needs air in abundance.* As long as his body is wrapped up warmly and *he is kept covered up in bed* you can push his bed or cot out on the veranda, if you have one; but he should not be left alone there, in case he becomes uncovered.

It is now possible to get an oxygen tent in which the little patient can live in an atmosphere of oxygen; this is a great relief to the breathing and lessens the strain on the heart in serious cases.

Let him have plenty to drink—glucose with lemonade or orangeade, glucose and barley-water, milk and soda-water. Let his diet be light but nourishing. There is no object in starving a child; he requires nourishment to enable him to withstand the ravages of the disease. Give him soups, purées, milk, egg and milk, fruit-juice, grapes, Benger's or Allenbury's Food, and bread and milk, all in small quantities but frequently.

Do not overclothe him with heavy garments—thick vests and nightgowns. Some medical men believe in fomentations or plasters, or in cotton-wool and gauze jackets, and these you must be prepared to apply (Sections 169, 171). I have found that Antiphlogistine administered to the back and chest greatly relieves the breathing, especially if there is pain, but on discontinuing it you must replace it with a cotton-wool jacket lightly tacked together (Section 171), and let it remain until it falls to pieces.

The child should be watched day and night, and should not be allowed to get out of bed for anything; he must have no visitors, only those in immediate attendance upon them being allowed in the room. He should be sponged with warm water night and morning, as long as he sweats, being moved as little as possible.

The fever lasts from 5 to 10 days and then the temperature falls, suddenly or gradually. When it falls suddenly, the most serious period of the disease is the 48 hours immediately after, for the sudden fall is a great shock to the already overtaxed system. The heart tends to enlarge, so any extra excitement or exertion may cause death. When children die in pneumonia it is from heart failure. Should the temperature not fall by the tenth day, complications are to be feared; your medical man alone can deal with these.

In a serious case *delirium may occur*, especially at night. The child must be watched with additional care, for he may try to get out of bed; should he do so, talk reassuringly to him, and by gentle restraint or resistance get him to settle down again. Do not use

force or grip his arms or legs unless all other means of persuasion have failed. It is better to use a sheet or broad band well tucked into the sides of the bed to restrain him. Your doctor should be informed at once.

Do not give any medicines or aperients without having instructions from your doctor.

The secret of successful nursing in pneumonia lies in absolute quiet, plenty of fresh air, and nourishing food in small quantities. I am a believer in a few drops of brandy every six hours, but all will not agree with me; for babies I consider brandy to be a necessity.

No child should be allowed to get up for 3 to 6 weeks after an attack of pneumonia, and then only on the advice of a doctor.

176. What are the symptoms of bronchitis? How do I treat it?

Bronchitis is one of the most common complaints of infants and children, inflammation of the lungs being rare in comparison; bronchitis is, however, not nearly so dangerous.

For the first few days the child has a heavy cold, and is out of spirits. Instead of the cold leaving him, it becomes worse, and he is really poorly, fretful and feverish with a temperature usually of 99–100° F. (37–38° C.). His breathing becomes rather hurried and oppressed; his cough is hard, dry, and loud, and he wheezes. If you put your ear to his naked back, between his shoulder-blades, you will hear the wheezing more distinctly. If he is at the breast, it is a great comfort to him, but his cough compels him frequently to lose the nipple. His water is scanty and rather high-coloured, staining the napkins and smelling strongly. He is generally worse at night.

What to do.—Always send for your medical attendant. In his absence, confine the child to bed as long as he has any temperature; if he has none keep him in his bedroom until the cough is relieved. The temperature of the room should be 60° F. (15·5° C.). Let the bedclothes be as light as possible, but warm; in the early stages, till the cough is loosened, the child is best propped up on cushions. If the attack is severe, I have found a steam-kettle containing friar's balsam, a tablespoonful to the pint of hot water, a great relief. The window should be kept open, as the patient requires plenty of fresh air, but a fire should be kept burning in the room and no cold winds should be allowed to blow in. Do not nurse in your arms a baby with bronchitis—it only impedes the already distressed breathing—but place him in his cot.

For diet, let the child have plenty of warm drinks; drinks too cold or too hot tend to aggravate the cough. Let him have lemonade or barley-water sweetened with glucose, beef-tea, Benger's or Allenbury's Food, arrowroot, bread and milk, rusk and milk, and milk puddings.

In mild bronchitis, rubbing the chest with camphorated oil night and morning is very effective; if you use "liniment" be sure it is fresh, and use only a little—about enough to go on a sixpence—as it is very strong. If the attack is severe, plasters or fomentations, or linseed poultices will often afford relief (Section 169). As soon as the temperature has settled and the cough is looser, give older children more nourishing diet, including chicken and fish.

Do not administer any medicine that is not prescribed

by the doctor. Do not seek to stop the cough. A cough is an effort of Nature to get rid of phlegm which would otherwise accumulate. Let this be deeply impressed upon your memory. Do not, however, become alarmed because you do not see any expectoration. Children under five years of age do not expectorate unless they are suffering from whooping-cough; the phlegm is swallowed. Therefore you must pay particular attention to the bowels, and see that they are daily opened. An occasional aperient may be necessary to clear the bowel thoroughly.

177. If a child shows a predisposition to pneumonia or bronchitis, what precautions should I take to prevent an attack?

Some children, especially those who are rickety, are very subject to bronchitis. Some appear to inherit a "weak chest," and catch cold on the slightest provocation. Such children must not be coddled. They must pass a large part of the day in the open air. Even if the weather is cold, unless the wind is from the east or north-east, they ought to be sent out, but let them be well clothed. The nurse should have strict instructions not to stand about or dawdle, but to keep walking all the time. Hot and stuffy rooms are the finest incubators imaginable for colds in the head, pneumonia, and bronchitis. Do not put the child in an oven of a room at one time and, as soon as he shows the slightest improvement, allow him to career all over the house into any draughts there may be. He needs plenty of sleep, but do not put too heavy bedclothes on his bed.

Clothe the child in woollen materials, comfortably and warmly. See that he wears good, strong shoes

and change his shoes and stockings every time he comes in from outside, whatever the weather.

Do all in your power to improve the child's constitution by suitable food, giving additional vitamins in the form of, for example, cod-liver oil or Virol. Start giving this in the autumn, and continue it through the winter. I do not advise it in the summer, nor do I believe in malt with the cod-liver oil, since it is liable to upset the child's stomach and bring him out in spots. Residence in a different locality may be indicated if the attacks are severe and repeated; often a holiday by the sea or in a warm climate will work wonders with a chronic case or in clearing up an acute attack. As a precautionary measure send him, in the autumn, for a couple of months to the seaside. Salt-water baths have a tonic effect, and are useful as an occasional fillip. In short, concentrate on his health and, until he is stronger, let learning be left alone.

178. What are the symptoms of asthma, and how shall I treat an asthmatic child?

Asthma is a less common complaint than bronchitis. There is usually a family tendency to it and it is associated with eczema, hay fever, and nettle-rash. The attacks usually start suddenly, generally in the early morning when the air is coldest; the child sits bolt upright in bed or bends forward with his face in his hands, fighting for breath, his chest full of wheezes and noises, his lips and face blue. He can breathe in, but only breathe out with difficulty, so his chest scarcely moves in respiration, and he uses his stomach muscles. He has no temperature, unless the asthma is associated with bron-

chitis, but his body is cold, his skin dry, his eyes bright and his pulse rapid. He has a wheezy dry cough, but rarely brings anything up; if he does it sticks to his teeth and is hard to remove.

What to do.—Send immediately for your doctor. Meanwhile get the child warm by putting a fomentation, plaster, or linseed-meal poultice to his chest and back, and hot bottles to his feet. Get the room warm and, but only if *no cold wind is blowing*, open the window wide. Give him hot drinks, with a little brandy. The attack may last a few minutes or several hours. A steam-kettle with friar's balsam in it, a tablespoonful to a pint of hot water, may help his breathing.

To prevent further attacks it is necessary to find out the cause. Your doctor may be able to do so by means of skin tests. If this is not possible you must eliminate the likely causes, *e.g.* the presence of a cat or the near neighbourhood of a horse—even a horse-hair mattress or pillow may be responsible. Feather pillows also are a possible source of trouble. The child's food may hold the cause; some asthmatic children, for example, are sensitive to milk, highly seasoned food, eggs, meat or cereals. The pollen of grasses or flowers, or room dust may bring on an attack. All these possibilities have got to be eliminated, one by one, in the hope of finding the seat of the trouble. But, unfortunately, with many children no definite cause is ever found.

Often a change of residence will do good. A visit to the sea, however, may make the child worse. An inland, non-bracing climate is best for these children.

179. What is influenza? What are the symptoms, and how shall I treat it?

Influenza is an infectious disease occurring in epidemics in the early months of the year and in the autumn. *In an infant* it is sudden of onset, with fever, sickness, drowsiness, sore and inflamed throat, pains in the muscles and limbs, headache and dirty tongue; constipation may be followed by diarrhœa, and *there may be great prostration.* After a few hours, especially if medicines are given, the child starts to sweat, which then pours off him and he literally steams in bed, giving out a characteristic odour. The attack may only last two or three days, but often the temperature, having come down about the third day, starts to go up again and the fever may continue for several days or a week or two before subsiding. Sometimes there is diarrhœa and fœtid stools. Recovery is the rule, but a very young child may have complications such as pneumonia or inflammation of the ear, or the fever may be so prolonged, and the infection so severe, that the child may die exhausted.

In older children, in addition to the symptoms enumerated above, the temperature runs to 103–104° F. (39–40° C.), there are pains in the back, the eyes are bloodshot, and the expression is dull and heavy. The throat is sore and reddened and there is a little cough and expectoration of mucus. The water is high-coloured; you should save a specimen of it for your doctor. There is very marked general prostration and debility. The presence of a little sweat rash may cause a mistaken diagnosis of scarlet fever, but with the latter disease (Section 196) the

throat symptoms are severe, and the rash does not appear on the face.

The complications likely to occur in older children are pneumonia, acute inflammation of the ear, diarrhœa and, rarely, meningitis or inflammation of the membrane of the brain. Convulsions may occur (Section 97).

What to do.—The child must be put to bed at once and kept there, isolated, and the doctor must be sent for. I do not advise you to nurse influenza in a child without the help of your doctor, the complications are too serious and frequent. The room should be warm, the temperature being kept at 60° F. (15·5° C.), and well ventilated. Attention must be paid to the bowels, but do not overpurge your child, or you may start a diarrhœa which may be difficult to stop. It is better to add fruit to the diet and give laxatives. Give plenty of water. The food should be nourishing and easily digestible—milk, cereals, bread and milk, beef tea or broth, etc.

180. How am I to know whether my child has influenza or only a feverish cold? And how would you advise me to treat the latter?

The feverish cold has usually a sudden onset; the child may be lethargic and have no appetite the day before, and be heavy-headed; he may, if old enough, state that his head aches and he may sneeze repeatedly. By next morning his nose is stuffed up, he has difficulty in breathing, and has a sore red throat, which hurts him when he swallows. His temperature may be 100–101° F. (38–39° C.).

Keep him in bed if he has a temperature. If he has not, *keep him in the same room all day.* Rub his

chest with camphorated oil at night and give him one powdered tablet of aspirin every four hours for the headache and temperature; then within forty-eight hours he will be back to normal. He may have a cough. If in 24 hours the cough has not gone and the temperature is still raised, consult your doctor. Give him lemon juice in hot water, sweetened with sugar or glycerine, at night, and some honey and glycerine for his cough when he is at his worst.

181. My child complains of difficulty in taking a deep breath, as it hurts him, or of a sharp pain in his side. Is this pleurisy?

Unless the child has injured himself by falling on his side, it probably is pleurisy. The symptoms are likely to be ushered in by a shivering fit, followed by a "stitch" in the side, perhaps abdominal pain, and fever. The skin is hot and dry, the cheeks flushed, the pulse quick, the breathing short and shallow. The urine is scanty and high-coloured.

Pleurisy means inflammation of the tissues that cover the lungs and the inside of the chest wall. It is *dry* to begin with, but later a clear fluid may be secreted; then it is a *wet* pleurisy. If this becomes worse, the clear fluid becoming full of cells and dead matter, then there is an *empyema*. There may be no dry stage, or period of pain, a wet pleurisy being present from the onset. Pleurisy is caused by exposure to wet and cold, or by an injury to the chest wall; or it may occur at onset or during pneumonia, or be associated with bronchitis, rheumatism, or tuberculosis. Severe dry pleurisy is not common in children but wet pleurisy is of fairly frequent occurrence and is strongly suggestive of tuberculosis (Section 300).

The treatment should always be under the direction of a doctor. Until he arrives, apply heat and stop movement of the ribs as much as possible by means of a plaster or poultice maintained in place by a towel pinned tightly round the chest. The child should be kept in bed and treated as described in Section 179. If no medical aid is available, keep the child in bed until his temperature has been normal for a week, or, if below normal, shows no great variation between temperatures taken in the morning and in the evening. You can advantageously nurse him in the open, on a balcony or before an open window, as in pneumonia. Afterwards he should be given a medical examination at the earliest opportunity. He will need a long convalescence, preferably by the sea.

182. My child snores very much when asleep. What is the cause?

He is probably suffering from *enlarged tonsils*. When he lies down, his tonsils—there is one on each side of the throat—almost close up the passage along which the air has to pass. It is the effort of drawing the air past the block that causes the snoring. Enlargement of the tonsils in an older child may be due to repeated inflammation, but the tonsils are sometimes enlarged at birth; the cry is then thick and there may be slight deafness, and sometimes there is a troublesome irritating cough. In an older child the cough may take the form of a "bark," and he may have difficulty in breathing and repeated sore throats with fever. His growth may be stunted and he becomes "pigeon-breasted."

Enlarged tonsils are nearly always accompanied by *adenoids*, though these adenoid vegetations may be

present without enlargement of the tonsils. Adenoids are abnormal growths at the back of the nose, above the "swallow" and out of sight. If they become large the child cannot breathe properly through his nose, and he suffers from frequent colds in the head, and sometimes from nose-bleeding. The nostrils are often small and ill-developed, and where there is a discharge or "corruption" coming from them, the upper lip and the face frequently become sore and scabby. Ear troubles often arise as a sequence of this complaint, and the hearing may be impaired for life. Headache is not uncommon and sometimes these children suffer from indigestion and pains in the stomach. They are frequently poor, weak, bloodless things, and become stunted and deformed in the chest. They often wet their beds at night. If under one year of age, they have difficulty in sucking properly.

Later on the face alters; it becomes elongated and the child has a stupid, vacant look, and talks "through his nose." The arch of the mouth is high, the teeth are crowded together. In his education his progress is poor, his mental acuity being dulled. Thus adenoids are among the greatest inflictions falling to the lot of any poor child.

When they have been successfully treated the child's health will improve in a marvellous manner, but they may have to be removed if resistant to simple treatment.

Enlarged tonsils are best left alone unless they are obviously causing obstruction owing to their size or unless there have been repeated sore throats, and the child is not progressing but is ill from absorbing the poisons from the unhealthy tonsils. Your doctor is the best judge of this and you must rely upon his advice.

183. My child has a sore throat. What may this portend and what symptoms must I be on the look out for?

When a child has a sore throat he usually wakes up with it. He may have a "shivering fit" the day before, followed by a fever and difficulty in swallowing. Several complaints start in this way. The child may merely have a cold or nasal catarrh, or the sore throat may herald rheumatic or scarlet fever, diphtheria or tonsillitis.

If it is an attack of *tonsillitis*, the fever will remain next morning, and the child may have swollen and painful glands in the neck and a foul breath, and feel very ill. If you can see the tonsils, they will appear bright red, and so will all the back of the throat. They will be swollen and may even meet in the mid-line, and they may be covered with little yellowish-white spots the size of pin-heads. The tongue is furred, the pulse rapid; there is great prostration and the bowels are constipated.

Tonsillitis is caused by an infection or microbe gaining the upper hand in that sponge-like organ, the tonsil, which has normally enough "vitality" to overcome all the bacteria that may come from the inspired air. The inflammation may confine itself to the tonsils or it may spread to the tonsil bed—a tonsil being rather like an acorn in its cup.

If the inflammation collects between the acorn and the cup, we get the abscess formation which is described as a *quinsy*. In quinsy the inflammation may be at only one side at first; the tonsil is not so red, but is displaced, being pushed more into the centre of the throat by the greater swelling of the roof of the mouth and side of the throat. It may remain on one

side or it may spread to the other. The general condition of the child is much the same as in tonsillitis, but the pain is acute—more knife-like than sore; it may shoot up to the ear and cause earache.

What to do.—You cannot treat tonsillitis yourself, but should send for your doctor. All you can do meanwhile is to keep the child in bed in a warm room, giving him sips of warm milk or water if he is thirsty. Be prepared to apply plasters or poultices, for should breathing become at all difficult you must immediately apply a hot fomentation round the throat (Section 169) and give sips of ice-cold water, or give ice cream or ice to suck.

If the child develops a quinsy, do not worry the doctor to open it; there is a time to open a quinsy and there is a time when more harm than good can be done by doing so. The quinsy may go away without forming pus and may never need opening, or it very often bursts of its own accord. If it does, be sure the child spits out as much of the contents as he can be persuaded to. Gargles I do not believe in; an antiseptic lozenge to suck, a mechanical spray or the painting on of a lotion are the only methods you can employ to get direct application on the seat of infection.

After tonsillitis, a child will be very weak; he will have lost much weight, and have no appetite. A change of air is indicated if possible but, anyhow, a long period of rest and good food will be needed before the child is strong again, and he should not be hurried back to school until pronounced fit by your doctor. *Every child who has had tonsillitis should be re-examined by the doctor a month after recovery, as heart disease is a frequent sequel.*

Subsequent treatment to prevent a recurrence must be decided upon by him. If, after reasonable convalescence and good feeding, the tonsils remain large and red, possibly exuding yellow matter when pressed upon; if, also, the glands in the neck remain large and painful, or if there should be a series of attacks of tonsillitis and the child become listless and backward at school and have no desire for games, then it will probably be necessary to have the tonsils, and with them the adenoids, removed.

184. What are the symptoms of diphtheria?

This serious complaint has been known since ancient times and has often caused terrible epidemics. It attacks children mostly between the ages of two and eight, but no period of life is exempt. The younger the child, the more serious is the disease.

Before the disease really shows itself, the little patient feels poorly and is "out of sorts." A shivering fit, though not severe, may generally be noticed, but the fever, as a rule, is slight. There is heaviness and slight headache, principally over the eyes, and sometimes there is a mild attack of delirium at night. The next day the child has slight difficulty in swallowing. If old enough, he will complain of constriction about the neck. On examining the throat, the tonsils will be found to be swollen and more darkly red than usual. Slight greyish-white specks, like flecks of milk, will be noticed upon them, very different from the pin-head yellow-white spots seen in septic tonsillitis. In an hour or two, or in the course of a day, an exudation will cover the tonsils, and the soft palate and the uvula may be involved. The inside of the nose may also be attacked and then blood and

foul-smelling matter come from the nostrils. Sometimes the nose is affected alone and not the throat. This exudation, unless immediately treated, gradually increases until it becomes a membranous or skin-like substance, in colour white-grey, wash-leather yellow, dark brown or black. It peels off in pieces, leaving an ulcerated and bleeding surface behind. If the child is old enough and strong enough he will sometimes spit it up in quantities, the membrane rapidly reforming again and again. The discharges from the throat have a distinctive and offensive odour. There is danger of the windpipe becoming choked with membrane and swelling, bringing about suffocation and rapid death. The glands about the neck and under the jaw are generally much swollen, as is also the entire neck, which gives the appearance of a double chin.

If the condition is untreated, and often even with treatment if it is late in application, a battle to the death ensues between the child's constitution and the disease. The dangerousness of the attack is not always to be measured by the state of the throat. Sometimes the child becomes weaker and weaker; bloody matter oozes from the mouth and nostrils, exhaustion is profound and the child slowly dies.

When serum is injected, the membrane, if all goes well, clears away in twenty-four to forty-eight hours, and the child gradually recovers health and strength. But convalescence must be prolonged, and infinite care and close watch must be kept for some months more, as the heart will still be in a delicate condition.

Sometimes diphtheria takes a very mild form, the child being merely a little "out of sorts," but playing

about as usual. On the other hand, the disease may be even more grave than usual. It is then ushered in by vomiting and all the symptoms may be exaggerated; the pulse is very weak, and the child dies exhausted in two or three days or less.

There are *complications of diphtheria* which you should be warned about, such as sudden heart-failure and death from the slightest exertion, e.g. getting out of bed to pass water. This may happen during convalescence as well as during the acute stage.

Paralysis sometimes comes on from three to five weeks after the onset of the illness. Usually the first and often the only part affected is the soft palate; attention being drawn to the condition by the food coming down the nose, and by a nasal quality in the child's voice. The paralysis may, however, be much more extensive, resulting in weakness of the legs and chest; if the latter is severely involved, the complication may be fatal.

185. Is diphtheria contagious?

Contagious and infectious. It can pass to the mother or nurse by means of the droplets of bacteria-carrying moisture thrown out, as the child breathes, coughs, sneezes, or blows his nose. It can be carried by means of clothes to other children. Therefore, when practicable, any other children in the house must be removed, if possible to a home where there are no children. Their throats should be swabbed, either by your own doctor or by the Medical Officer of Health, and examined every day. If a child does not contract the disease within seven days of the last exposure, and if the swab from the throat is found after expert examination to have no diphtheria germs

on it, he may be looked upon as free. The incubation period is two days or, rarely, up to seven days.

The sick child must be isolated at once, and a sick-room must be prepared for his reception, if no hospital accommodation can be obtained for him, which is unusual. Only those toys that can be sterilized or readily destroyed should be permitted him, and no animal pets should be allowed to enter the room, as they can catch the disease or carry it upon their coats.

Diphtheria is a notifiable disease. Your doctor will see to that, but you must not be upset when the Medical Officer of Health comes along. He has not come to treat your child, but to help you with the sanitary side of the nursing, to discover the cause, and to stop the disease from spreading to other people.

186. By what means is diphtheria contracted?

The diphtheria germs are present in the air, in the earth, and on anything that has been near a person suffering from the disease. Cats and dogs may have diphtheria or carry the germs on their coats; cows may carry the germs on their udders. The bacteria may lie dormant for years in clothes or furry toys. They may be present in the nose and throat of one not suffering from the disease; he is then a "carrier" and, untreated, is a public danger. Some parts of the country are more liable to the disease than others.

187. Can I ensure that my child will not get diphtheria?

Not absolutely, but you can protect him so that the likelihood of his getting it will be lessened, and should he contract it, it will be mild in form and the risk of complications decreased. Your doctor will

first test your child to find out whether he has a natural immunity to diphtheria, because, if he has, no further measures are needed. If he has not, two small injections will give him great protection. This should be done when the child is a year old, and he should be tested again every three years until he has left school to see if he is still negative. If there is diphtheria in the house, however, you should at once have your child inoculated, however young he is, as diphtheria is particularly fatal to babies.

188. What is the nursing treatment of diphtheria?

Send for the doctor and isolate the child. (*See* Section 185.) Prepare the sick-room as described in Section 166 and follow the instructions as to the disposal of excreta which are given there.

Wipe the nose and mouth with clean pieces of lint or with paper handkerchiefs, which must be burned immediately.

Should any membrane be coughed up, save it for the doctor, placing it in 1-in-20 carbolic solution (that is, 19 parts of water to 1 of carbolic). A specimen of the urine should be saved every day. No food which leaves the sick-room is to be returned to the kitchen or larder; it must be burnt, and the vessels washed separately from those of the rest of the household, and boiled.

You and the nurse should be tested to ascertain whether you are immune to the infection, and if necessary should have protective injections (Section 187). If you have only one nurse, you will have to relieve her in her off-duty hours and for sleep. Wear simple and washable clothes. Keep your hands very

clean, and after leaving the sick-room always wash, and dip your hands in a disinfectant. Should the child cough in your face, instantly wash it with 1-per-cent. carbolic solution; if the sputum enters the eyes, immediate washing in a weak antiseptic, *e.g.* boracic, solution is necessary. If you have any cuts or sores, keep them covered.

Before they are sent to the laundry washable articles such as nightdresses, sheets, etc., must be placed in 1-in-20 carbolic solution in an enamel or china bucket for 24 hours. The laundry must be notified, and they must be sent separately from the household wash.

Should the infection be in the throat, the only thing you can do is to give a mouth-wash of hydrogen peroxide (a teaspoonful in half a pint of water) or of glycothymoline, to keep the mouth clean. If the infection is in the lower throat, or wind-pipe, a hot fomentation or plaster (Section 169) round the neck will often relieve the child's feeling of suffocation. If the infection is nasal, keep the nose clean with pledgets of cotton-wool—not mounted on a match-stick, but just tightly twisted. You can moisten the wool with a little salt water or peroxide and water. After use the pledgets must immediately be burnt.

The diet should be light and nourishing, and liquid at first. I consider diphtheria to be one of the diseases in which *brandy* does help to keep up the strength. Give it every six hours in doses of one drop for each year of the child's age, until a teaspoonful is reached. To help the heart, *glucose* and sugar should also be given, as much as the child will take, in drinks or in fruit-juice or jellies.

The doctor will treat your child with injections. Should the child collapse after the injection or become covered with a rash, inform him at once. Should the disease progress, in spite of treatment, until suffocation threatens, an operation will be necessary; so send urgently for your doctor if the breathing becomes laboured and the child turns grey in the face. He may "crow" as in croup, or he may just stop breathing. While waiting for the doctor, apply heat to the outside of the neck, pull the tongue forward and, if you can, clear the throat with your fingers, and start doing artificial respiration (Section 274).

The child must be isolated for at least a month from the onset of the attack, or until swabs of the throat taken by the doctor show no bacteria to be present.

As I have already told you (Section 184), the convalescence must be long. The child must remain in bed for at least six weeks, even if the membrane goes in 24 to 48 hours. During this period he should not be allowed to get out of bed for anything, and his toilet should be performed with the greatest care. Good nursing is essential. After six weeks in bed, gradually get him on his feet and, if possible, send him for a long convalescence by the sea or in the country—anyway, out of town.

189. How do you advise me to disinfect a room, the clothes and the furniture after a case of diphtheria or other infectious disease?

The most efficient way of disinfecting a room is to spring-clean it. The floor and walls must be thoroughly scrubbed with hot water and soap; if the walls are not washable they must be stripped, scrubbed and repapered. The ceiling should be whitewashed, the

furniture thoroughly cleansed with soap and water. All clothing, bedclothes and curtains must be soaked in a carbolic or other disinfectant fluid for twenty-four hours, then boiled or sterilized by steam and washed in the normal way. Carpets and mats must be washed with soap and water, then, where possible, aired for twenty-four hours in the sunlight. The mattress, pillows and eiderdown should be sent to the Public Health Authorities to be stoved and sterilized. Toys, unless of value, should be burnt; otherwise they can be scrubbed, washed and aired. Books are best destroyed or stoved.

The old-fashioned method of using a sulphur candle or formalin lamp is now considered unnecessary, being less efficient than a thorough washing of the room and its contents.

190. What are the symptoms of measles?

Measles commences with the symptoms of a common cold: the patient is at first chilly, then hot and feverish; he has a running at the nose and sneezes, his eyes water and are red, his head aches, he is drowsy and he coughs with a hoarse and peculiar ringing sound and has difficulty in breathing. On the fourth day the eruption generally makes its appearance; it continues for four days, and then disappears. It is important to bear in mind that *the eruption consists of crescent-shaped areas of a dusky-red hue*, slightly raised above the surface of the skin; that they usually appear first upon the face and the neck, where they remain most marked, and then spread to the body and arms, and lastly to the legs. The half-moon shapes are formed by a peculiar grouping of raised spots. Often the spots run together and form large and

irregularly-shaped patches on the backs of the arms, the fronts of the thighs, and the buttocks. The face is swollen, more especially the eyelids—indeed the eyes are sometimes closed for a few days. The throat is sore, red and swollen. White spots, like flecks of milk, are seen on the inside of the cheek, opposite the back teeth.

191. What are the complications of measles?

Bronchitis, which is always present with measles, may become worse and lead to pneumonia and the condition known as empyema (Sections 176 and 181).

The mouth becomes sore and full of little ulcers; the tonsils may become enlarged and inflamed and remain so after the subsidence of the fever. *The ears* may become infected, this being shown by earache, exacerbation of temperature, drowsiness, and possibly screams of pain. (*See* Section 223.)

Diarrhœa may indicate inflammation of the intestines; *convulsions* may be present in an extremely virulent form of measles, may be associated with the onset of the fever, or may denote a complication, such as an inflammation in the kidneys or brain.

The eyes, unless gently bathed when sore, may become worse and chronically inflamed over a long period.

192. Is measles contagious? And is it a dangerous fever?

It is very contagious, especially in the early stages when there is running from the eyes and nose. The contagion period lasts three weeks from the last exposure to infection.

It is a serious disease, more serious than scarlet fever, as complications occur more frequently.

193. What is the treatment of measles?

Isolate the patient, if there is an epidemic, as soon as he shows the slightest symptom of a cold, or, if

there is no infection about, as soon as the rash appears, and send for your doctor. Put the child to bed in a well-ventilated room, keeping the temperature at about 60° F., and adopt the hygienic precautions recommended in Section 166.

If you have other children, there is no object in isolating them as they will have been exposed during the most infectious stage, *i.e.* before the rash appeared. You can have them injected with a serum now, which will either protect them entirely or make the attack only a mild one. Take their temperatures daily, and on the first appearance of a nasal catarrh, cold, or rise of temperature, put the child to bed. None of them are to go to school on any account. *The incubation period is usually nine or ten days*, but it may be as short as four days or as long as fourteen; if after fourteen days there are no symptoms the child may be considered free.

There are cases in which the rash appears to have difficulty in erupting and the child is obviously very ill, and weak, and stuffy in the throat and chest. A hot bath (100° F. or 38° C.) will bring the rash out and improve the child's condition.

If the eruption itches very much, put a little lysol or bicarbonate of soda (Section 89) into the warm water with which you sponge the child down daily. Put in just enough to make the water smoky, and powder the child after with zinc and boracic. If the irritation is great, you can repeat this in the evening as well.

Give the child a fever diet, with plenty to drink. The old-fashioned remedy of black-currant tea relieves the throat.

Take great *care of the eyes* while the fever is high

and the lids are sore. Keep the light shaded, and do not let the child read even if he feels like it, which is doubtful at this stage. Bathe his eyes night and morning with boracic lotion and put a little pure white vaseline or boracic or yellow ointment on the lids at night.

You must not give aperients unless they are ordered by the doctor as the bowels are easily upset; an intractable, possibly fatal, diarrhœa may be started. Your doctor will tell you how to treat diarrhœa, should it occur. Should the bronchitis get worse and the breathing become more laboured, let your doctor know at once, and apply a plaster, fomentation or linseed-meal poultice to the chest and back. (*See* Section 169.)

Should there be any sign of collapse before your doctor arrives, give stimulants, such as brandy or sal volatile, hot drinks, and warmth to the body. If the child has croup badly, act as indicated in Section 174.

Earache can often be relieved by a hot fomentation over the ear and side of the head, and warm oil into the ear. (*See* Section 224.) Even if it comes on in the night *always inform your doctor at once;* time saved in commencing treatment of this condition may prevent the necessity of a serious operation later on.

The fever lasts almost a week and ends suddenly; if it is prolonged beyond that period, it is owing to some complication. The child should not be allowed up till the temperature has been normal night and morning for one week; if he has had any complications, one to two weeks of normal temperature should be allowed to elapse. Once the child is up he can, if the weather is fine and warm, be put out in the open

air or pushed out in a perambulator or chair, but he must not walk for three weeks from the onset. Convalescence should be long, and accompanied, if possible, with a change of air, good food, and a certain amount of rest.

Remember, never expose the child to cold draughts, but do not overheat the sick-room. Do not let the child get up till he is thoroughly free of the disease, as it is in the later stages that complications occur. *Give no medicines unless ordered by the doctor:* you may cause the death of your child with cough mixtures or aperients.

Staining of the skin may last for several weeks after the eruption is gone and there is usually a slight branny desquamation.

194. Will you describe the symptoms of German measles?

The eruption is the most noticeable feature. It sometimes appears on the day that the child first feels out of sorts, sometimes not until two or three or even up to nine days later. It is seen on the face first, then on the chest, and is over the whole body in 24 hours; it consists of separate round or oval slightly raised feverish red spots, not occurring in half-moon shaped patches as in measles. It lasts two or three days, then gradually fades, and is followed by a slight dry desquamation. The child may feel quite well up to the advent of the rash, when he just feels "unwell," and mopes and does not want his food; or he may have a cold in his head, bloodshot eyes, and a sore throat for a few days before the rash comes. The glands at the nape and back of the neck, under the jaw, in the armpits and in the groins may be a little enlarged and sore, and may feel shotty and hard.

German measles may take on the appearance of measles or scarlet fever, but the temperature is usually very slight (100° F. or 38° C.). The incubation period is from two to three weeks, and the quarantine is therefore three weeks from the last exposure.

195. What is the treatment of German measles? And are there any complications I must watch for?

The child must be put to bed in a sick-room the temperature of which is 60° F. (15·5° C.) and the doctor should be called in. No medicines are needed and the complications are rare; occasionally croup or pneumonia occurs if the child is delicate.

Diet should be of a nourishing, easily assimilated kind, not necessarily liquid unless the temperature exceeds 102° F. (39° C.).

Disinfection of the room will not be necessary beyond a thorough scrubbing.

196. Will you describe the symptoms of scarlet fever?

Sickness and fever are usually the first indications that anything is amiss. The eruption often appears on the same day, but the child may have been chilly, languid, drowsy, feverish and generally poorly for two days before it appears as characteristic bright scarlet pin-points on a flushed background. The skin is burning hot and dry. The throat is red, sore and swollen, and the tonsils are enlarged, often showing yellowish-white specks; in bad cases they are very swollen and become ulcerated. The nose runs, the eyes are bloodshot, and the tongue is thickly coated with fur, which leaves, when it clears away, a tongue somewhat resembling a strawberry.

The rash may be general, but always excludes the face, which is, however, often flushed; it is not at all rare

to find the skin a less vivid tint, perhaps a dusky hue, the rash being only in one place, either on the chest, the abdomen, the back or the limbs. It usually starts to fade on the fifth day, is indistinct by the sixth, and gone by the seventh. There may then be great itching of the skin, which begins to peel and dust off, making the body look as though meal has been sprinkled over it. The peeling takes longest to complete on the soles of the feet and the palms of the hands.

Scarlet fever may be mild, showing itself only in a slight sore throat and a rash, perhaps only in one patch, lasting but a day or so; the fever may be absent or only slight (99–100° F. or 37–38° C.). But there is always the bran-like peeling.

On the other hand, the attack may be severe, with delirium or convulsions, a high temperature (107° F. or 42° C.), severe inflammation of the throat and swollen and painful neck glands.

Then there is the kind, fortunately rare, in which hæmorrhage in the skin and nose-bleeding occur, blood being also passed in the water. Death occurs about the third or fourth day.

197. What is the treatment of scarlet fever?

The first thing to do is to send for a doctor. Isolate the child in as large a room as you can and, if possible, devote the whole of the upper floor to him and those in attendance upon him.

The nurses are to have no more intercourse with the rest of the household than is absolutely necessary. No household pets may be allowed admission to the sick-room, even during convalescence. In fact, adopt the general precautions already enumerated in Section 188, under Diphtheria.

If, in older children, the throat is moderately sore, ice to suck will afford great relief; give a very young child a water ice, or iced water, sweetened with glucose, 2 teaspoonfuls to the tumbler, and flavoured with lemon or orange. Black-currant tea is an old remedy that can be recommended.

Should the throat be very swollen and superficially ulcerated, with some foul discharge from it, more active measures must be adopted, to prevent the discharge from being swallowed or inhaled. The throat should be mopped out every hour or so, according to the amount of discharge, with glycerine and 5-per cent. boric acid lotion. A mop can be made by wrapping absorbent wool round a wooden spill; this should be gently wiped round the mouth and afterwards burnt. An older child may wash his mouth out with glycothymoline or hydrogen peroxide, half a teaspoonful in a tumblerful of warm water. The treatment of the throat is no easy matter, but is most important, and skilled nurses must be obtained for its efficient performance. If the glands of the neck are very swollen and painful, great relief will be afforded by hot fomentations, plasters or poultices (Section 169).

It is rare for children under a year old to contract the disease, but if they do, and are at the breast, they should be maintained there and fed at the regular hours. The older child is best kept on a liquid *diet*, but as soon as the fever has departed, food should be increased to satisfy his appetite—milk puddings, bread or rusk and milk, junkets, jellies, sponge-cake, meat jellies, fruit, soups, etc., being given him. It is advisable not to overfeed him at this period, how-

ever, as the kidneys may have been infected and, if put to extra work, may become inflamed, gross structural damage occurring, with dropsy or Bright's disease. Preserve every day a specimen of the child's water for the doctor to see, preferably in a clean glass vessel.

If the fever is high (104–105° F. or 40–41° C.) there is no harm in *sponging the body* two or three times during the day with water of the same temperature as the body, to which you can add a little eau-de-Cologne or lavender water. Such sponging soothes the child's skin and reduces the fever. If the child "wanders" or becomes wildly *delirious*, or is sleepless, an ice-bag, kept filled with pieces of ice broken to the size of a walnut, should be applied to the head. This can be procured from a chemist; a sponge-bag is a good substitute, fixed in place by a few turns of bandage. See that the mouth of the bag is securely fastened and watertight. Here let me remind you that in dealing with a delirious child you must not seize his wrists, but resist his movements with the flat of the hand; often tucking the bed up tightly will prevent much wild scrambling.

To allay the irritation keep sponging the child, adding a little of some coal-tar preparation—lysol or izal—to the water, or bicarbonate of soda (Section 89). Dusting with boracic and zinc powder also helps.

Unless there is some complication, the fever will have disappeared by the end of the first week. When it has subsided peeling commences, and it will be proper for the child to be given hot baths to get rid of the dead skin and keep the living skin in healthy action. In administering these baths the greatest care must be exercised to see that the child does not get chilled,

for should he do so his kidneys are almost sure to suffer. When washing him pay *particular attention to the head*, especially behind the ears, to the hands, the feet, especially between the toes, and to the buttocks.

The child should be kept in bed for at least three weeks, whether the attack is mild or severe; otherwise there is added risk of complications. He must be quarantined for at least six weeks, sometimes for two months or even longer, for scarlet fever is a very infectious disease, and great care has to be exercised. Your doctor will have to decide, on the merits of the individual case, when the time has come that the child is no longer infectious, a decision it is sometimes hard to arrive at.

198. What complications must I be on the watch for in scarlet fever, and how can I nurse them if they occur?

Diarrhœa may be troublesome at the onset of the disease, its presence indicating that the attack may be a severe one. Your doctor should be informed as soon as the diarrhœa starts, because if it persists the child may die. *Ulceration of the throat* may follow the sore throat which is always present in this fever, especially if the toilet of the mouth is not adequately attended to in the early stages. *Inflammation of the ear* often follows and is associated with the sore throat. It shows itself by earache, often of sudden onset. Immediately send for your doctor, and meanwhile treat it as described in Section 224. Should the bone behind the ear become swollen, sore or tender, there may be *mastoid disease* (Section 223).

Symptoms of *inflammation of the heart and its valves* include extra distress in breathing on the slightest

exertion. To prevent this complication, the less the child is moved or allowed to exert himself during the height of the infection the better; he must not get out of bed to open his bowels, nor must he strain at stool. Be sure he has a long convalescence, and ask your doctor to examine the heart frequently. *Pain in the muscles and joints* may be associated with heart trouble. Here we see the close connection between scarlet fever and rheumatism. (*See* Section 213.)

If the child is very pale and complains of headache, and then his face, feet, hands and abdomen suddenly begin to swell, it signifies *inflammation of the kidneys*, a serious complication which may follow chilling during the height of the fever. It appears at the third or fourth week. It is to guard against this complication that a specimen of the child's water should be preserved every day for the doctor to see and test. When there is inflammation of the kidneys the child passes very little water; what he does pass should be measured. This can easily be done by means of a special measure, or a glass jam-jar marked on the outside in quarter- and half-pints. Blood in the water gives a smoky appearance. To treat kidney trouble, regulate the amount the child drinks so that he is taking the same quantity of fluid as he passes, and give him no solid food. His drinks should consist of glucose and barley-water or warm milk or fruit-juices, until the quantity of urine increases and the swelling, or œdema, of the tissues subsides; then a gradual increase in diet is needed, but this must be under the supervision of your doctor.

Be very careful in nursing the child; his skin will be very tender and needs extremely careful drying

and powdering. If he is old enough, it is best to give him a rubber ring or a water- or air- bed, a cheap form of which is an "air-mattress" such as is used in sea-bathing. Attention should be paid to the bowels and your doctor should be informed from day to day of their condition. If medical aid is unprocurable do not give aperients indiscriminately; liquid paraffin or confection of sulphur is suitable.

Convulsions or fits may supervene if the disease is severe; your doctor must then immediately be sent for. (*See* Section 51.)

199. I have heard of a case of scarlet fever in which the child, before the eruption showed itself, was suddenly struck prostrate, cold and almost pulseless. What in such a case is the immediate first-aid treatment?

This is an exceptional form, called malignant scarlet fever. Send for a doctor at once. Meanwhile apply hot bottles, bricks or bags to the feet, legs and back, and boil water for a hot-blanket pack (Section 170), or, if a hot bath is available, carry him in a blanket and lower him into the hot bath in the blanket. Give him teaspoonfuls of brandy and water (a tablespoonful of the spirit to half a tumblerful of water). When he is warm the rash will appear.

200. I have other children at home. What am I to do about them? How can I purify the house and its contents from infection after scarlet fever?

Scarlet fever is conveyed principally by the breath, the discharges from the nose and mouth, and the evacuations. Other children must not be allowed near the sick child or his attendants. If possible they should be isolated in another part of the house,

and they must on no account go to school, or to anyone else's house, lest they spread the disease. If after seven days from the last exposure your children show no signs of sore throat or temperature they can be sent away to a friend's house. They can go before this if their skin-tests are negative. (*See* Section 201.)

If the mother has to attend the sick child herself, she should take the precautions described in Section 166.

When the child has recovered from the fever, and is free from infection, he should have a final bath with Dettol or lysol—one tablespoonful to half a gallon of water—and should be washed with carbolic soap. After drying he should put on a complete set of clean clothes and should not enter his sick-room or use anything that has been in it until it has been disinfected.

Remember, discharges from the nose or ears may carry the infection, and your doctor's advice should be sought if such remain.

For disinfection of the rooms and their contents *see* Section 189.

201. Are there any precautions I can take if there be an epidemic in the district, to prevent my children from getting scarlet fever?

You can take them to your doctor to have them tested, to see if they are liable to it, and, if necessary, you can protect them by means of injections.

Boil all milk and drinking water; milk is especially dangerous because it absorbs the bacteria from the air, also it may be infected, having come from a cow with a sore udder, due to the same bacteria as scarlet fever, or because the man or woman who milks the cows may be carrying the infection.

Schools could be closed, and any house with scarlet

fever in it should be avoided like the plague. Fresh air and sunlight are the best preventatives.

202. How can I differentiate between a septic throat accompanied by rash, scarlatina, scarlet fever and measles?

Except for measles, the disorders mentioned are caused by different groups of the same bacteria (streptococci). Just as there are different breeds of dogs, so there are different kinds of streptococci.

In *streptococcal tonsillitis* there is fever, sore throat, furred tongue, and perhaps rash, but the attack only lasts a few days and peeling of the skin is rare; complications of the heart are common. In its most severe form, a virulent sore throat may be followed by a general infection, death occurring in forty-eight hours. To differentiate it from true scarlet fever is often difficult, especially if a rash is present, and professional knowledge is needed. It is best to treat the condition as scarlet fever until it has been proved to be otherwise.

Scarlatina was at one time thought to be a distinct disease, but it is now agreed that it is merely scarlet fever due to *streptococci* of a less virulent form.

The main *differences between scarlet fever and measles* are that in scarlet fever there is a shorter period of sickness before the rash appears; the rash is lobster-red, takes the form of pin-point spots, and *does not appear on the face;* associated with it is the typical sore throat and strawberry-like tongue; and the skin usually peels, especially on the palms of the hands and soles of the feet. Measles starts with a common cold and cough; the rash is blotchy, *is present on the face,* and the blotches are half-moon shaped, and there is afterwards no definite peeling, but only a scurfy exfoliation.

203. Will you describe the symptoms of chicken-pox?

The breaking-out of an eruption on the child's body is usually the first indication that he has this disease. He may be a little out of sorts for a few hours before, and perhaps has a shivering fit, but the eruption shows itself in a few hours—anyhow, within a day—of the child's first appearing poorly. It starts in the form of small rose-coloured pimples attacking the neck, back, chest, shoulders, limbs, inside the mouth, and on the tongue and the face slightly; in the scalp the spots have a typical hard, shot-like feel. The spots quickly become vesicles, or small bladder-like pimples, at first containing a fluid clear but later becoming pearl-like. If these vesicles are broken, a "pit" is left in the skin; if unbroken they dry up and form scabs. *They always remain separate, and the eruption comes out in crops* for four, five or more days, so that distributed over the body, all stages of the eruption—pimples, vesicles and scabs—will be found at the same time. Sometimes the vesicles have a red ring round them. There is usually itching of the skin, and there will be fever, the degree depending on the severity of the attack.

Complications are rare, but the spots may become septic. Inflammation of the brain or of the kidneys is not unknown. There are also rare forms of bleeding chicken-pox.

204. What treatment do you advise? Is there any danger?

Isolate the child and put him to bed, adopting the same precautions as advised for scarlet fever (Section 197). Send for your medical attendant. While the temperature is raised, keep the child on a light diet, with plenty of fluids to quench his thirst.

Do not allow him to scratch himself. It is as well to cut his nails short (Sections 4, 104) to guard against this. Allay the irritation of the skin with a cooling lotion of calamine or with boracic powder or else with sulphur ointment or 2-per-cent. carbolized vaseline. He must not leave his bed till his temperature has been normal three days and the rash has ceased to come out. He remains infectious, and therefore should not leave his room till all the scales are off. The room should be disinfected, as described in Section 189, but the walls need not be stripped.

The incubation period is 12 to 20 days, and the quarantine period is 21 days from the last exposure.

205. What can you tell me about smallpox?

Smallpox is now very rare in this country owing to vaccination (Section 46), which either wholly protects the child or causes the disease, if contracted, to appear only in a mild form. There are three varieties of the disease. In one, the *discrete* form, the eruption remains as distinct pimples; in *confluent* smallpox, the pimples run together; in the *hæmorrhagic* form there is bleeding into them.

Smallpox commences with a shivering fit, great depression of spirits, headache, sickness, pains in the back and loins, convulsions or delirium, and a temperature of 103–104° F. (39·5–40° C.). The eruption appears about the third day. The disease is a very serious one and highly contagious, and the sufferer should be removed at once to a special hospital. All who have been in the house or in contact with the child should immediately be vaccinated.

The incubation period is 12 days and that of quarantine 15 days, dating from the last exposure.

206. If my child has a shivering fit, is it to be looked upon as an important symptom? What should I do?

Certainly it is to be regarded as important, for nearly all serious illnesses commence with a shivering fit. Take the child's temperature, and if it is over 100° F. (38° C.) put him to bed at once, and send for your doctor. A few hours of judicious treatment at the commencement of an illness is frequently of more avail than days and weeks of treatment when once the disease has gained a firm footing.

When the child is in bed, give him a warm bottle to his feet and one to his back, and an extra covering for his bed, and allow him plenty of hot milk or glucose and lemonade to drink, using 2 teaspoonfuls of glucose to the glass.

207. My child at frequent intervals has a shivering fit followed by vomiting. What may this be? And what can I do to prevent recurrence of the attacks?

This may be the condition called *cyclical vomiting, or acidosis.* It will be noticed that the child is particularly bright and ravenous for his food the day before. During the night he may vomit, his temperature rises to 103–104° F. (39–40° C.); and he is drowsy, pale, heavy-eyed and irritable. The vomiting may be repeated till there is nothing to come up but bile-stained mucus. He is constipated and when his bowels do open he may pass a clay-coloured motion; his water may be dark; and his breath has a peculiar smell, like that of rotten apples.

These repeated attacks may be caused by a septic focus in his system—septic tonsils, teeth, ears or appendix; it may mark the onset of an inflammation of the liver; or there may be something in his diet that he is unable to digest, perhaps fats or chocolate.

Put him to bed and keep him warm, and send for your doctor. Withhold all solid food till the vomiting stops and the temperature is down, but give plenty of drinks, containing glucose or sugar, and let the child suck as much glucose barley-sugar as he likes. A pinch of bicarbonate of soda in the drinks will help to relieve the vomiting. I have found a linseed or Antiphlogistine poultice over the liver often serves the same purpose. A drastic aperient should only be given on the advice of your doctor.

If the attacks are repeated fats should be reduced or eliminated from the diet—no cream, no chocolates, and only a scraping of butter. A mixture of tincture of rhubarb, 3 minims, and bicarbonate of soda, 5 grains, given over a period of a month, may stop the attacks permanently. Give him as much glucose barley-sugar as he likes.

If, on another occasion, the child exhibits the symptoms of sparkling vivacity and ravenous appetite, associated with constipation, give him a pinch of bicarbonate of soda in lemonade every four hours, and an aperient. You may thus prevent the attack or, anyhow, lessen its severity. An excitable, nervous child, especially an "only child," is most liable to this condition; there is a big nervous element in it. Less excitement, fewer parties, less spoiling, and some gentle discipline often have marked effects.

Associated with cyclical vomiting is *travel, train or car sickness.* To allay this trouble give the child glucose or glucose barley-sugar, with bicarbonate of soda in his drinks for a week before the journey is to take place. Also a modified diet, with less fats and no chocolates, and attention to the bowels will help.

208. What are the symptoms of catarrhal jaundice? What can I do if my child suffers from it?

For several days before the attack the child is lethargic; he yawns, shows loss of appetite and loses his colour; he is constipated and the motion may be clay-coloured; he may complain of pain in his stomach and limbs; and may vomit, possibly after a shivering attack. There is then a faint yellow tinge to the forehead, the whites of the eyes, the inside of the mouth, and the palms of the hands. The water may be mahogany-coloured or orange red. The temperature is never very high, being about 100–101°. F. (38–39° C.).

You must put your child to bed and send for the doctor; this is not a condition to be taken lightly, and the child needs proper nursing. A linseed poultice, back and front, over the liver is a definite help in allaying the pain, stopping the vomiting, and hastening the course of the disease. The diet should be light, with no fats to begin with. Give skimmed milk, fruit-juices and fruit purées, beef tea (made from beef-bones) from which the fat has been removed, vegetables, ample fluids, and glucose in plenty.

209. My child has pains in his stomach. Do you advise me to give him castor oil?

Never. More fatalities have been caused by giving violent aperients to children (and adults too) with pains in their stomachs than one cares to think about.

If your child has pain in the stomach, and is constipated, *take his temperature.* If this is above normal your doctor must be called at once. If there is no temperature, find whether he has eaten anything the freshness of which was doubtful. Take note of his

motions, whether they are of normal colour, or whether any blood is present. Is the water painful to pass? Is it scanty and thick? *Save a specimen for the doctor.* Has he had a sore throat or earache at any time in the last week? Does he look ill? Does he play with his toys between the attacks of pain? Has he had more than one pain, *i.e.* is it always there, or does it come and go? Remember, if the pain is severe, and is associated with vomiting, bad breath and a temperature, you must send for your doctor. By trying to treat the condition yourself you hazard your child's life. If the pain is severe, you can apply heat, in the form of a hot-water bottle, fomentation or plaster, to the place till the doctor arrives. Whatever the cause may be, that can do no harm.

210. Do you believe in "a chill on the liver" as a complaint? What can I do if my child contracts one?

Yes, there is such a condition in children, quite apart from cyclical vomiting (Section 207). It occurs when a child has been taken from a warm room into the cold air, or gets his feet wet and does not change his shoes and socks at once. The following night he has a pain in the stomach, and vomits, and shows a mounting temperature, after initial shivering attacks and yawning. The water he passes may be dark, and there is usually constipation, though there may be diarrhœa. The child is pale and hollow-eyed, but there is no jaundice. Keep him in bed, and allay the pain by applying hot fomentations and poultices to the stomach. Give him plenty of glucose and lemonade to drink, but no solid food for 24 hours. He should have an aperient of grey powder (¼ grain) at night if the pain is not severe (but it is wiser to await your

doctor's advice), and a dose of 5 grains of bicarbonate of soda and 2 minims of rhubarb every four hours until the temperature subsides and the vomiting ceases. *Should the pain increase, the temperature rise and the vomiting continue, your doctor should be consulted.*

211. What can you tell me about the complaint called mumps?

Mumps is inflammation of a gland in front of the ear, known as the parotid, and is commonly ushered in by a slight feverish attack, the temperature reaching 99-101° F. (37-38·5° C.); fever may, however, be absent. After a short time—usually three or four days but sometimes as soon as the child sickens—a hard swelling is noticed in front of and under one ear and spreading to the side of the face. The other side then swells also, the swelling going round under the chin. The colour of the skin is not usually altered. This lump is exceedingly painful and continues to be so for from four to seven days. It then gradually disappears. Sometimes the glands underneath the jawbone are swollen as well. In a boy the testicles may become extremely painful and swollen, and a girl may have acute pains in the abdomen, this showing that her ovaries have contracted the infection. The parotid glands may escape and the genital glands be alone affected, a very serious form of the disease and one which needs great care in nursing. A child rarely has more than one attack of mumps. Sometimes there is a very high temperature (105-106° F. or 40·5-41° C.). Cold sponging, on the advice of your doctor, is the proper treatment.

212. Is mumps contagious? How long is the incubation and what is the treatment?

It is very contagious, especially in the early stages,

and rapidly spreads through a school or household. The swelling may occur from 14 to 25 days after the time of exposure and the child will be free from infection three weeks after the first appearance of swelling. Quarantine lasts for 30 days from the date of the last exposure.

Isolate the child, and apply poultices or fomentations to the swellings. If there is any rise of temperature, any swelling of the testicles, or any abdominal pains, keep the child in bed. If a girl has abdominal pains you must send for your doctor, as the condition is dangerous and other possibilities have to be excluded. While the child has a temperature a light diet should be instituted. Look after his bowels.

The complications are few; but where the testicles or ovaries are affected and proper nursing with rest in bed is not instituted, there is every possibility of their powers of procreation, when grown to adult age, being destroyed.

213. My child looks pale; when I touch his limbs it causes him to cry out, and he does not move them himself. One or two of the large joints are swollen and red, the swelling subsiding in a day and appearing elsewhere the next. He has a fever and sweats at night. What is the matter with him and what treatment do you advise?

Send for a doctor at once, for your child may have rheumatic fever. Keep him in bed, in a warm room (60° F. or 15·5° C.), putting him between blankets. Give him a plentiful but light diet, with plenty of sugar and glucose to sweeten his fruits, puddings and drinks. It is essential that *he should be moved as little as possible.* Even when washing or passing his

excretions he should never be moved from the bed during the early stages, and later should be moved only with the permission of your doctor. The great danger in rheumatic fever is damage to the heart, which is always affected. Whether or not his heart will become permanently injured and he will be a cripple for the rest of his life depends on his receiving proper medical treatment and correct nursing.

The disease may appear to be mild, a mere triviality perhaps, but in reality it is nothing of the sort; it is the most damaging of diseases and causes more permanent invalidism in children than any other. Be on the look-out for rheumatic nodules in the elbows, back of the head and hands. (*See* Section 217.) Dry heat will relieve the pains in the limbs until your doctor gives you the correct remedy; a Flammeline or Antiphlogistine poultice is useful, or the application of oil of wintergreen on flannel. Never apply wet fomentations or poultices. Attend to the bowels; a laxative and plenty of fruit will be necessary, as there is a tendency to constipation.

Rheumatic fever is not infectious, but it is a long disease and entails at least six weeks in bed. It may follow tonsillitis or scarlet fever, and is a complication of them.

214. What are growing pains? Can my child get rheumatism without having rheumatic fever?

Your child can suffer from rheumatism, with the subsequent damage to the heart, without having had acute fever. All pains in joints, muscles and limbs should be taken notice of in a child; if your child has any, do not look upon them as being accounted for by the progress of growth. They may mean rheumatism.

Only a medical man can determine their nature and advise you as to treatment. The pains are often associated with sore throats or tonsillitis (Section 183).

215. What other conditions may be present when a child complains of a painful joint or limb?

There may be an unrecognized *fracture or dislocation* of a bone or joint. By questioning you may discover that the child has experienced a fall or bump. An X-ray must be insisted upon.

There may be an *acute inflammation of the bone.* In this event the child is ill, with high fever, but the pains and swellings do not move about from limb to limb; they remain in the one place, gradually increasing in intensity, and responding neither to treatment by heat nor to medicine. Immediate surgical advice is needed to cure this condition.

Then there is a terrible infectious disease called *infantile paralysis*, which is carried by kisses, by drinking out of infected cups or glasses, or by inhaling the breath of infected persons or "carriers," as in diphtheria. A limb becomes suddenly painful, with loss of movement; the temperature may be slightly raised. In all such cases of a painful limb or joint your doctor should be called at once. The child should be isolated, and the limb affected should be treated with great care; never allow it to hang loosely down or to be moved at all. Other children in the family should be kept from school and allowed to meet no one for 14 days.

Other causes of sudden pain in a limb include the onset of *meningitis* (Section 221).

216. What is St. Vitus's dance and what are the symptoms?

St. Vitus's dance, or chorea, is a rheumatic inflammation of the brain affecting the nervous system.

The sufferer is generally a girl, highly intelligent, sensitive, and top of her school class, but with a tendency to exaggerated reactions to small causes. She is always anæmic. The onset of the disease is invariably associated with some mental shock, such as being suddenly attacked by a dog. Girls contract chorea more frequently than boys, in the proportion of five to two, and the disease usually occurs when the child is between six and fifteen years of age. As a rule she ultimately recovers.

The outward and visible signs of the brain infection are purposeless movements, often combined with muscular weakness and blunting of the intelligence, in an over-bright child. The onset is gradual. The movements are of a purposeless jerking character, uncontrolled or only partially controlled by the will, and the child may be powerless to prevent them; they cease, however, when she is asleep. The emotions are intensified, the child bursting into tears upon the slightest provocation; if her emotions are stirred, it tends to set the muscles in action and to intensify the spasmodic movements. Voluntary movements are greatly hampered and interfered with; the child drops things and cannot feed herself. Her movements are conducted in a jerky, erratic manner, or their purpose may be entirely defeated by the uncontrollable behaviour of opposing muscles.

Such children are often most unjustly punished, this depending on the understanding and humanity of the school master or mistress. Any child who suddenly alters in character in this way, and the quality of whose work deteriorates, should be talked to and a reason sought in both mind and body; if one cannot be

found she should be taken to a doctor and be thoroughly overhauled.

The child suffering from chorea has a fleeting smile that leaves her face dull and expressionless. She shrugs her shoulders, tosses her head, and jerks her eyeballs. The arms are thrown about, twisted and contorted. The fingers are widely separated, and open and shut, and the palms of the hands are turned outwards. If the child is given a cup of milk to drink, it is either dropped or spilled or, with much jerkiness of movement, the cup is finally dashed to the mouth and the fluid is gulped down. The movement of the lower limbs is not so marked, but she cannot stand still, and shuffles and crosses her feet and wriggles and twists. She stumbles in her walk or makes a rush for the place she wants to reach. She breathes in an irregular jerky fashion and talks with a splutter and explosively. The worst cases cannot even lie in bed. She becomes wasted and the limbs covered with bruises and sores; she cannot talk; and passes her evacuations into the bed. One side of the body may alone be affected. Constipation frequently attends the disease; the temperature may be raised and there may be hot drenching sweats at night and sore throat. A child who has once suffered is always liable to another attack, especially if she is worked too hard at school or her home surroundings are unsatisfactory. Each attack may last for two or three months.

217. What is the treatment of St. Vitus's dance?

Take the child from school at once and send for a doctor. Chorea is rheumatism and may seriously affect the heart, frequent examination of which is, therefore, advisable. If the attack is mild, with no

sweats or temperature or sore throat, a few months in a convalescent home under the strict supervision of a nurse may be sufficient to effect a cure.

Bed is the best place for the child, and she should be kept as quiet as possible, away from other children, and with *no visitors*. This, combined with a diet of milk and farinaceous foods, freedom from all emotional disturbances, and gentle regulation of the bowels will work wonders.

The child is better under the supervision and nursing of a stranger than in her mother's charge. Maternal sympathy will prove too strong and definitely detrimental to the child. Take my advice and, if the child is not sent to a home, have a nurse, kind, firm and judicious. In severe cases the administration of nourishment becomes a source of anxiety, and needs great patience; she may have to be fed by a tube passed into the stomach.

If the child throws herself about violently in bed, pad the sides with pillows. A hammock may be better than a bed.

On no account try to control the movements by tying the hands or legs. Strict attention must be paid to cleanliness and the toilet of the skin, or bedsores will occur. Use an air- or water-bed if bedsores threaten. It may be necessary to have a mackintosh sheet, because the child is liable to pass her evacuations into the bed.

If you should discover nodules the size of an almond or a pea under the skin at the back of the head, about the elbows or at the back of the hands, direct your doctor's attention to them. They are called *rheumatic nodules*.

When the child has sufficiently recovered, that is,

when the movements are slight and are not increased by the exertion, she may be allowed to get up, but only when your doctor gives permission.

Convalescence should be long and careful; no violent exercise or brain work should be attempted for months and she should be guarded against emotional strain or excitement. Change of air and scene are useful, provided they are taken at some quiet country home or farm under the charge of a suitable person.

218. Is there not a condition of fidgets noticeable in some nervous children which might be mistaken for chorea?

Yes, there is. Although chorea is not infectious or contagious, another child may be seen to be getting "the fidgets." Such children are highly excitable, and under emotional excitement wink their eyes, grimace, are perhaps unduly fidgety with their fingers or, much less frequently, are unable to sit still. If their condition were a trifle more pronounced, it would be mistaken for chorea, and without careful watching it is sometimes impossible to tell the difference. It is best to consult your medical adviser, since in chorea the danger of heart disease is so serious. Make sure that the child is not being over-pressed at school; and that home lessons are not a worry and do not mean sitting up later than is advisable. Send the child to bed early. Plenty of sleep, plenty of fresh air, plenty of good food at meal times, attention to the bowels, freedom from excitement of all kinds, plenty of play, firm and judicious moral control without punishment, and a few lessons to keep her occupied are required. Place the child in front of a mirror and encourage her to go for a daily increasing length of time without

making the movements; a reward is often helpful. A period away from home will often bring about a cure.

219. Do children suffer from typhoid fever? What are the symptoms and the treatment?

Yes. Cases sometimes occur, even in infants a few months old, but it is not usual to meet with typhoid in a child under four years of age. Children and young people are actually more susceptible than adults, but they have the disease in a milder form.

The onset is indefinite. The child is "out of sorts," sits over the fire, is dull, complains of headache and is sick, the headache being more severe than the sickness. He is a trifle feverish during the day, and the fever is worse at night; he suffers from sweats, his face is flushed, and he becomes delirious. During the second week his stomach begins to swell, and rose-coloured pimples make their appearance, coming out in crops which last two, three, or four days. There may be only a few of these on the body, or they may be very numerous all over him. He suffers, perhaps, from diarrhœa, but is often constipated. The bowels are nearly always ulcerated. Occasionally the motions resemble pea-soup. The tongue is coated with fur, but is clean at the tip and edges; later the fur darkens and secretions collect about the lips, teeth and jaws; finally the tongue becomes red and beefy looking.

The disease lasts from 10 days to 3 weeks. Relapses are not uncommon. In children, death from hæmorrhage of the bowel is rare; bleeding may be profuse, yet they recover. Death may occur, however, from heart failure, lung complications, perforation of the bowel, or blood poisoning; or the child may waste and die.

What to do.—The child must be isolated, and a

doctor immediately called, and the same hygienic precautions and sanitary arrangements must be adopted as for diphtheria (Section 188). *The motions and soiled bed linen will convey the disease.*

Solid food must not be given unless the doctor orders it—disregarding this injunction may lead to perforation of the bowel, and thus to peritonitis and death. If during the height of the fever the temperature suddenly falls to normal or below it and the child appears to be much worse, send at once for your doctor. If there is also bleeding from the bowels, keep the patient lying very quiet and apply cloths wrung out in icy-cold water, or ice in a sponge-bag, to the abdomen.

The disease is conveyed by contaminated water, food, or milk. It takes eight to twenty-three days to incubate, and the child is not free from infection until fourteen days after the subsidence of the fever. Constipation is usually troublesome during convalescence and for some time after.

During an epidemic or before going to a country where typhoid is prevalent, immunity can be obtained by having two injections—with a week's interval between them—of a protective vaccine.

220. Please tell me about boils. What is the best treatment of them?

Boils are seen in infants and young children who are neglected or have a lowered resistance to infection. School children often suffer from them—indeed there may be quite an epidemic of boils in a school.

Should an infant or a child suffer from boils, or have a series of them, you had better take him to see the doctor, as he may have some constitutional

disorder such as diabetes, which requires treatment. A child may be eating too much chocolate or the wrong type of food, or he may need a tonic or change of air. Boils are due to germs which, finding their way into the skin through the pores or hair follicles, set up an acute inflammation. *Boils are contagious*. If you have other children, remember this, and see they do not use the same towel or bath-water. If the child scratches the surface of the boil and touches another part of the skin, he will convey the infection elsewhere, and other boils may arise. The boils are more likely to occur where the clothes rub the skin; the neck and buttocks are favourite spots.

Never squeeze or press a boil; you only spread the infection into the tissues round. Gently wipe the discharge away, and if the boil is on the neck or scalp, shave the hair off around it. See that the bowels are open by giving a purge when the boil is red and hard.

Never prick or lance a boil yourself unless medical aid is not obtainable. You may, however, if a hair is protruding in the centre, pull it out with a jerk, after sterilizing the pincers by boiling them for five minutes.

To treat boils, apply hot boracic or saline fomentations in the early stages every four hours; they must not be too large, only big enough to cover the inflamed part. Fomentation will soon cause the boil to break, and as soon as the core comes away the lesion will commence to heal. A good alternative to a fomentation is to take some pure yellow soap and shave off a small quantity, mix this with equal quantities of Demerara sugar and apply the mixture, spread on lint. A solution of sodium sulphate (Glauber's salts) on lint is also useful. Change this every six hours. There are

proprietary compounds, such as Ilon, which work in the same way. Do not stop the "drawing" application till all the pus has been drawn out. Afterwards dust the part with powdered boracic acid, or dress it with dry boracic lint, until there is no raw surface.

If the child is in a low state of health, a change of air to the seaside is indicated, or a tonic prescribed by your doctor.

221. My child suffers from sudden severe headache; what may this indicate?

A young child is often unable to tell you where the pain is, but if you watch him, he turns his head from side to side, or puts his hand up to his head or ear repeatedly. Take his temperature and notice his general condition. Note whether he has been lying about the last few days and not playing with his toys, and whether he is cross and irritable and does not take his food. If with these signs there is any rise of temperature, or if he cries at the light, possibly vomits, is constipated, and develops a squint, this is a most urgent case for your medical man, as the child may have some brain infection, such as meningitis.

Lay the child down in his room, which is kept at a temperature of 60° F. or 15·5° C., with the blinds down, and keep him in absolute quietness. All other children must be kept away from him, and he must never be left till the doctor has seen him.

With an older child also a sudden severe headache should never be neglected; his temperature should be immediately ascertained for it may mark the onset of a fever. If there is no temperature and the headaches are not severe, but recur from time to time, the

child may have trouble in his ear; his eyes may need attention, or his tonsils may be enlarged—all matters needing expert advice and thorough examination. (*See* Sections 182, 219, 223.)

222. What can I give a child for headache if he shows none of the above symptoms?

If the pain is not severe and the temperature not raised you may always give one aspirin, and this can be repeated in four hours' time if necessary. A night purgative is advisable. But give no other drugs or proprietary tablets without your doctor's permission. Stop the child from reading or straining his eyes, especially from reading by insufficient light.

223. What are the symptoms of disease of the ears?

A baby is restless, rolls his head, puts his hands up to his head or ear, and refuses to rest his head on the affected side. He may have pains in the stomach, green stools and diarrhœa. If a young child screams shrilly, violently and continuously, he is often suffering from earache. An older child will complain of the source of pain. To distinguish the scream of earache from that of bowel-ache, note that the former is more continuous, the child putting his hand to his head, while in the latter he cries more spasmodically as the pain comes and goes, and he draws his legs up to his chest. The bowels may be disordered in either case.

A careful examination of the ear will generally help to decide the chief cause. If matter exudes from it, and the glands of the neck are swollen and painful, the drum of the ear has broken; the symptoms are relieved as soon as the pus appears, but I do not advise you to wait for this. If proper treatment is instituted the drum will probably heal, but if an

unhealthy discharge is allowed to go on for a long time, the slit becomes a hole which will never heal, and impairment of hearing will result.

A further disease of the ear sometimes sets in, causing a serious flare-up of the symptoms and requiring an immediate operation. This disease, called *mastoid disease*, affects the bone behind the ear. Pent-up matter in the ear may lead to all the signs and symptoms of acute brain disease or meningitis and the child may even die from unrecognized mastoid disease.

Inflammation of the ear may arise from a cold or nasal catarrh, from sore throat, large adenoids, scarlet fever, measles, diphtheria, or whooping-cough.

Earache may be due to causes other than inflammation of the ear; it may be caused, for example, by wax, a foreign body such as a pea or insect (Section 269), painful glands behind the jaw, an abscess at the roots of a tooth, or decayed teeth.

224. What is the best remedy for earache?

Apply to the ear a hot fomentation, plaster or poultice. (*See* Section 169.) Old remedies include the application to the ear of a bag filled with hot salt, or of a roasted onion enclosed in muslin. *Avoid all cold applications.* Put into the ear a few drops of warmed glycerine or olive oil, or glycerine of phenol on a wisp of cotton-wool. Take care that the wool is always removed before a fresh piece is put in, and that the ear is gently dried out with the wisps. *Never use wool on a match-stick or hairpin to clean the ear.* Wrap the wool round a match to make the wisp, then withdraw the stick and use the woollen pledget only.

Should matter have formed and there is no exit

for it, then the doctor may be able to give great relief by making a small puncture in the drum. All earache associated with a temperature or lasting over 12 hours should, therefore, be dealt with by a doctor; neglecting to call in medical assistance when your child has earache for any length of time may jeopardize his life and certainly his hearing.

A child with earache should, if he has a temperature, remain in bed; he should otherwise be kept indoors in a warm room. If your child has enlarged tonsils and adenoids, you must have expert opinion on them as soon as the acute stage of ear inflammation has passed. Putting off the evil day is dangerous. I look upon adenoids and unhealthy conditions inside the nose as the worst offenders in producing recurrent attacks of earache.

A knitted hat with ear-covers is, in the winter time, excellent for a child subject to earache.

225. What are the causes of chronic discharge from the ear? And what is the treatment?

It is a sequel to an attack of acute inflammation of the ear which has proceeded to the formation of matter and rupture of the drum, and is often due to neglect or inadequate treatment during the acute stages. Such neglect may have been due to the fact that another disease such as measles, scarlet fever or tonsillitis was also present and attracted the major attention.

The child must be taken to the doctor. The ear must be kept clean by wiping it out with dry pieces of wool, rolled into wisps or spills as described in Section 224. Let me repeat, never use anything hard to wipe it out with. If the discharge is thick, it can be loosened with glycerine or glycerine of phenol dropped

in overnight. It may be necessary to clean the ear several times a day. After cleaning, leave a piece of dry wool in to act as a wick. The mother or nurse should not syringe the ear; only a doctor should do this, as great damage can be done by driving the matter in deeper. When the discharge is getting slight, blow a little boracic powder into the ear night and morning by means of a pulverizer or through a quill. Improve the child's general health by giving Virol, cod-liver oil or Parrish's Food. Let him have a good diet, with sufficient vitamins, extra milk, fruit, salads and vegetables, and send him to the seaside. If change of air is not practicable, great attention should be paid to ventilation and fresh air.

Other and very important methods of treatment require special knowledge and must be undertaken by a doctor. *If at any time the skin behind the ear becomes swollen, red and painful, send for your doctor without delay.* (*See* Section 223.)

You must never box a child's ears, for you may rupture or injure the drum, or drive pus inwards, thus causing acute inflammation of the inner ear.

226. What are the causes of deafness?

Apart from perforation of the drum following disease or injury, *wax and adenoids* are the most frequent causes of deafness. Wax can be removed by soaking the inside of the ear well with olive oil overnight and then having the ear syringed by your doctor the next day.

Prevention being better than cure, adenoids should always be removed as soon as possible. Enlarged tonsils may also cause deafness.

A child at school may be repeatedly punished for inattention, when he is really not inattentive at all,

but deaf. Therefore if a child becomes thus inattentive and begins to lose ground, have his hearing tested. Remember that some children are very shy and do not like to own that they cannot hear.

A child may be born deaf and if completely deaf from birth is always dumb. Deafness may arise from acute destructive inflammation of the nervous mechanism of the ear, as in meningitis or disease of the brain, or chronic changes may have taken place causing destruction of the hearing apparatus. Deafness may be hereditary and it may follow typhoid fever. (*See also* Section 156.)

227. What is the treatment of a stye on the eyelid?

Apply a hot boracic fomentation every four hours till the stye breaks; or, if the swelling is intense, take the child to a doctor and have it opened. To prevent the lids from sticking together put an ointment containing 2-per-cent. boracic or yellow oxide of mercury along the lids at bedtime. Recurrent styes are often due to a minor defect in the eyesight, or may be associated with general debility, or a faulty diet, *e.g.* excess of carbohydrates and chocolates. Consult your doctor about it. A change of air to the sea or country will often put matters right. A course of injections may be necessary in an extreme case.

228. My child squints. What is the best treatment?

Squinting, or a "cast in the eye," is usually first detected when the infant's attention is attracted to near objects. It may affect sometimes one eye, sometimes the other, or the same eye constantly. Sudden squint during a fever is serious as it may mean that the brain is affected. Your doctor must be told.

It is necessary to take the child to an eye specialist at once, because suitable glasses or the covering of one eye may save the sight of an eye which would otherwise be lost; also by means of exercises to educate and strengthen the eye muscles a permanent squint may be prevented, making unnecessary the operation that might otherwise be required. A child born with squint should be taken to an eye surgeon in the first 12 months. If one eye squints, and the deformity is neglected, great loss of vision will follow.

229. What is conjunctivitis? My child cannot open his eyes, the light seems to hurt him so; what is the matter?

Conjunctivitis is a disease of the mucous membrane covering the insides of the lids and part of the eyeball. If you detect a small speck of matter between the lids, at the side of the child's eye, if he complains of pain or smarting or of a feeling of grit inside the eyes, and if the eyelids and whites of the eyes look red, swollen and inflamed, take him to see a doctor. The matter from the eyes may be profuse and the lids very swollen. Sometimes conjunctivitis is very serious, and the clear part of the eye, "the sight," may be attacked with ulcerations. Neglect to get early advice and treatment from your doctor may cost the child his sight, or at least cause serious damage to it.

If the inflammation is slight, bathing the eye with hot boracic lotion (2-per-cent.) once a day and applying an ointment (1-per-cent. yellow oxide of mercury or 2-per-cent. boracic) at night may clear it away in 24 to 48 hours. Beyond this you cannot treat the condition; you may make matters much worse by over-bathing the eye.

Ophthalmia or conjunctivitis occurring at or soon after birth is very dangerous; people may be blinded for life by neglect in seeking medical advice. (*See* Section 3.)

If the child's lids are inflamed, always make sure that no grit or other foreign body has got into the eye; such may be present although the child is unaware how or when it got in. (*See* Section 267.) But as you will not be able to tell the difference between a simple case of conjunctivitis and a bad one it is very necessary to see a doctor about any inflammation lasting over a day or two.

Conjunctivitis is contagious; matter from the eyes on handkerchiefs, flannels or towels may convey the disease to other children, or the child may carry the infection on his hands to the other eye or to some part of the skin, and cause a "breaking-out." If a child has a breaking out, or a running from the ears, see that he does not rub the matter into his eyes, or an ulcer may be started.

When a child cannot bear the light, immediate consultation with your doctor is necessary. It may be due to a local trouble in the eyes, but it may herald a serious brain disease or meningitis. (*See* Section 221.)

230. If a child has an enlarged stomach or is "pot-bellied," what would you recommend as likely to reduce its size?

An infant may have a swollen stomach through "wind" in the bowels, the result of indigestion. (*See* Section 79.) Also if an infant is subject to sickness and loose motions at intervals over a period of some months, he wastes and his stomach becomes swollen. (*See* Section 84.)

The commonest cause of "pot-belly" is rickets (Section 233), or there may be an inability to digest fats—cœliac disease (Section 132). In certain cases chronically enlarged bowels are due to an inborn error of development.

If there is a prominent stomach and abdomen, with little or no pain and a tendency to constipation, if the child fails to thrive and is lethargic and picks at his food, and if, in addition, the abdomen feels "doughy," there is a possibility of *abdominal tuberculosis* (Section 294). This is the doctor's province and the treatment must be undertaken by him. It takes a long time—one to two years—before the child can be considered cured of this complaint.

There are many other maladies which cause enlargement of the stomach; therefore in all cases it would be prudent to seek medical advice.

231. What are the best aperients for a child?

The aperients for a child must be divided into those necessary for a habitually constipated child and those necessary to give an initial purge.

In the case of *the habitually constipated child* the diet is the first item to be rectified. On waking in the morning let him drink a glass of cold water, or the juice of an orange in which a few stoneless raisins and sultanas have been soaked overnight, a teaspoonful of mashed honeycomb or golden syrup being added. For his breakfast let him have a teacupful of frumenty or some cereal, or oatmeal porridge.

For his midday meal see that he is given a green vegetable—spinach, cabbage, cauliflower, or broccoli —and for his sweet, stewed prunes or apricots or some other fruit, but not figs or raspberries; give him

also a glass of water, and another glass in the middle of the afternoon and at bedtime. The child should have wholemeal brown bread in preference to white, and Demerara in place of white sugar. Should the constipation still remain, a mild laxative should be given, such as liquid paraffin mixed with red-currant jelly, one to four teaspoonfuls three times a day. This can be lessened or increased so that the bowels are soft and the paraffin does not come through and wet the clothes.

Should these fail, fluid magnesia or compound confection of senna or sulphur may be tried. The dose of any of these for a child is 1 or 2 tablespoonfuls every four hours till the bowels act. Leniva, ½-1 saltspoonful night or morning, reducing to drop doses so as to give a normal action, is also very useful. If the constipation still persists I advise you to seek the advice of your doctor.

I recommend gentle massage of the bowels, especially after a hot bath in the morning. Sometimes a little hot water in the chamber works wonders, and a hot compress to the bowel is often a good stimulus. A constipated child should never be allowed to sit for hours straining; at regular stated times each day he should be made to sit in his chair for 10 minutes or so, but never for more than a quarter of an hour.

If *an initial purge* is needed, use grey powder (⅛–¼ grain), or confection of sulphur or senna. Senna, however, does not suit every child and may in some cases cause severe colic. I prefer Leniva* to Syrup of Figs; I have found it to be an easily gauged and controllable laxative and purgative and one that is not griping.

* Made by Messrs. Schacht, of Bristol.

I do not consider that in general a mother should give enemas or suppositories to children, except soap suppositories for babies, unless directed to do so by a doctor or trained nurse. (*See* Section 82.)

232. What causes protrusion of the lower bowel through the back passage? And what are the remedies, immediate and preventative?

The most common causes are constipation, the frequent administration of aperients, and allowing the child to remain for longer than a quarter of an hour at a time on his chamber or chair. Anything that produces violent straining conduces to protrusion or prolapse of the bowel, *e.g.* constipation, diarrhœa, worms, coughing, or a condition of the penis necessitating circumcision.

The immediate remedy is to lay the child face downward upon the bed, with his hips on a pillow, and to smear vaseline over the protrusion, using the forefinger of your right hand (making sure first that the nail is cut close); then with a towel or cloth wrung out in hot water, by gentle pressure push the bowel back. *Never use force to get the bowel back.* If the above method be followed you cannot do the slightest injury to the bowel; and the sooner it be returned the better for the child. Every time he has a motion you must see that the bowel does not come down, and if it does you must instantly return it. But should you notice sores on the protruding part or be unable to reduce it without using force, you must call in a doctor.

If there is *a liability to recurrence* you had better keep the child lying down in bed for a few days, and allow the motions to be passed into a diaper. He must not sit up to stool. If, after the bowel has been returned, it shows any tendency to come down again,

place a pad of lint over the back passage, fixing it tightly in the same way that a woman's diaper is suspended from the waist. Should this method fail, strap the buttocks close together with Elastoplast, or zinc adhesive plaster, or by carrying completely round them a broad piece of bandage. But, remember, that if the cause is not removed, the bowel will again protrude. It is most important to keep the motions soft and easily evacuated (Section 231). If circumcision or other operation is necessary, have this attended to at once.

233. What can you tell me about rickets?

This disease occurs in town or country, in breast-fed or artificially-fed children, and among both rich and poor. It is caused by lack of vitamins and calcium (lime) in the diet and by lack of the ultra-violet rays of the sun. It usually starts to become apparent at the time of dentition, that is, when the child is between six months and three years of age.

Through the deficiency of lime salts, softness of the bones is produced, together with enlargement of the bone-ends, weakness of the muscles, and an irritable condition of the brain. The child perspires about the forehead and head, will not lie under the bedclothes, and his body and limbs are tender. In some cases he may be a little feverish. The earliest changes noticed are little knobs or beads in front of the chest, at the junctions of the ribs with the gristle or cartilage, and spots of softening in the bones of the skull. Enlargement of the bone-ends will appear to you as thickening of the joints; the wrist-joints will probably attract your attention first. Sometimes these alterations in the bones are not very obvious, the chest

showing greatest deformity. If the disease advances, the child becomes pigeon-breasted and "pot-bellied." (Section 230.) In marked cases the head is large and square, the face small and thin, and the opening in the top of the head remains wide, though it should close when the child is eighteen months of age.

The teeth are late in appearing, are irregular, and decay early. The child is unable to walk when he should and may not even show a desire to crawl. If the disease is not sufficiently severe to prevent him from walking, he probably has knock-knees or bow-legs (Section 236) or weak ankles. In severe cases his growth is likely to be stunted. Perhaps he has a side-ways bending of the spine (Section 235), or the spine arches backwards. The pelvis or bony cavity in the lower part of the abdomen becomes narrowed, a disastrous deformity in girls because it may later lead to difficult child-birth. He suffers from indigestion in one form or another, usually diarrhœa, readily catches cold, seems never free from bronchitis, and is very liable to a severe form of inflammation of the lungs. He may be attacked by convulsions or croup.

If the disease is not marked, he is probably pale, fat and heavy; the swelling of the bone-ends is not very obvious but the bones are soft and various deformities will readily be produced. Be careful when handling a rickety child for, especially if the disease is severe, the bones break readily.

What to do.—If you have any suspicion that your child has rickets, immediately consult your medical man. The presence of the disorder in a breast-fed child means that the mother is not having sufficient vitamin D, that the child is being maintained at the breast for a longer

period than nine months, or that the child's weight is greater than the mother can maintain in health before the nine months are up. (*See* Sections 43, 44.)

The food of a bottle-fed child should be changed to one containing the necessary vitamin. Here your medical man alone can advise you. The child should be given cod-liver oil three times a day and, if possible, should have sunlight treatment, administered by a properly trained nurse or at a clinic.

If there is severe deformity of the lower limbs, it is sometimes advisable to take the child off his feet, and not allow him to walk until his bones have straightened and become strong.

234. If a child be pigeon-breasted or narrow-chested, are there any means of expanding and of strengthening the chest?

If a young child from early months to four years of age becomes pigeon-breasted, he is suffering from rickets (Section 233) or perhaps from enlarged tonsils (Section 182) and you must seek the advice of your doctor. Neglect of the deformity makes the child liable to suffer from bronchitis and pneumonia, which, owing to the deformed chest and weak muscles, he is ill able to combat.

Such a child should almost live in the open air. He should devote some portion of the day to his lessons, but these must not be allowed to prevent him from being out of doors most of the time. Gymnastic and breathing exercises will assist in correcting this deformity.

235. If a child suffers from lateral bending of the spine, what had better be done?

If when your child walks he bends to one side, and on examination you find the spine rigidly curved, imme-

diately take him to your doctor, for he may be suffering from a most serious condition—spinal tuberculosis.

If the curvature is due to rickets, the child must not be allowed to sit up for long periods, and when lying down he should be made to lie straight out, either on his back, or side, or face, the position being changed from time to time. Daily douching of the back with hot and cold water alternately is a useful strengthening auxiliary. Attention must be paid to the diet, by giving extra vitamins and calcium in the form of cod-liver oil and milk. Physical exercises, under a well-qualified instructor, will be useful later on, and he should have plenty of sunlight, natural or artificial, and fresh air.

Lateral curvature may also be caused by one leg being shorter than the other from birth or owing to disease. Sometimes a congenital affection of the spine or dislocation of the hip-joint is the cause, or it may be due to disease or lack of development of one lung.

Except in cases of disease physical exercises are indicated, but they should not be overdone, especially in the initial stages. The object of the treatment is to work the muscles gently so that they may grow and become strong, and this is not done by over-fatiguing them. Exercises must be followed by rest.

If the exercises at any time cause pain, or the child appears to be very cautious in his movements and holds his back stiffly, you must immediately consult a doctor. No natural exercise should cause pain in healthy bones and muscles. (*See* Section 215.) Use no mechanical restraints, no abominable stays or irons. Let the child become straight by natural means.

236. What is the cause of bow-legs and knock-knees in a child, and what is the treatment?

The cause is nearly always rickets, assisted frequently by the child's being allowed to walk too soon and bear the weight of the body on weakened bones and cartilages. The treatment must be carried out by your doctor or under his direct supervision. You should never attempt to straighten the legs without his instructions, and should never use instruments unless he orders them. A great deal can be done without splints, by means of a nourishing diet, including plenty of milk, administering additional vitamin D in cod-liver oil, by sunlight in measured doses, and by taking the child off his legs.

237. What is scurvy? What are the symptoms and what is the remedy?

Scurvy is a disease due to deficiency in the diet of vitamin C, which is contained in fresh fruit and vegetables. (*See* Section 43.) It causes bleeding beneath the membrane which covers the bones, especially the bones of the legs, though any bone may be affected. If the legs are involved they appear to be paralysed, the child having little power in them. He shrieks most piteously if anyone approaches or touches him. Sometimes the affected bones break. You will perhaps see blue bruises on the gums, or the gums may actually bleed. Bruises may come on the skin or possibly one or both eyes become "black." There may be blood in the urine or in the motion, the latter looking like tar. The child requires very special treatment, so you must call in a doctor at once.

To prevent its occurrence, see that foods containing vitamin C are included in the diet.

238. If a child has a scabby eruption about the mouth, what should I do?

Impetigo, as this eruption is called, is highly contagious, so the child suffering from it should sleep alone, and should have his own towel and washing materials and his own cup or glass, which must be washed and kept separately. If he has "breakings-out" elsewhere, he is doubtless inoculating himself. To prevent this from happening, splint the arms with corrugated paper and cover the spots with small rounds of zinc plaster or Elastoplast, which should be left on until forced off by the secretion underneath, or until they fall off. Instead of plaster, you may use an ointment of ammoniated mercury, or Storaxol; I have found the latter most successful. But first remove the scabs by bathing them with warm oil.

Perhaps the infection is associated with sore throats, or ulcers in the mouth. If the child has a frequent discharge from the nose, and the upper lip is sore and scabby, have the nose examined, for he probably has adenoids. (*See* Section 182.)

239. What are the symptoms of eczema? And what is the treatment?

Milk crust or eczema attacks infants at the breast and young children; after the sixth year it is less common. It is a nasty-looking complaint and frequently gives a mother a great deal of trouble, anxiety and annoyance. The forehead, cheeks, and scalp, the skin behind the ears, and the soft skin of the flexures of the joints are the parts most frequently attacked. The skin is hot and reddened, and multitudes of tiny pimples are seen, which become watery and burst, leaving a weeping surface. Next

one sees scabs and weeping or raw surfaces. Sometimes matter forms instead of clear fluid, the scabs being then of a dirty greenish-yellow colour. Sometimes, but fortunately rarely, the eruption is so extensive on the head as actually to form a skull-cap and so extensive on the face as to form a mask. It causes great irritation and itching, so that the child is constantly scratching himself, and crying from annoyance the greater part of the day and sometimes also of the night.

The actual cause of eczema is not known, but there is a definite hereditary tendency and it is associated with asthma and nettle-rash. As with them, therefore, it may be possible to find out what it is that brings on an attack by eliminating the various likely causes (Section 178) or by means of a skin-test carried out by your doctor.

What to do.—The first thing to do is to prevent the child from scratching. This can be done by tying his hands down or, preferably, by splinting the arms with wood or corrugated paper so that, though not absolutely immobile, he cannot bend his elbows. Scratching not only aggravates the condition, but may lead to its becoming infected by other bacteria.

To prevent the infection from spreading, the same precautions should be taken as in impetigo (Section 238).

Soap must not be used in washing the child; the affected part is best cleansed with olive oil and should be wiped or dabbed gently, never rubbed. Actual treatment must be as directed by your doctor. In severe cases the best application is starch plasters to cover the entire affected part; if there is only a small

patch, olive oil and calamine lotion should be dabbed on several times a day, or Ferris's Sedrosol ointment.

Diet may have to be modified, on the instructions of your doctor; chocolates and rich food should, anyway, be avoided.

The complaint is of long duration and liable to relapse, so great perseverance and patience are needed by the mother; it will go as the child grows, however, and leave not the slightest trace.

240. What is shingles? And what is the remedy?

It is an eruption consisting of clusters of round vesicles on inflamed patches of the skin, often occurring in a band round the body. It comes out gradually, being frequently preceded by a day of pain or a sensation as of ground glass or needles under the skin. If the body is the site of the eruption, it usually starts from an area near the spine; there is an old belief that "it kills if it encircles" but this is a fallacy. The face, neck, shoulders, upper arms, buttocks or thighs may be the site of the attack.

The affection is usually of only a few days' duration but severe attacks may last longer; or the spots may become infected by scratching with a dirty finger-nail, troublesome sores resulting, which leave pitted scars. Children suffer less pain than adults, in whom it is usually extremely severe.

What to do.—The child must be taken to the doctor for a complete overhaul. Collodion should be painted on locally and allowed to dry till a good skin has formed over the eruption, and then covered with a dressing of light cotton-wool, firmly but not tightly bandaged on. If the rash is on the face, collodion alone can be used. If it is in the ear or on the eye,

do not use collodion, but apply a little oil; you will have to consult your doctor about what else to do; if shingles in the eye is neglected severe scarring may injure the sight.

241. What is ringworm? And what are the symptoms and remedies?

Ringworm is due to a parasitic fungus. It is highly contagious and may attack any part of the body, being most often seen on the head, causing the hair to drop out. Your child may catch it from another child by using the same brush and comb, sleeping in the same bed, or wearing his headgear, or he may catch it from some animal, probably a cat, dog or cow. It is so contagious that a child can catch it by touching something, such as a stile, upon which an infected cow has rubbed itself.

On examining the head of an infected child small oval patches of scurf will be found in which are stumps of hair that look as if they had been broken off. The patches spread until they are the size of a two-shilling-piece or larger. In ringworm of the body, you notice a slightly scurfy patch, oval or round in shape, with the centre pale, and the margin raised and reddened.

The disease occasions a great deal of irritation, and breakings-out will be found on the head, which may become septic if neglected.

The *treatment of ringworm* should be entirely in the hands of a medical man, but if you are unable to get a doctor and the patch is small, cut the hair for an inch or so round the patch, and soap it well with biniodide-of-mercury soap or Neko, afterwards rubbing in an antiseptic ointment, such as Storaxol.

It is essential that the linings to all hats, caps, etc.,

be taken out and destroyed; indeed the hats themselves are best destroyed. If possible, it is as well to separate uninfected children from those infected; otherwise, extra supervision is demanded to prevent them from using the same brush and comb, and from head rubbing or kissing. The infected child must not attend school.

242. Is there any other condition which might resemble ringworm?

Yes. There is a condition known as alopecia areata, which is distinguished from ringworm by the fact that the hair falls out and leaves no stumps. The patches from which it has fallen may be slightly pink. The cause of alopecia is uncertain, but it is associated with certain forms of ill-health, and you must consult your doctor. It is not infectious or contagious. Where no doctor is available, treat as for ringworm.

243. What is the itch? And what are the remedies?

Itch, or scabies, is a contagious disease due to the presence of an insect which burrows under the skin. It may occur on any part of the body, most commonly the buttocks, the soles of the feet, the fingers, between the fingers or toes, the wrists, and the trunk. The face may be attacked. The irritation caused is very great, and increases when the body becomes warm in bed. Children scratch themselves freely and, carrying the infection under their nails, inoculate various parts of the body with the insect. The spots are frequently infected with other bacteria, when they become inflamed, exude pus and scab over.

To distinguish scabies from eczema, nettle-rash or teething-rash examine the hands for a small pimple

or vesicle; from this it will be found that a minute raised, black, wavy line runs, at the end of which may be seen a little opaque speck; this is the insect, which may be extracted by means of a needle. Scabies is propagated by dirty people and caught by those who have omitted to wash their hands after touching dirty things. It is prevalent amongst the natives of tropical countries.

What to do.—Give the child a hot bath, washing him well with soft-soap on a flannel. After drying him, apply a 5-per-cent. sulphur ointment, especially in the crannies, and clothe him in a fairly tight-fitting pair of pyjamas or a night-shirt and drawers. Next morning give him another hot bath; put on clean underlinen, and see that the soiled linen is well boiled with soda. His clothes and bed linen should be disinfected by superheated steam; the Sanitary Inspector or Public Authority will do this for you or will tell you where it can be done. This process must be repeated for at least two nights running; it is better to do it for four or five nights to make sure. Take care that the child does not catch cold, after so many hot baths, by wrapping him up warmly, and seeing that he is not chilled.

Find out, if possible, where the contagion came from, and safeguard the other members of the family. The towels, etc., of the affected child must be kept separate, and the child himself isolated. There is no fear of the attendant catching the disease provided she uses ordinary caution.

244. Are there any other skin troubles that my child is likely to get?

Yes; there is a condition that mostly occurs abroad but also in this country among school-

children. It consists of an irritating rash in the flexures of the skin, especially round the genitals and between the toes, where it is associated with sodden skin. It is definitely contagious, and the boy or girl should wear a pair of light cotton drawers if the infection is in the groins, or a thin pair of white socks if on the feet. The disorder, which is called dhobi itch, is due to a fungus, and is sometimes very difficult to treat; treatment should be carried out only under the direction of a doctor.

To reduce liability to infection, careful drying after a bath or bathe should be strongly insisted upon, especially in the flexures and between the toes. If the skin between the toes tends to become sodden, dabbing with spirits of wine, or boracic or Fissan powder helps to harden it. A small piece of cotton-wool between the toes overnight allows the air to get to the skin and is helpful for all sodden unhealthy skins.

245. Will you give me some directions about the treatment of vermin in the head?

A child's head may become infested with vermin or lice through dirt and neglect, by putting on the hat or cap of a child already infested, or by using the same brush or comb, or even by wearing a hat which has been hanging in the near proximity of the hat of an infested child.

When a child has vermin he scratches his head frequently, and there may be breakings-out on the scalp. Examine the hair with a fine-toothed comb, and the lice or the nit, which is the egg of the louse, will be seen. Nits can be distinguished from scurf by the fact that they are fastened firmly to the hairs. Sores at the back of the head and nape of the neck may

cause stiff neck, and the glands at the back of the neck may enlarge and become painful.

What to do.—Immediately isolate the child, and take all his hats and head coverings away from the proximity of others. Examine the heads of any other children carefully with a fine-toothed comb to see they are not also infested.

Get a large bowl of hot soft water and wash the head of the infested child thoroughly with pure soft-soap, rubbing up a good lather. Wash off and then give, with fresh water, another good lathering. When this is rinsed off, apply turpentine all over the head, protecting the eyes meanwhile. Alternatively, use oil of sassafras or an ointment of vaseline and ammoniated mercury or balsam of Peru. Leave the hair soaking with this for an hour, the child wearing a bathing-cap or linen cover. Then wash the head again with hot soft water and soft-soap. Keep the head under observation for a day or so, and at any suspicion of recurrence repeat the process. Old hats and caps should be burnt; those that will wash should be washed in strong lysol and water and left to soak for 24 hours; those that are of value and unwashable must be disinfected by heat by the Sanitary Authority.

246. My child, in summer time, is much tormented with fleas. What are the remedies? What other vermin may he become infested with, and what are the remedies?

A small muslin bag filled with camphor, if placed in the cot or bed, will drive *fleas* away. Each flea-bite should be dressed with a drop or two of spirit of camphor on a camel-hair brush or piece of cotton-wool. Soaping the legs with carbolic soap or powdering

the inside of the socks with 1-per-cent. iodoform powder is useful.

Camphor is an excellent thing also for preventing *bugs* from biting. If there are bugs in the house, they should be destroyed by the local Sanitary Authorities; creosote and oil of turpentine wiped over all the woodwork in the room, especially in the cracks and corners, will help to keep them away. All bedding should be sent to the Sanitary Authorities for disinfection.

In the summer and autumn a child running about the fields or parks may get intense irritation on the legs, behind the knees, and in the groin, due to *harvest bugs or mites.* As a prevention the legs should be well soaped with carbolic soap; bites should be treated with spirit of camphor, spirit of wine or sulphur ointment.

247. What are the causes of worms? What are the symptoms? And what is the best treatment?

The chief causes are drinking infected water, sleeping in the same bed or using the same towel as a child already infested, or allowing an infested cat or dog to lick the child's hand or lie on his bed.

Threadworms cause irritation of the rectum and, in a girl, may infect the "front passage," and sometimes cause a discharge; the child is irritable and off his food, sleeps badly and dreams, and may lose weight. The worms can often be seen at night-time, when they are most active, near the orifices. In appearance they resemble white cotton threads, half an inch or less in length; they may become matted together to form little balls.

Roundworm may be unassociated with special symptoms, the first indication of the trouble being the passage of the worm in the motions. In other

children its presence may be associated with indigestion, pains in the stomach, either loss of appetite or ravenous appetite, diarrhœa, sickness, night-terrors, restlessness or lack of sleep, picking the nose, blotchy spots or nettle-rash, or, sometimes, convulsions. The motions may exhibit worms or their eggs, or may exhibit an excess of mucus. In appearance the worms are not unlike the common garden worm; they vary from 10 to 15 inches in length, are of a reddish-brown colour when alive, and have a disagreeable smell. They occur singly or in twos or threes, rarely in greater numbers.

Tapeworms have large jointed sections; the smallest part is the head and the largest the tail end. The worm is from 7 to 10 feet long and its head is the size of a pinhead; the fully grown joints are half an inch long by a quarter of an inch broad. If the head does not come away, the worm will be fully developed again in about ten weeks' time. It is necessary, therefore, when the worm is passed to wash the stool in cold water and carry the worm in a jam-jar, covered with water, to the doctor that he may examine it for the head.

The worm may give rise to no symptoms whatever, the mother being unaware that her child has it until she finds a flat joint in the chamber or closet, on his clothes or in his bed. There may, however, be loss of flesh, abdominal pain, vomiting, and general irritability, as in roundworm infection.

What to do.—The treatment should be entirely in the hands of a medical man. Let me caution you never to give your child patent medicines or worm cakes for the destruction of worms. But you can take

measures to prevent the child from reinfecting himself and infecting other children. The child should be kept scrupulously clean, and his buttocks washed and well dried after each evacuation. As, in the case of threadworms, there is often great irritation of the back passage, a soothing ointment of ammoniated mercury should be applied; the child should wear drawers or pyjamas to prevent him from scratching the skin with his fingers. To prevent other children from being infected, *he should sleep alone* and have his own washing materials and towels, and his bath water should not be used for other children.

A child should not be allowed to play with a domestic animal known to have worms; if he does his hands should be washed at once, especially if the cat or dog has licked them.

248. My child "wets his bed" while asleep. Is there any way of preventing him from doing so?

First make sure there is no predisposing cause, such as inflammation of the bladder, stone, or, in boys, the need for circumcision. Consult your doctor about this, taking a specimen of the water with you to have it examined.

If there is no predisposing cause, reduce the child's liquids, letting him have none after his tea, *i.e.* after about 5 p.m. Count how many times the water is passed by day, and if there is a day frequency, encourage him to hold his water by locking the lavatory door and making him ask to go; then delay half an hour before you open it. Encourage him to make his water before he goes to bed and wake him again one or two hours after he has been asleep. He ought to be made to lie on his side. Remember always that

wetting the bed is an infirmity and the child cannot help it. It is therefore cruel to scold and chastise him for it. Do not discuss the matter before him, thus making him feel self-conscious and ashamed. The less said about it in his hearing the better the results.

A mother should every morning ascertain for herself whether the child has wet his bed. If sheets and blankets have been soiled, they must be rinsed and properly dried before they are replaced. In bad cases it is as well to have two sets going, using them on alternate days. Waterproof sheeting ought always to be used to protect the mattress.

The child should sleep in a well-ventilated room, on a horsehair mattress, and must not be too warmly or too heavily covered with bedclothes.

Constipation, the presence of worms, enlarged tonsils and adenoids all conduce to cause "the accident." Sometimes the cause may be traced to the diet, *e.g.* excess of meat or rhubarb. Highly nervous, delicate children, who frequently sleep very soundly, are often sufferers.

Medicines should only be administered under a doctor's prescription and instructions.

If mother and nurse were more attentive to their duties, especially in the early days, holding a child out at frequent and regular periods whether he asks or not, bed-wetting would be of rare occurrence.

249. When is circumcision necessary?

It is necessary if the outside skin of the penis is very long with a narrow orifice, and the child suffers from irritation of the part. This is shown by the frequency with which he carries his hand there. If,

also, the skin cannot be pulled right back over the end of the penis, without hurting the child, then an operation is necessary. Personally I consider that all boys with any length of foreskin, unless it can be worn drawn back, should be circumcised.

250. Does stone in the bladder occur in children? If so, what are the prominent symptoms?

Yes, it is not uncommon in boy children; girls very rarely suffer from stone. Sometimes the stone is passed in the urine, the child crying out in passing water. The stream may be interrupted or stopped, and the child strains with no effect; then after lying down awhile, he passes another stream. At times the urine is mixed with blood, and not infrequently the child wets his bed at night. If he is old enough he may complain of pain at the end of the penis. You must consult your doctor.

251. Can you tell me of any way to prevent chilblains, and what I can do to relieve the irritation if they develop?

Start in the autumn by giving the child extra calcium, in the form of milk or tablets, and vitamins, especially vitamin D in the form of cod-liver oil, pure or concentrated. In the winter time let him wear warm lamb's-wool stockings and good strong shoes, and never let him incur wet feet; always change his shoes and stockings immediately on his coming in from outdoor exercise, whatever the weather conditions.

Encourage the circulation in the feet by means of outdoor exercise and get the child to run about the room before his bedtime. Rub his feet and legs after his bath with some sweet oil. On no account allow

him either to warm his feet before the fire or to bathe them in hot water.

If chilblains are present and no previous treatment has been adopted, immediately increase his milk and give him extra vitamins, as described above. Take him to your doctor if the chilblains are very bad or break into open sores.

Local applications for chilblains which are recommended to allay the irritation include liniments of soap, camphor, or turpentine. Or the chilblains can be painted with tincture of iodine—this should not be repeated too often and should never be used when there are open sores or cracks—or with oil of wintergreen. Boracic or zinc ointment can also be used.

252. During the winter my child's hands and legs become very chapped. What ought I to do?

Let a teacupful of bran be tied in a muslin bag and be put overnight into a large jug of water, rainwater if possible. In place of bran you can use any water softener. Use this water when washing him, adding more water to the can when some is poured off. The bran will require renewing twice a week. *Take great care to dry the skin* every time he is washed; never use a damp towel, and be sure to use soap that contains no soda.

The best local remedies are glycerine, pure vaseline, cold cream and boracic ointment. One of these should be smeared on the parts affected two or three times a day. If the child is very young or the skin very irritable, it will be necessary to use glycerine and rose-water, one part of the former to two of the latter. The child should wear warm gloves.

253. What are the remedies for cracked lips?

The frequent application of cold cream, vaseline or boracic ointment to the lips.

Poisoning

254. Have you any advice to offer on the treatment of accidental poisoning by lotions, liniments, etc.?

It is a culpable practice for a mother or nurse to leave external applications within reach of a child, or to put a medicine and an external application, such as a liniment, on the same tray or mantelpiece, for many liniments contain large quantities of poisons.

Anyone administering a dose of medicine to a child ought always *to read the label on the bottle*, a simple method of averting a serious accident. Again I say, let everything for external use, without exception, be either locked up or kept separated from any internal medicines.

If a child has swallowed any lotion containing *opium or morphia*, give him two tablespoonfuls of Condy's fluid, or of permanganate of potash, 1 in 1,000, in a tumblerful of water. If you have none at hand, tickle his throat with your finger or with a feather, or give him an emetic, such as a tablespoonful of mustard or two tablespoonfuls of salt in a tumbler of water, repeating this every five minutes till he is sick. Send for the doctor at once. Put the child to bed and keep him warm with hot bottles, and give him plenty of warm water and glucose to drink, but if he tends to go to sleep, do all you can to keep him awake—slapping him, walking him about, giving him cold baths, etc.

If a child has swallowed *an alkali*, *e.g.* ammonia

(hartshorn in oil), caustic soda or potash, and his mouth is badly burnt, make him wash out his mouth with vinegar and water, lemon-juice and water, thin gruel, or barley water. *Do not give an emetic*, but give him olive oil or milk to sip.

If *an acid*, such as hydrochloric (spirits of salts), sulphuric (vitriol) or nitric acid has been swallowed, immediately make a paste of magnesia or chalk in water, and smear it over his lips and inside his mouth. Also make a solution of it, a tablespoonful in a tumbler of water, for him to sip. Do not give an emetic. In alkali and acid poison you may give paraffin or olive oil on signs of recovery to relieve the pain.

If *carbolic acid or lysol* has been swallowed, give Glauber or Epsom salts, a tablespoonful in a tumbler of water, then treat as for other acids. In *mercury* poisoning (corrosive sublimate) give white of egg with milk or water in unlimited quantities. In poisoning by *lead lotion* give Epsom salts. In *fungus or fish poisoning* give an emetic (see above, under opium poisoning), followed by castor oil as an aperient. In poisoning by *camphor* (camphorated oil) give an emetic; by *iodine* give starch, a tablespoonful in a tumbler of water, or white of egg, or gruel; by *arsenic* give magnesia freely, then an emetic, and follow with castor or olive oil. Weed-killer often contains arsenic. These are the commonest forms of poisoning, but there are others.

If the child is unconscious, do not give him anything by mouth, until you have ascertained if he can swallow; this can be done by dropping a little water on the back of the tongue from a teaspoon.

In all cases of poisoning send for a doctor at once, saying what has happened and, if it is known, the

nature of the poison. Preserve all vomited matter. Keep the child warm, and if there is any sign of collapse, give brandy or sal volatile.

255. What is the treatment of poisoning by belladonna or deadly nightshade?

Let me first caution you never to allow the deadly nightshade to grow in your garden. The whole plant —root, leaves and berries—is poisonous, and the berries, being attractive to the eye, are very alluring to children.

If a child has eaten the berries, instantly send for a doctor. In the meantime give a mustard emetic (a tablespoonful to a tumbler of water), forcing the child to take it. Repeat the mustard emetic again and again until the poison is washed out. After he has been sick give him copious draughts of warm water and glucose. Remember that not a moment must be lost.

Throw cold water over the child's head and face. The best way of doing this is to squeeze a large sponge of cold water over his head, which is held over a basin. Continue this for an hour or two, until the effects of the poison have passed away.

The symptoms that will attract your attention are brilliantly red cheeks and face, widely dilated pupils—the eyes being very bright and prominent—great excitement and quickened breathing. The mouth is dry, and there is a feeling of dryness of the throat. Delirium is succeeded by drowsiness and coldness of the extremities.

Injuries and Accidents

256. When a child has cut himself, what is the best application?

Wash the wound with warm water (you may add to the water hydrogen peroxide, a teaspoonful to the

pint), and if the wound is very dirty allow it to soak for a quarter of an hour. Meanwhile, if the cut is, as frequently happens, on the finger, clean the hand, all round the cut, with soap. Grease can be removed with a little turpentine on some cotton-wool, but be careful not to touch the actual wound with it, as this will be painful. After soaking, dry the hand well and apply a dressing of lint or cotton-wool, and a bandage. If you have no dressings use clean linen.

If the cut is a severe one, surgical aid, of course, will be required. Furious bleeding can always be stopped by applying direct pressure with a clean finger, or one dipped in iodine, pressing against the bone, if possible. Or a piece of pencil or a cork, wrapped in a clean rag or handkerchief, can be bound over the cut by a handkerchief or bandage. But pressure should be applied on either side of the cut or wound, to see if the bleeding can be stopped this way, before applying direct pressure on the wound.

257. How should I treat a bruise?

Apply ice or ice-cold water to the area immediately, and then an evaporating lotion made by adding two teaspoonfuls of spirit—eau-de-Cologne or methylated—to two tablespoonfuls of water. A handkerchief or piece of lint is soaked in the lotion, applied firmly over the part, and kept constantly wet with lotion. Witch-hazel lotion is an alternative, one to two teaspoonfuls being used in two tablespoonfuls of water.

258. If a child falls and grazes his skin, what should I apply to the place?

If the wound is full of dust or dirt from the road, hot fomentations should be applied but only after

thoroughly washing the limb with soap and water and, with cotton-wool, gently wiping the raw surface to get off as much dirt as you can. The hot fomentations or plasters (Section 169) will soon remove the rest. When the wound is clean cover it with boracic or zinc ointment or pure vaseline, applied on lint or clean linen. If the graze is extensive and occurred in the street, especially if there were any horse droppings near, you should take the child to a doctor, as an injection against tetanus may be necessary.

259. How should I treat a sprain?

A sprain involves torn ligaments and tendons round a joint, and is associated with great pain and swelling.

All severe sprains of ankles or wrists should be treated as fractures until they have been seen by your doctor. By that I mean that the child should not be allowed to use the limb, or to bear any weight upon it, and that it should be firmly bound to a stick or piece of wood and the child laid on a bed or couch. To relieve the pain the bandage tied round the joint can be soaked in cold water, or the lotions suggested above for bruises can be applied. A doctor should be consulted as soon as possible.

260. If a child falls upon his head and is stunned, what ought to be done?

Send instantly for a doctor. The child will look deadly pale, very much as if he had fainted, but he will, probably in a few minutes, regain his consciousness. Vomiting frequently follows. Put him to bed as soon as possible and keep him there until the doctor comes. Exclude all visitors. Apply to the head an ice-bag or cloths soaked in cold water or

spirit lotion (Section 257). If he is prostrated and the extremities are cold, apply hot-water bottles to the feet, and omit the cold applications to the head. *Never give alcohol or brandy.*

261. A nurse may possibly drop an infant and injure his back. What ought to be done?

Instantly send for a medical man. Omitting to have immediate professional advice has frequently resulted in the child becoming a cripple for life. A nurse in such a case is frequently afraid to tell her mistress, and the consequences may be deplorable. If ever a child screams violently without any assignable cause, and cannot be pacified, the safest plan is to send for a doctor, or to take the child to one, that he may be carefully examined.

If you know that the child has been dropped, immediately lay him flat in his cot, and keep him warm and quiet till the doctor arrives.

262. Are matches poisonous?

They are certainly very dangerous, and all cheap matches are poisonous, though non-poisonous kinds are now sold more frequently. It is desirable that matches should be put out of the reach of children. A mother should be very strict with servants in this matter.

263. If a child's clothes catch fire, what should be done to put out the flames?

The flames will go out if air is kept from them, so lay the child on the floor and roll him in the rug or carpet, or in the door-mat, or in any thick article of dress you may have at hand, or even have on, or put him down and roll him over and over on the floor.

You must have a proper fireguard before the nursery grate. This is required by law. Be strict in preventing your child from playing with fire. If anything justifies corporal chastisement, it would surely be that dangerous practice.

The dreadful deaths from burning, which so often occur in winter, too frequently arise from readily inflammable dresses or cotton pinafores. Here let me give you a word of warning about washing clothes in petrol. Never allow a child to wear a dress so cleaned until it has been well aired out of doors and all smell of petrol has gone.

264. Is a burn more dangerous than a scald?

Burns and scalds are equally dangerous, and the more extensive in area the scald or burn, the greater is your child's jeopardy. Also the danger is greater the younger the child. Scalds of the mouth and throat caused by a child drinking boiling water from the spout of a kettle are very dangerous. Immediately put hot cloths round his neck, to draw the swelling outwards and prevent him from suffocating, pull the tongue out, and send urgently for a doctor.

265. What treatment should I give to an external scald or a burn?

A severe scald or burn requires the immediate services of a doctor. Nothing should be applied to the place until his arrival except strips of gauze soaked in tea, sterile water or tannic-acid solution, covered with cotton-wool. Do not remove the clothes, except when the burns are due to chemicals, as you may do the injured surface great damage and cause unnecessary

pain and shock. In burns by chemicals, cut away the clothes round the burn and apply, for acid burns, baking soda or chalk, or, for alkaline burns, vinegar or lemon-juice. As the burnt child always suffers from shock, and his vitality is greatly reduced, as evidenced by pallor, faintness, coldness and trembling, wrap him in blankets, put hot-water bottles to his feet, and place him *near* the fire; but do not hold the limb too near the fire, with the idea of warming it. Such a proceeding is acutely painful and utterly useless. If the child is over two years of age, give him from two to four teaspoonfuls of brandy in sugar and water; if under two, a lump of sugar, with a few drops of brandy on it, to suck; give him also glucose drinks, 2 teaspoonfuls to the tumbler of water.

Never smear the burn with ointment or oil unless instructed to do so by the doctor, and *never prick the blisters*. Small burns should be dressed with strips of gauze soaked in tea, and covered with boracic lint till healed.

266. If a bit of quick-lime should enter my child's eye, what ought to be done?

Such an accident may happen to a child who is standing near a place where building or demolition operations are in progress.

Flush the eye, if only slightly affected, with water poured from the spout of a small teapot; you may add vinegar (one tablespoonful to three of water). Let the eye be bathed for at least a quarter of an hour with it. The vinegar will neutralize the lime and will rob it of its burning properties. Having bathed the eye, drop into it two or three drops of olive or castor

oil, and cover it with wool or lint kept in place with a handkerchief or bandage.

Spasm of the lids may, however, be too strong to permit treatment without surgical assistance, and you will lose precious moments of valuable time by attempting it. Send immediately for medical assistance, as inflammation of the eye is very apt to follow a burn by lime. If treatment is not promptly and efficiently carried out the child may lose his eyesight.

267. If any other foreign body should enter the eye, what is the best method of removing it?

If there is a speck of grit, sand or dust, a particle of coal, a gnat, a hair or an eyelash in the eye, it should be tenderly removed with the corner of a clean piece of linen or with a clean paint brush, a silk handkerchief, or a paper spill. If it is low in the eye, hold down the lower lid with the forefinger of the left hand while taking it out. If it is higher up, under the upper lid, pull the top lid down over the bottom and then allow the eye to open. If this method fails, put a match or bodkin on the outside of the upper lid and, standing behind the child, pull the top lid up over the match; after so everting the lid, the eye can be wiped with a little cotton-wool or a corner of a silk handkerchief. It is advisable to put a little olive or castor oil in the eye after the foreign body has been removed.

If a particle of metal or grit is embedded on the "sight," it will require the skilled hand of a surgeon to remove it. Spasm of the lids is usually great owing to the extreme pain, so put two or three drops of oil into the eye, cover it lightly with a pad of cotton-wool and a bandage, and take the child to the doctor.

268. If a child puts a pea or bead or any other foreign substance up his nose, what ought to be done?

A small child should not be allowed to play with peas or with beads unless they are on a string, lest he push them up his nose. If he has just done so and he is old enough, close the other nostril and tell him to blow hard. Should the obstruction not be expelled, take the child to a doctor or send for one at once. If a pea is allowed to remain in the nose for any length of time it will swell and thus become difficult to extract; any foreign body will cause irritation and swelling of the tissues lining the nose if it is allowed to remain there any time, and this will greatly add to the difficulty of extracting it. It is advisable, after immediate efforts have failed, to encourage the child to breathe in through his mouth, lest the object be drawn in further.

269. If a child has put something, such as a pea, bean bead, or cherry-stone, in his ear, what ought to be done to remove it? If it is an insect, what can I do?

Never poke at the ear with anything; you will only push the object further in, and may rupture the drum. Put a pad on the ear and take the child to a doctor. Do not pour any oil or liquid into the ear, because if the object is a seed it will swell and thus be more difficult to remove.

Should the foreign body be an insect, however, lay the child on his side, the affected ear uppermost, and with a teaspoon fill the ear with warm water or olive oil. The liquid will float the insect to the surface and you can then remove it.

270. If a child has swallowed a piece of broken glass or a pin, what ought to be done?

Avoid purgatives, as the action of the bowels would be likely to force the piece of glass or pin-point into the lining membranes, thus wounding them, and perhaps causing ulceration and eventually death. Send for the doctor at once. Do not let the child move about, but lay him on his bed. If it is a pin that he has swallowed, the child may be encouraged to eat small pledglets of cotton-wool between slices of bread and butter, in the hope that they will adhere to the pin and prevent the point from perforating the bowel, but do this only where there is delay in obtaining a doctor.

The motions should be examined for the swallowed articles by macerating them in water and sieving them through muslin or gauze.

271. If a child swallows a coin, hair-slide, button or other foreign object, is it dangerous? What ought to be done?

There is, as a rule, no immediate danger. Take him to a doctor, who will have him X-rayed to find out exactly where the object is located. Feed him with farinaceous food, and examine the motions.

I here take the opportunity to condemn the use of all hair-slides for young children. I cannot too strongly condemn their use. Young children put everything available in their mouths when they are teething, and will soon discover a slide or grip in the hair.

272. If a child, playing with a small object such as a threepenny-bit, puts it in his mouth and it enters the windpipe, what should be done?

If the foreign body passes the glottis he will cough and have symptoms of croup (Section 174). If it

passes down to the bronchial tubes, the symptoms may be very slight or he may have difficulty in breathing. The immediate remedy is to hold him up by the legs, allowing the head to hang downwards; then give several sharp blows on his back with the palm of your hand and you may have the good fortune to see the object coughed out of his mouth. If this plan does not succeed, or if he is too large for it, send instantly for a doctor or, better still, take the child to him.

273. What ought to be done in a case of choking?

If the child is small, immediately turn him upside down. Should this fail, give a good smart blow or two with the flat of the hand on the back, with the child's face down across your knees. If that does not have the desired effect, tickle the throat with your finger, so as to bring about immediate vomiting, or put your finger into the throat and feel if the substance is within reach; if so, endeavour to hook it out.

274. What can I do for a child who has been suffocated or stops breathing from any cause?

If a small child or baby, immediately hold him upside down by the legs, and then insert your finger into the anus, or back passage. If this does not cause the child to breathe again, wrap him in a warm blanket or shawl, his hands above his head, and roll him backwards or forwards on your knees or arms, seeing that his tongue is not at the back of his throat and that his air passages are clear.

If the child is older, of school age, lay him flat on the floor, face downwards, with his hands above his head

and the face turned to the side. Make sure that the mouth and nose are clear. Then kneel by the side of the child at the level of his thighs and place your two hands in the small of the back, with the lower edge of the hands along the ridge of the pelvis and the wrists touching in the midline. Then gently sway backwards and forwards, keeping the arms straight, about 18 times to the minute, exerting pressure as you go forward and relieving it as you go back.

275. Should my child be bitten by a dog thought to be mad, what ought to be done?

Immediately place a tight bandage between the wound and the heart. Hang the limb down, and encourage bleeding by putting the hand or foot in a basin of hot water and scratching round the wound with a sharp knife or needle which has been sterilized by being passed through a flame till red-hot. You may suck the wound, spitting out the blood.

Never kill a dog supposed to be mad. Keep it until the veterinary surgeon has seen it, but it should, of course, be tied or shut up, and thus prevented from biting anyone else. Cats and wolves are also liable to contract rabies and their bite may cause hydrophobia. In England hydrophobia has been unknown in recent years.

If a child has been bitten by a rabid animal, arrangement must immediately be made for him to be conveyed to the nearest Pasteur Institute, where inoculation will be carried out which will save him from developing the disease.

276. In the case of an ordinary animal bite, what can I do?

The wound should be thoroughly cleansed (*see* Section 256), and watched for forty-eight hours. An

old animal may have bad teeth, or it may carry deadly bacteria on them. Should the wound become hot and painful or look septic, immediately take the child to the doctor, or start putting on hot fomentations yourself, every two hours, until the doctor arrives.

277. What are the best remedies for the sting of a bee or wasp?

Extract the sting, if it has been left behind, as is likely in a bee-sting. This can be done by means of a pair of tweezers or by pressure with the hollow end of a small key. Then apply a blue-bag moistened with water, or any alkaline lotion or powder, *e.g.* soda, ammonia, or sal volatile, renewing it from time to time. Rubbing the stung part with the cut surface of a raw onion relieves the pain immediately, and causes the swelling to subside. Should there be much swelling or inflammation afterwards, apply hot fomentations.

Before giving a child pears, apples, or plums off the tree, examine the fruit carefully to make sure that no wasp is lurking in them; a sting in the throat may have serious consequences. Should this occur, immediately apply hot fomentations round the neck to draw the swelling outwards.

278. Do you advise me, every spring and autumn, to give my child medicines to strengthen him and increase his powers to withstand infections?

No. Fortunately for the present generation there is not so much of that folly practised now. To dose a healthy child with physic is the greatest absurdity. The only medicines required are exercise, fresh air, a wholesome diet with plenty of fruit and vegetables,

sleep in a well-ventilated room, thorough ablutions and a change of air, for instance, to the seaside.

The Delicate Child

279. If a child is naturally delicate, what can I do to strengthen him?

I would advise strict attention to the rules above mentioned, and also change of air, especially if it is possible to get him away to the south, south-west or south-east coast once or twice a year. Change of air sometimes acts like magic, and may restore a child to health when all other measures have failed.

The only medicines for a delicate child should be those given by the doctor, but Virol or cod-liver oil can always be administered. Give it either before a meal or half an hour after, with an acid drop. Some children have difficulty in taking the oil; it repeats or causes indigestion, even vomiting. They can then be given the concentrated forms which are more readily tolerated. There is no advantage in giving malt with the oil except to make it palatable or to increase the bulk, which may be useful in constipation. In hot weather it is liable to cause heat spots.

Adenoids and infected tonsils cause frequent colds and keep a child in a chronic state of ill-health. Their removal may transform a debilitated sickly child into a strong and healthy one.

Sea- and Sun-bathing

280. Do you approve of bathing in the sea for a delicate young child? And do you approve of his sun-bathing?

Not at once. He should be taken to the sea and then, when he has become acclimatized, given salt-

water baths or sprays. If it is summer, allow him to run about with the minimum of clothes. Never frighten a child with the sea—he may never get over it—but allow him to run about the sands, splashing into the pools and puddles at the water's edge. If he enjoys this, take him to larger or deeper pools, letting him, clad in a bathing suit, lie in the shallow water; then gradually introduce him to deeper water. Never drop him at once into deep water; you are not being kind, and will cause him to lose faith in you.

Do not allow the child to become chilled during or after bathing and paddling; if he gets cold, stop the paddling or bathing, wrap him in a warm towel, rub him all over, and give him a hot drink and a bun to eat (Section 289).

Some children become "liverish" after paddling. If so, stop the paddling or bathing for a few days, and after that only allow it on warm days and for short periods. Give him an aperient, glucose and bicarbonate of soda until he is acclimatized. (*See* Section 210.)

As to *sunbathing, it is most dangerous to allow a child to go to the sea and the next day to lie naked on the sand by the hour* in the glaring sunshine. I have seen children thus made very ill.

A child going to the bracing air of the sea is often constipated for the first day or so. Rectify this by the simple methods mentioned in Section 231. He may then be allowed on the sand, and exposed to the sun—except for his head, which should always be covered with a white hat—for five minutes each side of his body. Never expose him for a longer time than this at first, and if he has a sensitive skin make the

time even shorter. You may increase this period by five minutes each day till an hour is reached, beyond which you should never go until he is tanned, when he is protected.

If by mischance your child has become excessively *sunburnt*, immediately take his temperature, put him to bed in a darkened and cool room, and send for a doctor; if one is not available, give the child a purgative, such as grey powder or confection of senna. Give him plenty of water to drink, adding to it glucose, 2 teaspoonfuls to the tumbler, and lemon. If the skin is red and painful, apply calamine lotion or cold cream or Sedrosol ointment. Keep him as quiet as possible. If his head aches, apply cold towels or ice to his head, and you may give him a tablet of aspirin. (*See* Section 222.) This condition will, in the normal course, last only a day or so.

What I have said about exposure to the sun equally applies to "Sun-ray" lamps.

PART III

BOYHOOD AND GIRLHOOD

281. Have you any remarks to make on the ablutions of boys and girls?

It is desirable to commence a complete system of washing early in life, as it then becomes a habit not lightly dispensed with. Every boy, every girl, and every adult should have an allotted and separate time for the bathroom daily, in order to be able to strip and wash thoroughly.

The necessary washing materials are a piece of coarse flannel, a large sponge, a tablet of good soap, and a rough or turkish towel. Where there is no bathroom, a large basin or tub is required. The whole process should not take longer than fifteen minutes.

282. What is the best way of treating the hair?

A boy should wash his head several times a week, and as soon as hair becomes unsightly on his chin should be taught to shave. A girl should wash her hair once a week with soap and water or a shampoo. If the hair is very thick and heavy this might be done once a fortnight, but only if daily brushing is efficiently carried out for at least a quarter of an hour. After drying, it should be thoroughly brushed and combed.

Avoid unnecessary proprietary hair greases and all abominations of that kind. The best beautifier of the hair is a thorough brushing with two good hair-brushes. If the hair cannot be kept tidy without some application, then a little scented castor or olive oil might

be applied, or macassar oil may be well rubbed in. A little glycerine and lime-juice is also a good hair dressing.

If the hair falls out, scented castor or olive oil is a good remedy, a little being well massaged into the roots, night and morning. Macassar oil, coconut oil, and compound camphor liniment are other restorers. But the best and most sure restorer of falling hair is the rubbing of the scalp.

In the case of a girl, the cutting of the hair, whether long or short, should be settled by the parent, so that the general appearance of the child is pleasing. I certainly do not advise long hair down to the waist in a young girl, and I think it advisable for the hair to be worn short by the schoolgirl for reasons of cleanliness. But all curling and mechanical waving I strongly condemn; it interferes with the natural growth and nutriment of the hair, and may cause premature loss of colour and even loss of the hair. I see no objection in curling the hair at night with ribbons or paper.

283. What underclothing should a boy wear?

Underclothing should be of light and open texture, of a material that is a poor conductor of heat and yet readily absorbs perspiration. Wool is a bad conductor of heat, but air is even worse, and thus a combination of the two in the form of a wide-mesh vest, maintains the heat of the body but allows free ventilation of the skin. For the winter, therefore, I advise a light woollen vest, with a cotton or silk shirt; if the weather is very cold the shirt may be of flannel. The summer vest should be cotton, of the Aertex type, of loose texture, and the shirt also should be of Aertex or cotton.

As covering for the lower part of the body, a pair

of trunks, pants or drawers are advisable. I do not advise combinations—an unhygienic garment—nor do I advise belts, knitted or otherwise, for a healthy child. Flannel next to the skin causes irritation and is not advised.

284. Do you approve of girls wearing stays?

No; certainly not. Girls of a certain figure, however, with a tendency towards large breasts, do need some support, both for propriety and as a moulding for the body. A liberty bodice is then useful, that is a bodice of loosely-woven material, on which strips of material are stitched to keep it firm. It is provided with armholes and reaches to the waist.

But to strengthen the muscles of the body, physical exercises are greatly superior to any such support, and a girl leading a sedentary life should spare time to attend a class, or should carry out by herself exercises she has already been taught.

DIET

285. Will you suggest to me the best diet for a healthy boy or girl of school age?

On waking.—A little orange- or fruit-juice.

Breakfast.—Porridge or a cereal. Bacon; or boiled, poached or scrambled eggs; or, once or twice a week, fish (kippers, herrings, or haddock); or sausages (not more than two at a time, nor more frequently than once a week); or fried bread and tomatoes. Toast or bread and butter; jam, marmalade, honey or fresh fruit. Milk, coffee or tea to drink.

11 *a.m. in the winter.*—A cup of cocoa or hot milk and a biscuit or piece of bread and butter.

Dinner.—A good plate of beef or mutton with green vegetables and potatoes; or soup followed by fish. Give liver or kidneys occasionally as a change. For pudding, suet, rice, batter or milk puddings, or fruit; either fresh or stewed. Water or lemonade to drink.

Tea.—Tea or milk to drink. A fish or meat dish (cottage-pie or minced meat) when the girl or boy is 15–18 years of age. Bread and butter or toast and jam, honey, or Marmite. Plain cakes made with sultanas or raisins or cherries.

Supper.—Cereal or soup. Bread and butter with a fresh, home-made meat paste, jam or honey. Cocoa or milk to drink. If only a plain tea has been supplied, it is advisable with older boys or girls to give a light meat or fish dish.

286. Do you approve of meat for growing boys and girls?

Yes. There comes a period in their lives when there appears to be an extra demand for it; this is a natural craving and should be satisfied. Meat given at the proper period of the day, *i.e.* midday, and in digestible forms, is a necessity. It helps to form the muscles and organs which are developing at this period, and also, owing to the sports and games now indulged in, is needed to make up for wear and tear.

He should be encouraged to take plenty of time over his dinner so that he may be able to chew his food well. If more attention were paid to this matter, a boy would not so frequently lay a foundation of indigestion, etc., which may make miserable his after-life.

I do not consider that boys should take exercise *immediately* after meals; they should rest, in the summer in the open air and in the winter in their recreation room, for at least half an hour before they indulge in their various sports.

Alcohol and Smoking

287. Do you approve of a boy drinking beer with his dinner or taking wine?

There is no objection to a little good, mild, table beer, never strong ale, for a boy when he reaches 16

or 17 years of age, but not before. It is indeed questionable whether a boy requires anything but water with his dinner, but if he is early taught to enjoy and respect the pleasures of this world in moderation, he will be less likely later to give way to excess. Wine I consider unnecessary; it should only be given under medical advice. A parent ought on no account to allow a boy or girl to touch spirits, however much diluted.

Here let me offer a word of advice with reference to cocktail and sherry drinking among school-boys and girls; it is a pernicious habit. Alcohol is a poison, and the percentage of alcohol in cocktails is five times as high as in beer and ten times as high as in bottled cider. To approach the subject of drink with the young needs much tact. It is not the slightest use just forbidding it without giving a reason. You must get a tactful friend to explain the effects of alcohol in excess, parents not being always the best people to tackle this problem. But the method of approach depends a great deal upon the temperament of the boy or girl and the relationship of the members of the family to each other.

288. Have you any remarks to make on the almost universal habit of boys and girls smoking?

Smoking should be discouraged until the boy or girl becomes of age and should definitely be forbidden before the age of seventeen. It may be very difficult to enforce this, however, in these days when smoking is so universal in both sexes. But explain to your children that smoking entails the breathing in of a certain amount of poisonous nicotine and that, although

when indulged in in moderation by those of mature years this has little or no effect, it does affect those who are still developing and growing, as their organs react to smaller doses of the poison. Explain to them that smoking is likely to diminish their prowess in sport.

Swimming

289. Have you any remarks to make on boys and girls learning to swim?

Let me strongly urge upon you to let your sons and daughters be taught early to swim. Swimming is a glorious exercise, one of the best that can be taken, as it brings into action some muscles which are seldom brought into play in any other form of exercise; it strengthens and braces the whole frame. Also the fact that it is often the means of saving life is in itself a great recommendation. In large towns there are now swimming baths for all, and swimming ought to be part of the education of every boy and of every girl. It should be started at the age of 6 or 7 years. (*See* Section 280.)

Swimming does not, however, agree with every child; this sometimes arising from the fact that the body is quite cold before the plunge into the water. After bathing, a boy or girl ought to experience a glow over the whole surface of the body, and the spirits and appetite should be increased. If bathing disagrees with him, chilliness, lassitude and depression of spirits are experienced instead; the face becomes pale and the features pinched, and sometimes the lips and nails become blue. Cold bathing should then on no account be persevered in, unless such symptoms have resulted from the child going into the bath when he

was cold. A brisk walk before the bathe will often warm him up.

I must warn you against allowing your child to stay in the water too long. A quarter of an hour is sufficient, half an hour the limit. As soon as he begins to feel cold or to look blue or pinched, he should come out, wrap himself in a large towel and rub himself till warm. Something to eat and a hot drink are excellent after a bathe.

Here let me give you a word of warning about the place and state of the tide for sea-bathing. Never allow your children to bathe when or where a local inhabitant, who will know the currents and previous fatalities along the coast, informs you it is dangerous. See that they bathe, if possible, on an incoming tide, and have a grown-up with them. Unless they are very strong swimmers and in healthy training do not let them bathe in a rough sea or heavy ground-swell, or let them go very far out. Remember, that other valuable lives may be lost should your child get into trouble.

The bather, as soon as he enters the water, should instantly wet his head. It is injurious and even dangerous to bathe immediately after a full meal; the best time for bathing is about two hours after breakfast. A bathe once a day is sufficient as a rule; but if the child is strong and the weather very hot an afternoon dip is not harmful. If the child is not strong, a bathe only every other day may be indicated.

Should the bather feel somewhat faint after coming out of the water, besides rubbing him with a large towel, cover him with extra rugs or towels and give him a little whisky or brandy and a hot drink. In

the first weeks of bathing it is always advisable to have a Thermos flask containing a hot drink with you.

Pocket Money and Privacy

290. Have you any objection to a boy having pocket money?

It is a bad practice to allow school-boys or girls excessive pocket money, or they will be loading their stomachs with sweets, fruit, and pastry, to the detriment of their health. But I do believe in boys and girls learning the value of money and being able to plan its expenditure. They should be encouraged to keep accounts, but not, however, for the parents to study and criticize unless they are asked to.

A boy or girl should be allowed to have privacy in his diary or accounts and *privacy in his correspondence.* Parents will gain nothing by poking their noses into his affairs. Do not ask him where he has been every time he goes out of the house or away; he will tell you if you have his confidence, love and trust. When a child lies or is deceitful to his parents, it is often their fault and theirs only.

The Facts of Life

291. At what age should I tell my boy and girl the facts of life or of procreation?

There is no definite age, because if you have brought your children up with tact and honesty, answering their questions truthfully, there should be no need to have "that private talk in the library with father" before going to school. The whole subject should not be shrouded in mystery but should be treated as a

physiological truth and in a natural manner. Children's natures vary very much, but if you have studied your children and their personal peculiarities you should be able to judge the right method of approach to this very difficult subject.

No boy or girl should ever be allowed to go to school or to associate with older boys and girls without knowing something about these facts. There is very definitely a "wrong" and a "right" way for them to be told, and if they are informed by their precocious companions it will certainly be in the wrong way.

If you do not feel able yourself to inform your child, consult your family doctor or minister of religion, who may be a great help. One method of approach is to interest your child first in Nature—the flowers, the birds and the animals—and then ask him if he has ever thought how he or they arrived into the world.

When a boy arrives at puberty he has often a secretion at night, called a nocturnal emission. If it has not previously been explained to him as being a normal occurrence, and a safety valve of Nature, he may worry over it and think something is wrong, and if he is a reserved boy it may do a great deal of harm to his mind. A girl, of course, should have her "period" explained to her before the first occurs, lest similar shock or psychological upset may befall. The mother is very much to blame if anything goes wrong through the girl not being forewarned.

Here let me warn those parents who swing to the opposite extreme and who inculcate an unhealthy interest in those functions. Should the period be early or late, do not let your daughter see that you are

worried over her, and do not discuss the subject with others in her presence. Consult your doctor and ask him to visit you and talk of it in a natural way before the child, if necessary. Never frighten a girl or draw her attention too much to these regions: it leads to an unhealthy attitude of mind.

292. Do you hold that any alteration should be made in the life of a girl during her monthly period?

This time should occur in a woman or a girl as a perfectly natural occurrence, without pain, sickness or invalidism. Should there be excessive pain or feeling of ill-health she should be taken to a doctor. She should be taken to him also should the discharge fail to appear, should there be too great a frequency, or should there be too great loss of blood. A healthy girl should be able to carry on her normal life all through this time, her sports, her exercises, *and her baths*, the only exception being swimming in Public Baths. Excessive shocks, *e.g.* sudden immersion in cold water, and sitting about with wet feet are to be avoided.

Choosing a Profession

293. How should I go about the choice of a profession for my son? What profession do you recommend for a boy who is delicate or consumptive?

To quote Addison: "The misfortune is that parents take a liking to a particular profession and therefore desire their sons may be of it, whereas, in so great an affair of life, they should consider the genius and abilities of their children more than their own inclinations." The choice of a profession at the present time is a matter of great difficulty and responsibility.

Government employment, Army, Navy or Civil, now gives the nearest approach to security and provides also a pension. But all branches of it are limited in their scope and may not suit the personality of the individual boy. The boy's general interests and love of sport should be a guide, and if he expresses a desire for a certain trade or profession, it is your responsibility to try to get him into it, or as near to it as you can. There are many people only too anxious to help you—your doctor, clergyman and lawyer, for instance. If the boy is still at school, his form master, head master or house master can help. If he goes on to the university, they have now their own "career advising" societies. Never be afraid of "swopping horses in midstream," if the reasons for change are sane and sensible. Do not force a country-bred, country-loving, sport-loving boy to spend his life in an office or at a factory bench. He can take up agriculture, forestry or veterinary work or can even emigrate. Whereas a boy who has no love for the games and the outdoor recreations of youth, yet loves music and good literature, should not be sent into the Army or Navy.

If your son is delicate, first, do not be in a hurry to place him in any set trade or profession. Health is more important than learning, and often a year away from school or university, a year spent in travel, or living with a family in another country, will make all the difference.

I do not believe in pushing education; many boys have a science or profession at their finger-tips too early, and then, when they endeavour to earn a living at it, find that their lack of years outweighs their abundance of knowledge.

For a delicate boy or a consumptive boy who has been cured, an outdoor life is the ideal. No boy who has consumption, and in whom the disease has not been declared quiescent, should have to face the world for his living, as the worry and anxiety alone are quite enough to aggravate the disease. In many cases it even reactivates a quiescent infection.

Diseases, etc.

294. What are the symptoms of tuberculosis?

The symptoms depend upon part of the body attacked.

The *glands of the neck* are very frequently involved. They enlarge, the enlargement showing no tendency to disappear when treated as though inflamed, but continuing to grow larger. Next, the overlying skin becomes livid, the glands, from being hard and stonelike, become soft and the skin breaks, a pus-like material escaping. The skin near by becomes undermined and the pus constantly discharges. Should healing take place, puckered scars are seen, which tell their own tale.

Tuberculous abscesses sometimes arise in the skin, unconnected with the underlying glands. When they burst hard sores are formed with undermined edges. These are seen in the legs and between the ribs.

Tuberculous disease of the lungs, or consumption, is dealt with in Section 300, but the *glands about the lungs* may become tuberculous, without the lungs themselves being invaded at first. There is also *chronic peritonitis*, that is, invasion of the glands in the abdomen, with or without concurrent disease

of the bowels. There are then symptoms of indigestion, enlarged stomach and abdomen, feverish attacks, diarrhœa often alternating with constipation, a feeling of lassitude and lack of energy and occasionally a rising temperature. *Glands of the armpits and groins* may become swollen and break down into abscesses. In *tuberculous joints* the knee, wrist and ankle are most commonly affected. They become swollen, pale and painful and, if neglected, sinuses and ulcers appear. The bones near the joint are invaded. Of *bones*, the fingers, ribs and spine are most commonly attacked; the bones enlarge, and are deformed and painful, and sinuses and ulcers appear. Tuberculosis is most serious in the spine and neglect may lead to great deformity and crippling, and even death. Any pain in a bone which does not clear away with simple remedies in twenty-four hours should be reported to your doctor, and any deformity should be immediately investigated by examination and X-rays.

Tuberculous disease of the kidneys and bladder is to be suspected when bladder inflammation, or cystitis, does not clear up after medical treatment, especially if there is any family liability, or the chance of infection from others.

Tuberculous disease of the skin such as lupus or scrofula is now, thank heaven, very much rarer than formerly. It is usually associated with poverty and dirt. An ulcer or spot on the face or hands which does not heal is under grave suspicion.

Generalized tuberculosis, or galloping consumption, in which the disease affects many organs of the body, progresses very rapidly and is associated with extreme wasting, ill health and fever.

295. Are there not certain habits of life which predispose to tuberculous disease?

A child descended from tubercular parents is more liable to the disease than others. If the parents are suffering from the disease and take no precautions, children left in their charge are almost bound to contract it. Any child whose health is lowered from disease or neglect and dirt will, if he comes into contact with a person with active tubercle or if he drinks infected milk, stand in great jeopardy of contracting the disease.

Certain types of children are thought to be particularly susceptible to the tubercle bacillus. These are the tall, slight, brightly intelligent children with small limbs, clear delicate complexions, fine silky hair and long eyelashes; the short thick-set child of dull aspect with coarse skin and thick features may also have a tendency.

296. What can be done to prevent the disease?

Children should on no account be allowed to associate with consumptive patients or with those suffering from other tubercular troubles. The expectoration of consumptive patients is swarming with tubercle germs. The sufferer expectorates, the matter dries and soon becomes an imperceptible dust, and the next breath of air sends it adrift. If it meets with a suitable soil the bacillus develops and its growth means maiming for life, perhaps death. The liquid matter from a sinus or abscess may be inoculated into the skin, through a slight scratch, perhaps, which readily escapes notice, and the germs may produce lupus, skin abscesses or tuberculous glands.

Pasteurize your milk (Section 37), for infected milk

is the most frequent cause of tuberculous disease in children.

297. At what period of life does tuberculosis develop?

No period of life is exempt. In early life the acute forms are the commonest, *e.g.* meningitis and generalized tuberculosis (Sections 221 and 294). The latter is nearly always fatal. Between the ages of 15 and 25 the lungs are the organ usually attacked.

298. Suppose the disease to have been already contracted, what must be done?

The treatment must be prescribed by your doctor, but, in addition, strict attention must be paid to the rules of health. The patient must lie in bed out of doors, and his residence should be a healthy country place, where the air is dry and bracing. Diet should be the next consideration; give pure milk and plenty of it, ensure a sufficiency of vitamins by means of fruit and cod-liver oil, and give meat in easily digestible form, *i.e.* beef steaks and mutton chops. No alcohol in any form should be administered. The brain, until the body becomes strong, must not be taxed.

The above plan of life must be steadily and continuously pursued, for tuberculosis is a complaint the treatment of which requires great patience and perseverance over a long period.

A period in a convalescent home for children, where under discipline and constant medical supervision the child will lead an open-air life, is ideal. It is most necessary to be guided by a skilful and experienced doctor.

The treatment will depend, of course, upon the organ or part of the body which is attacked. It may in some instances be necessary to perform a surgical

operation to effect a cure. Do not despair; many tubercular patients are completely cured in time and by judicious treatment.

299. Is a slight spitting of blood to be looked upon as a dangerous symptom?

Spitting of blood is always to be looked upon with great suspicion; even when the youth or girl appears to be in good health otherwise, it is frequently the earliest symptom of consumption. The child must immediately be sent to your doctor for examination, taking a specimen of the sputum.

300. What is consumption? And what are the symptoms?

Consumption, or phthisis, is tuberculous disease of the lungs, which causes consolidation of the normally sponge-like tissue, and the formation of cavities therein. It is always spread by infection. It commences most commonly between the ages of 15 and 25, usually in a member of a household in which there is already an active case. The great reduction in the spread of the disease in this country has been largely due to the recognition of this fact.

Some of the most important symptoms of pulmonary tuberculosis can only be discovered by a medical man; but there are symptoms that it is well a parent should recognize that she may seek aid early. It is in the early stages that the disease can most successfully be cured.

The symptoms depend on the age of the patient, and in young children the disease may be preceded by a bad attack of bronchitis, pneumonia, pleurisy, whooping-cough, or measles. There may be no previous illness, however, but wasting, accompanied by a dry

short cough with tickling and irritation at the top of the throat; this cough is usually most prominent in the morning on waking, and there may be a thick, yellow sputum, perhaps streaked with blood, a most dangerous symptom. Associated with this is loss of appetite, diarrhœa, and intermittent fever with sweats, the temperature being 99–100° F. (37–38° C.) in the evening and 96–97° F. (35.5–36° C.) in the morning. If this condition is neglected, the wasting continues and the cough becomes incessant. Infection may spread elsewhere, *e.g.* to the brain.

On the other hand, the disease may become chronic, when there may be little or no coughing and no spitting of blood; but the wasting and swinging temperature will still be present and the sufferer becomes very short of breath on exertion. His finger-tips become bulbous. Other less common symptoms include hoarseness, coming on when the patient is tired or towards the evening. There is always lassitude, shortness of breath, a feeling of weariness following the slightest exertion, and maybe depression. The hair usually falls out, and is poor in quality. Enlarged finger-joints occur, and there may be burning heat of the palms and soles, occurring in paroxysms at noon and evening, and terminating in violent perspiration. Heavy night sweats, accompanied by a feeling of coldness, are experienced, and there is a hectic flush on the cheek bones, sometimes noticeable by the patient himself. Crabbe graphically describes this flush in the following lines:

"When his thin cheek assumed a deadly hue
And all the rose to one small spot withdrew,
They called it hectic; 'twas a fiery flush
More fixed and deeper than the maiden blush"

At first the expectoration is merely of mucus, but after a time it assumes a characteristic appearance, taking on a roundish, woolly form, each portion of phlegm keeping, as it were, distinct. It tends to stick to the teeth or to the receptacle into which it has been spat. It is yellow and may have streaks of blood in it.

The patient is commonly harassed by frequent bowel complaints which rob him of what little strength he has. Girls, who before have been regular in their periods of menstruation, become irregular, the discharge gradually decreasing in quantity until it entirely disappears.

The eyes have a particularly sparkling character, and in some cases the outlook of the boy or girl is one of optimism; they speak as if they feel and are better every day, even up to the last.

301. If my child is consumptive, what can I do? Also how am I to guard other members of the family against the disease?

There is only one place for a consumptive child and that is a Sanatorium, where the right air, surroundings, food and nursing are to be obtained. If it is not possible to send him to one, he must be kept in the best surroundings possible, *i.e.* in the country, among pine trees, and in the vicinity of the sea. He must be kept in bed and treated as an invalid, even though he may not feel ill, and he must be so treated until his temperature has settled down and his doctor has pronounced that the infection has ceased its activity, and that the body has found a protective barrier to keep the disease inactive. The consumptive is best nursed in an outside shelter which can be moved round so that cold

wind or rain do not beat upon him. If this is unobtainable, he must lie on a balcony or before an open window. He must not be allowed to do anything for himself, but must be washed, and must not be permitted to get out of bed even to pass his excretions. His diet should be nourishing but digestible; do not stuff him with milk, cream and butter so as to upset his digestion. The diet recommended, in addition to that shown in Section 285, is as follows:

11 *a.m.*—Glass of milk with Marmite sandwich, or Sanatogen or Bournvita.

Before bed. — Ovaltine, Horlick's Malted Milk, Sanatogen, Bournvita, Bovril or Marmite made with milk, with biscuits or a Marmite sandwich.

Extra vitamins can be supplied in cod-liver oil, plain or concentrated, or in Ostelin or Radiostoleum, three times a day or as prescribed by the doctor. If cod-liver oil causes indigestion the extra vitamins must be given in another form.

The prevention of infection is carried out as in diphtheria (Section 188), with added precautions as to the patient's excretions, his water and motions being covered with disinfectant (unless required by the doctor) and left standing for half an hour, before being emptied down the lavatory. If he coughs and brings up sputum it should be collected in a special receptacle, which contains a strong solution of carbolic (one part to nineteen of water) or mercury perchloride (1 in 1,000). Alternatively the boy should spit into a paper handkerchief, which is immediately burnt. All soiled linen should be soaked in disinfectant before being washed or sent to the laundry.

During convalescence, which should be long, great

care should be taken that no violent form of exercise is indulged in; the temperature should be taken night and morning for at least a year from the start of the convalescence. A sufferer from consumption is not considered cured until he has been without signs or symptoms for at least two years; after that he should be re-examined twice a year until he is 30.

302. Have you any remarks to make on round shoulders and a slouching walk?

No youth ought to be allowed to stoop; it spoils the figure, deforms the chest, and interferes with digestion. If he or she cannot help stooping, you may depend upon it that the health is bad, and a medical man ought to be consulted. If the boy or girl is pronounced free of any disease, a course of physical exercises will be beneficial, also participation in sports and plenty of walking. A girl might join the Girl Guides or the St. John Ambulance Brigade; a boy might become a Scout, Sea Scout, or Rover, or join the Boys' Brigade, a Cadet Unit, the Territorials, the Royal Naval Volunteer Brigade or the St. John Ambulance. Both boy and girl should sleep upon a hair mattress, and take regular breathing exercises in the morning before an open window, stripped to the waist. They should not be encouraged to lie about in easy chairs.

At about the time of puberty many children assume a slouching gait and loll about or sit with rounded shoulders. During this period plenty of fresh air and nourishing food are needed. Do not worry the child; let him lie about flat on his back and see that he has a horsehair mattress at night, not a feather one, and that the wire mattress does not sag in the middle. (*See* Section 235.)

303. When a youth suffers from frequent sore throats, what precautions ought to be taken?

His throat should be examined by your medical man (*see* Section 183). If his tonsils have already been removed, a septic tag may remain in the tonsil bed; the sore throat may be due to rheumatism (Section 213). Smoking to excess, especially cheap cigarettes, is a frequent cause of recurrent sore throats. Apart from the medicines or astringent applications given you by the doctor, a weak throat can be helped by hardening the whole system. See that he has a change of air by the sea; good nourishing diet, including fruit; a daily bath, followed by a tepid or cold douche; and plenty of outdoor exercise—but not with his throat muffled up. In the summer or warm weather let him have an open neck and no collar. Attention should be paid to the bowels, and he should avoid sitting in draughts and standing about or sitting in wet shoes or socks.

304. What are the best ways of stemming bleeding from the nose?

Bleeding from the nose is frequently an effort of Nature to relieve some congestion and, therefore, unless it is severe, recurrent or occurs in an already weakened patient, it should not immediately be restrained. Should it continue, however, make the sufferer sit down in front of an open window, with a hot bottle to his stomach and at his feet, and with the lower part of him wrapped in rugs or blankets. Apply a towel or handkerchief wrung out in ice-cold water to the bridge of the nose and the back of the neck. If you have any ice, apply this to the head in an ice-bag, sponge-bag, or piece of flannel. You can stand his

feet and legs in a bath of hot water. Should this not succeed, lay him down flat without a pillow, and with the face turned to the side, still applying heat to the lower half of his body and cold to the head, and send for your medical man, who will plug the nose, or show you how to do it. The sufferer should on no account blow his nose for some time after the bleeding has ceased.

305. When a girl faints, what should be done?

Lay her flat on her back, taking care that the head is not raised—it might even be lower than the body—and throw open the windows. Do not crowd round her. Shakespeare knew the great importance of this; he says:

> "So play the foolish throngs with one that swoons;
> Come all to help him, and so stop the air
> By which he should revive."

Unloosen her dress as quickly as possible, especially round the neck, waist and chest. Apply smelling salts to the nostrils if you have them; if not, dash cold water upon her face; rub her hands and limbs, cover her with rugs or blankets and fan her. As soon as she can swallow, give her either a draught of cold water, or brandy or sal volatile, a teaspoonful in a wineglass of water.

To prevent her fainting in the future it must be understood that fainting is due to the blood leaving the brain. Some women, and men for that matter, faint very much more readily than others, even though they are in good health; it merely means nervous control of the blood-vessels is abnormal. But should a girl suddenly develop a liability to fainting fits which

occur for very little cause, you should take her to the doctor and have her thoroughly examined, as she may be ailing either in her blood, or her nervous system. If no immediate cause can be found, I would recommend a change to a country life, with gentle exercise, early hours, digestible food, and avoidance of excitement. She should not be allowed to go into crowds, or bathe unaccompanied. Constipation should be avoided at all cost.

306. Will you advise me as to the prevention and cure of constipation?

If you have followed the advice I have given in previous conversations (Sections 82–3, 231), and your child has been brought up from the day of his birth with regular habits, is given a nourishing diet with fruit, vegetables and wholemeal bread, has daily exercise in the open air, and drinks plenty of water (at least three pints a day), there should be no constipation. These are the best preventatives of this common and body-weakening complaint. Some are born with a greater liability to constipation than others, however, and if it has been established, we must not only cure the immediate condition but also prevent its recurrence. It must be understood that there is a form of constipation in which the boy or girl may have an evacuation once a day but without completely emptying the bowel, a fermenting mass being left which poisons the system and saps the vitality.

So first of all we must start with an empty bowel. This is best accomplished by means of an enema or a dose of castor oil. Castor oil can best be administered well mixed with orange-juice and sugar, the glass

being wiped with the orange before the oil is poured into it. As an alternative, use cascara evacuant or calomel, 1–2 grains, or 2 grains of grey powder. Immediately this has acted, the treatment must start. A glass of hot water followed by a glass of cold is a very good beginning for the day. As to diet, give for breakfast porridge, or whole-wheat cereal with a helping of Bemax, with coffee in preference to tea, and some fruit and honeycomb to finish up with. Milk should be lessened in quantity, as it has a constipating effect. For the midday meal, give plenty of green vegetables —spinach, cauliflower (especially the stalk and leaves), cabbage or broccoli—and fruit as a sweet. The evening meal should be on the same plan, but uncooked fruit is sometimes indigestible given at night. Exercises should be taken, especially those that utilize the stomach muscles—walking, running, and rowing.

Olive oil or liquid paraffin helps to grease the wheels; start with a tablespoonful three times a day after meals, and gradually reduce the amount by a teaspoonful each dose. Senna pods or confection of sulphur or of senna may be employed as an alternative or in addition if the above methods fail. I do not advise salts as a continuous medicament; they have a lowering effect and rarely cure the condition unassisted. The daily habits should be continued and regularity maintained. Massage of the abdominal wall helps to strengthen the bowels, and physical exercises under a trained instructor are of assistance.

Should these measures not succeed—when continued over a long period with patience and perseverance they rarely fail in the young—I advise an enema of warm water once or twice a week.

A frequent cause of costiveness is the bad habit of disobeying the call of Nature for having the bowels opened. The moment there is the slightest inclination to relieve the bowels, especially in the morning after breakfast, it must be attended to or serious results will follow. Let me urge a mother to instil in her children's minds the importance of this advice.

I have here a word or two to say to a mother who is always physicking her family. It is an unnatural thing to be constantly dosing either a child or anyone else with medicine. If more care were paid to the rules of health, very little medicine would be required;

307. Young people are subject to pimples on the face. What is the remedy?

Hard red pimples appearing on the forehead, temples, nose, chin and cheeks, and occasionally attacking the neck, shoulders, back and chest, are a common and an obstinate affection of the skin They occur chiefly in those between 15 and 35 years of age and are especially prevalent at puberty.

They are conical, red and hard, after a while becoming white and yellow at the point, and discharging a thick yellow matter mingled with a whitish substance; next they become covered by a hard brown scab and, lastly, disappear very slowly, and sometimes incompletely, often leaving an ugly scar behind. Considerable pain and irritation are sometimes felt.

Should they appear in large numbers, the boy or girl should bathe the part affected with hot, preferably soft, water and a large flannel, for at least a quarter of an hour twice a day, afterwards drying with a rough towel. It is not advisable to press the spots in

an endeavour to empty them. A drying lotion such as calamine or one made of equal parts of eau-de-Cologne and 1 in 1,000 perchloride of mercury should be used. I do not advise soap for the face. For application at night, a sulphur ointment and zinc sulphate is advisable.

Attention should be paid to the general health. Constipation must be guarded against and outdoor exercise encouraged. Excess of carbohydrates and chocolates have a definitely bad effect on the condition of the skin, and as regards diet plenty of fruit and green vegetables should be taken.

Should the condition spread or be severe, you must consult your medical man, as X-ray or other ray treatment is needed; it is very successful.

308. What causes a gum-boil, and what is the treatment?

A decayed root of a tooth, which sets up inflammation and abscess of the gum. Make the sufferer foment his mouth by holding in it hydrogen peroxide in water (a teaspoonful to a tumbler) as hot as he can bear it. Repeat this every two or three hours. As soon as the gum-boil has gone, consult your dentist, and have the affected tooth extracted. Decayed teeth, besides causing pain and gum-boils, make the breath offensive, and the poisons circulate in the blood and may affect the whole body.

309. What is the best way to destroy a wart?

Pure nitric acid carefully applied every other day by means of a small stub of wood will soon destroy it. Care must be taken that the acid does not touch the healthy skin, or it will burn it. It should be kept, well out of reach of children, in a bottle with a dis-

tinctive stopper, and marked "POISON." Salicylic acid, 40 grains dissolved in an ounce of glycerine, or glacial acetic acid, are recommended as alternatives.

310. What is the best remedy for a corn?

The best remedy for a hard corn is to remove it. The right way is to cut around the circumference of the corn with a sterilized pair of sharp pointed scissors. Work gradually round and round and towards the centre. When you have, for some considerable distance, well loosened the edges, you can, either with clean fingers or with a pair of sterilized forceps, generally remove the corn bodily, and that without pain or loss of blood.

Hard corns on the sole and sides of the foot are best treated by filing with a corn file. This ought to be done daily, preferably after a hot bath, and continued until a slight pain is experienced, which shows that the end of the corn is approaching. Corns between the toes are sometimes soft. These are quickly removed by applying every night, on a small piece of wood or match-stick, some glacial acetic acid or salicylic acid. The toes should be held apart for a few minutes, in order that the acid may soak in, then a small piece of cotton-wool should be put between them.

An excellent preventative of and remedy for corns, especially soft corns, is washing the feet every morning, taking especial care to wipe the skin dry between the toes.

The corn, hard or soft, has probably been caused by tight or ill-fitting shoes. The only way to prevent a recurrence is to wear shoes that are sufficiently large

and properly made. But as long as fashion, which ordains high heels and narrow toes, is followed rather than common sense in the making of boots and shoes, men and women will continue to suffer from corns.

311. What is the best remedy for tender, sweaty and smelling feet?

Cold water: bathing the feet daily in cold water. Begin with tepid water, reducing the temperature daily until it is quite cold. Each foot should remain in the water about half a minute. If the annoyance be great, the bathing should be repeated also at night. The addition of a little Condy's fluid, just enough to make the water pink, is excellent. The feet should then be well dried, especially between the toes, and wiped all over with spirit, *e.g.* methylated spirit or eau-de-Cologne; then powder lightly with a powder made up of equal parts of boracic acid and zinc oxide. A clean pair of socks or stockings should be worn every day. Perfect cleanliness is absolutely necessary.

If there are bunions or corns, these should be attended to by a chiropodist or, as regards corns, by the method described in Section 310. See that the shoes or boots are well-fitting.

For feet that become tender on walking, soak them in water with bicarbonate of soda in it. Soaping the inside of the sock before starting out also prevents tenderness and blisters. Should blisters form, they should be pricked with a sterile needle, and powdered, and the foot should be rested for 24 hours. Should the blister be broken and the skin raw, give a thorough bathing in warm water and hydrogen peroxide; afterwards apply zinc ointment on lint to the place, and let the

foot rest from walking till the place has healed. Neglect will aggravate the condition and the foot may become poisoned.

312. Why are young girls of the present day so often subject to nervous complaints?

Many young people have lived their lives before they are twenty-five. They are rushed about in motor-cars and trains; their education is started early, far too early in many cases, and their poor little infant brains are overtaxed. Then they go to school, where there is more rush and cramming. In their holidays they read exciting books, go too frequently to riotous parties, to the pictures and to the theatre with consequent late nights. If they take up a sport, they go at it "all boilers alight." No time to rest and think—one glorious scramble of work and pleasure. Even when those difficult and serious years arrive when they pass from girlhood to womanhood, there is no pause; on the mad rush goes, with sherry parties, cocktails, numerous cigarettes, and still more late nights, and with cruises to hot climates as a possible *soupçon*.

Then you ask why the young women of the present day are jumpy and nervy and unable to take the ups and downs of life in their stride!

There is no cure except rest, but much can be done in the way of prevention. Those mothers who read this, and realize the unnaturalness of such life, carry the remedy in their own hands. Bring up your daughters to take life easily and their pleasures in moderation, and then we shall not have our hospitals and surgeries full of neurotic females; the world will be a happier place and England a better country, and there will be fewer broken marriages and unhappy homes.

313. How do you recommend me to treat a girl with neurasthenia?

By means of rest and fresh air and change of surroundings and companions. It is best that she should go right away from her family and be under the care of strangers in a convalescent home or country place. She is suffering from exhaustion of the nervous system, so rest in bed, on an invalid diet, is the best way to begin, with no visitors and only necessary attendance. Never fuss or worry over her, nor let her see you have any anxiety. She must be visited from time to time by your doctor, who will advise you as to the next stages and give her the proper medicines to assist her nerves.

In mild cases, tact and common sense win. A girl cannot take medicine for years on end, but she can live a healthy life of reasonable pleasures, with healthy food, and no alcohol, or very little. She should only smoke in moderation or, better still, not at all. Occupation of mind has the most remedial effect, but this is often a difficult problem, as the type of girl who becomes neurotic does not usually enjoy occupation, but craves amusement and sensation.

In conclusion, may I express a hope that my advice will not have been given in vain, but that it may be a humble instrument for improving the race of our children—Britain's priceless treasures! Oh, that the time may come "that our sons may grow up as the young plants, and that our daughters may be as the polished corners of the temple."

APPENDIX I

Diet Suitable for a Nursing Mother

On waking.—1 or 2 glasses of hot or cold water, or 2 cups of weak tea.

Breakfast.—Cereal. Fried kidneys, or liver and bacon, or fried tomatoes and bacon, or fried fish (sole, whiting, sprats or cod), or boiled, scrambled, poached or fried egg and bacon. Wholemeal or brown bread or toast with butter and marmalade or honey. Two breakfastcupfuls of coffee or weak tea.

11 *a.m.*—Glass of milk, or cup of Bournvita, chocolate, cocoa, Ovaltine or Horlick's Malted Milk.

Lunch.—Hot or cold fresh meat (beef, mutton or lamb), or chicken, rabbit or turkey, or sweetbread, liver, kidney, tripe, or calf's head. Potatoes and green vegetables (sprouts, cauliflower, spinach) or asparagus, carrots, marrow, seakale, fresh peas, runner or French beans, lettuce, tomatoes or watercress. Milk puddings (rice, tapioca, sago or vermicelli), or steamed puddings with treacle, honey or jam; or fresh or stewed fruit (except rhubarb) with custard, cream or junket; blancmange. Cheddar, Cheshire, Leicester or cream cheese; macaroni cheese or cheese omelette. At least 2 tumblerfuls of water, barley-water or home-made lemonade or some light ale.

Tea.—2 or 3 cups of weak tea. Wholemeal or brown bread and butter. Marmite, honey, treacle or jam sandwiches. Watercress or lettuce. Home-made cakes or buns, or short-bread.

Dinner.—Soup (*e.g.* cream of vegetables) and meat, vegetables and sweet as for lunch.

Bedtime.—Cup of cocoa, Ovaltine, Bournvita, Horlick's Malted Milk, Glaxovo or Marmite.

The following foods are recommended to supplement the mother's diet:

Cow & Gate Prenatalax
Allenbury's Food
Neave's Health Food
Benger's Food
Glaxovo
Ovaltine
Bournvita

APPENDIX II: Proprietary Foods

(To be given under the direction of your medical man)

From birth to 3 months:

Humanized Trufood	Prepared by spray process.
Humanized Cow & Gate	
Robinson's Almata	
Savory & Moore's Food	Carbohydrates in the form of starch.
Allen & Hanbury's No. 1	Carbohydrates in higher proportion than in human milk.
Nestlé's, Sweetened	
Ostermilk No. 1 } Same composition	
Sunshine Glaxo }	
Cow & Gate, Half-Cream	Fats are lower, and the proteins higher than in human milk.
Cow & Gate, Special Cream	
Ambrosia	Fats and proteins are higher in proportion to carbohydrates than in human milk.
Cow & Gate, Full-Cream	
Nestlé's Ideal, Unsweetened	
Savory & Moore's New Milk	
United Dairies' Lacta No. 1	
Veguva No. 1	Contains vegetable and fruit juices. Low fats and carbohydrates.

From 3 months till weaning time.

Trufood	
Allen & Hanbury's No. 2	Carbohydrates high in proportion to other constituents.
Allen & Hanbury's No. 3	Carbohydrates and proteins high.
Cow & Gate, Half-Cream	Carbohydrates are in higher proportion than in human milk, but fats are lower.
Allen & Hanbury's, Half-Cream	
Benger's Food	Proteins digested. Fats and proteins are high in proportion to carbohydrates.
Neave's Food	
United Dairies Lacta No. 2	
Ostermilk No. 2 } Same composition.	
Full-Cream Glaxo }	
Nestlé's Lactogen	
Veguva No. 2	

Weaning Foods:

Allen & Hanbury's Cereal	
Chapman's Food	Fats and proteins low.
Libby's Cereal	Fats and proteins high in proportion to carbohydrates.
Cow & Gate Cerex	Low in fat.
Sister Laura's Food (to be prepared with milk)	Carbohydrates slightly higher than in human milk.
Mellin's Food	Carbohydrates completely soluble.
Mellin's Lacto	
Benger's Food	
Ridge's Food	Low in fats.
Robb's Food	Low in fats and proteins.
Trufood Follow On	
Nestlé's Milk Food	Low in fats.
Mead's Cereal	
Frame's Food	Proteins in specially digestible form, carbohydrates high.

Foods for adding to Milk Mixtures at 6 months:

Cream of Wheat.
Glaxo's Farex.
Glaxo's Malto-Dextrin.
Mead's Pablum.
Robinson's Groats.
Cow & Gate Modelac.
Robinson's Barley.
United Dairies' Kookal.

Special Foods for Special Conditions (only to be given on doctor's instructions):

Mead Casec.
Cow & Gate Prolac.
Cow & Gate Sprulac.
Cow & Gate Weylac.

Glaxo's Sol Protein.
Allen & Hanbury's Whey Powder.
Mead's Protein Milk.

Foods with High Fat Content:

Nestlé's Cream.
Cow & Gate Brestol.

Food with Low Fat Content:

Cow & Gate Separated.
Allen & Hanbury's Half-Cream.
Cow & Gate Beurlac.
Cow & Gate Sprulac.

Foods used in Allergic Conditions or in Cases of Food Idiosyncrasies (*Sections* 132, 178):

Cow & Gate Frailac.
Cow & Gate Allergilac.
Mead's Sobec.
Cow & Gate Caprolac (Goat's Milk).
Robinson's Almata.

Foods with the Addition of Lactic Acid:

Cow & Gate Full-Cream, Half-Cream and Separated Lacidac.
Mead's Protein Milk.
Mead's Powdered Lactic Acid Milk, Nos. 1 and 2.
Cow & Gate Beurlac.

Foods with Extra Iron added for Anæmia:

Glaxo Full-Cream Ferrolac.
Glaxo Modified Ferrolac.
Cow & Gate Hæmolac.

Food consisting of Sugar for Addition to Milk Mixtures when indicated and ordered by the doctor:

Mead's Dextri-Maltose, Nos. 1, 2 and 3.
Mead's Dextri-Maltose, Vitamin B.
Glaxo's Malto-Dextrin.
Cow & Gate Daltose.
Corn Products Karo.
Corn Products Dextrose.
Virol.

Biscuits:

Allen & Hanbury's Rusks.
Mellin's Biscuits.
Robbs's Biscuits.

APPENDIX III

Useful Contents for the Nursery Medicine Cupboard

4 bandages (½ and 1½ in. wide)
4 oz. plain lint
4 oz. boracic lint
1 lb. best hospital absorbent wool
4 oz. plain gauze
1 Elastoplast bandage (2½ in. wide)
Enamel or stainless steel bowl
Eye-bathing glass
Boracic lotion (B.P.C.)
Tin of white vaseline
50 tablets of grey powder (¼ gr.)
Castor oil
Olive oil
2 oz. boracic powder
4 oz. bicarbonate of soda
2 oz. boracic and zinc powder
Bottle of dill water
½ oz. boracic ointment
6 oz. hydrogen peroxide
Bottle of Phillips's magnesia
Tin of glucose
2 oz. brandy or sal volatile
Feeding-cup
Tin of Ferris's Flammeline or Antiphlogistine or Kataplasma Kaolini
Tube of Ilon ointment
Bengue's balsam or oil of wintergreen
Witch-hazel
2-per-cent. solution of iodine
Cold cream
Starch powder
Turpentine

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