A Clinical Lecture

ON

SOME COMMON ERRORS IN THE DIET AND GENERAL HYGIENE OF CHILDREN.

DELIVERED AT THE HOSPITAL FOR SICK CHILDREN,
GREAT ORMOND STREET.

By A. F. VOELCKER, M.D., F.R.C.P.,

PHYSICIAN TO OUT-PATIENTS, MIDDLESEX HOSPITAL; AND PHYSICIAN,
HOSPITAL FOR SICK CHILDREN, GREAT ORMOND STREET.

THE out-patient department and the wards of a large children's hospital are the places to study the results of many of the errors of management of children, but what is wanted is a more careful study of disease in the making rather than when fully developed. How much distress, pain, time, and expense could we save children and parents if we would only investigate for ourselves the conditions under which children live, not only in the poorer classes, from which our hospital patients are drawn, but also in the upper classes, in which too often the hygienic management of children is left in the hands of that too-often ignorant and self-satisfied curse—the "experienced nurse"! I often urge students to use their eyes as they walk up to the hospital, and to observe how disease is being made under their very eyes, and many a salutary lesson might be learnt by medical men if they would only contrast the advice they give and the manner in which this advice is followed. It is discouraging, after some ten minutes spent in the careful instruction of a parent in the way in which a child should be dieted, to see the reward of good behaviour, or the bribes for quietness, being bestowed with an absolute disregard to what has just been advised. It is because I feel very strongly that unless we recognize what actually takes place in our patients when they are not under the doctor's eye, we run a great risk not only of doing our patients little or no good but we bring discredit on our art and fail, often quite deservedly, in our treatment. I am led to make these remarks because I think that at the present time attention to these details is considered beneath a doctor's notice and because almost the last thing that troubles the student is the question of treatment.

DIET AND FEEDING.

At the risk of a charge of flogging a dead horse, I urge what we as medical men cannot insist on too strongly—the necessity for mothers to nurse their own infants. The objections which are raised to this are, the unwillingness of the mother to be tied down and the necessity for foregoing many social pleasures and duties. Such reasons are unmaternal and should not weigh with us, but we must also remember that in addition to the temptation not to be tied too closely to the nursery there is often very considerable pressure exerted on both mother and doctor by the husband; we should remember this when we are endeavouring to get a mother to do her duty to her offspring. In these cases, instead of directing our arguments to the mother, we should do much better if we boldly tackled the head of the house and pointed out to him how much safer it was for both mother and child if the child were breast-fed. An immense amount of evil is done by monthly nurses by the persistent efforts some of them make to induce the mothers not to suckle their infants. I may perhaps be asked why it is that this should be the case. Well, there are three reasons which I can think of. First, it is a popular suggestion with the parents in too many cases; secondly, it saves the nurse, or, as she would say, the mother, trouble. If an infant is breast-fed it has to be brought to its mother every two to three hours, and while it is being fed it has to be waited for, and then put back into its cot, and this we can well imagine is not a popular proceeding with the nurse. In the third place, too often the monthly nurse's ideal is to leave a fat and heavy baby when "her month is up." Smithfield dead meat market is her ideal, and provided the babe puts on weight as long as she is in charge all is well. I wish that there was some way by which those who start mischief through artificial feeding could be made to suffer for the later results of their actions. It is surprising how much wrong feeding some children will put up with, but most

of these results of artificial feeding only show themselves some time after the monthly nurse has taken her departure, with the promise of her re-engagement for the next "if it ever should come."

The mention of the increase in weight, which is so commonly urged as a defence of the practice of artificial feeding of infants, reminds me of another danger to the happiness of a home into which "number one" has arrived. This danger is the weighing machine. I have called it a danger, not a curse, though it may become the latter. I have known the whole household upset because in a certain few days baby has not gained any weight. There are times when the weighing of infants may give us most valuable information and guidance in treatment, but there are times when much the best course is to send the scales to be cleaned or to get them broken. As a rule, numbers five, six, seven, and eight in a family are not weighed.

As you probably know, there is a widespread belief that cow's milk and mother's milk do not agree, and that a child cannot be brought up on a combination of feeding from these two sources. This, I am glad to say, is combated by the advice we at this hospital give on the pamphlet which we issue on the bringing up of infants. Here you will find it urged that if the mother's milk be insufficient the child should be given cow's milk, suitably diluted, in addition to the breast milk. This heresy that the two do not agree is to be strongly condemned, for it will often be found that, whereas the mother's milk may have been insufficient at first, yet, after a short time, it suffices as the sole form of nourishment for the child. To speak of the endeavours of some mothers to nurse their children as half-hearted is an abuse of terms. Many of these mothers never mean to be bothered with nursing their children, and will seize on any excuse which enables them to pose as unwilling victims of natural defects.

Before you agree to the discontinuance of breast feeding satisfy yourself that the dilution and preparation of the substitute for breast milk has been properly and fairly tried. It is almost laughable to hear what a number of food preparations are in some cases said to have been tried within a short limit of time, and to have been found wanting. It is often thought that because a preparation is not at once retained by a child it is not suitable, and I think that this is one of the reasons why we hear of so many cases which are said to be unable to take cow's milk. Since I have been connected with this hospital—and that is nearly eighteen years—I have hardly come across a single case in which cow's milk, when properly modified, could not be retained. It is a common error to assume that cow's milk does not suit a child because the child happens occasionally to reject some of it. This leads me to mention another error—that it is a good sign for an infant to throw up a little at the end of each feed. The monthly nurse has this as an *idée fixe*, but we should regard it either as a proof that the child has had too much, or, what is more often the case, that the child has taken its food too rapidly. Want of attention to this point of the rapidity with which children take their food leads to discredit being attached to the food rather than to the feeder.

In older children the time taken over the consumption of a meal is a point to which far too little attention has been paid. Individual children vary much in the time they require for a meal, but the variations should be kept within reasonable limits. While the too common habit of bolting food, which I am sure needs no condemnation from me, as it offends all principles whether of physiology or propriety, is, it is true, often inveighed against, far too little attention is paid to the dawdling over meals which leads to so much fancifulness and fastidiousness in children in the matter of likes and dislikes of this and that article of food and encourages moral as well as physical weaknesses. It is quite true that these dawdling ways are met with in the subjects of dyspepsia, but it is to my mind a very important question how far the habits are a cause of the condition which they certainly aggravate. Meal times should be taken seriously, and there is need for greater discipline at table than is generally exercised. Conversation between the courses should be allowed, were it only in the hope of stemming the tide of modern dining-out hospitality, where the intellectual factor of conversation has been annihilated by the necessity of securing for internal consumption what is placed before you before it

is whisked off by the waiter to make room for another glimpse at some culinary triumph. Conversation may be used by a careful parent as the means of regulating the pace with which food is being taken. Encouraged when food is being bolted, forbidden when food is being played with, affording an opportunity for unconventionally conveying instruction, or, rather, information, to children, as well as affording a school of manners, I look upon the banishment entirely to the nursery, away from a parent or properly educated governess, as a grave defect in the present-day way of bringing up children.

The choice of food for a child seems to be influenced by the two considerations of its nutritive value and its effects on the bowels, and it is this latter factor which leads to the abuse of certain articles of diet which, excellent in themselves, may bring about the very conditions they are employed to counteract. There are two very common errors which I should class under this head, and they are the fruit and the porridge shibboleths. I have seen more constipation produced by the administration of these two things than I have seen cases of constipation cured by their employment.

Fruit is an excellent addition to the dietary of children provided that it is recognized that all fruits are not equally useful and that several are not suited for children. I cannot see that the administration of grapes to infants is ever called for, unless from bad feeding there is a scorbutic element in the case, and then there are many more efficacious remedies to be used. Fruits, such as oranges, cherries, plums, while containing sugars and that "something fresh" of which we as yet know so little except its importance, contain a large amount of cellulose, and leave so much undigested residue that the digestion is often upset by their employment; and when we come to the employment of tinned and otherwise preserved fruits, which in the fresh state might have been pardonable, their use becomes absolutely injurious. I once had a child brought to me with a diagnosis of membranous colitis, but an examination of the suspected membrane showed the undigested remains of tinned pineapple.

The great reason urged by those who are victims of the fruit heresy is that fruit prevents constipation. It is perfectly true that the acid tartrates and malates do act as laxatives, as is seen by the aperient effects of fruit juice, but a great deal of the aperient action of fruit is due to the mechanical effects on the mucous membrane and muscular coats of the intestine. The small seeds which do not undergo digestion irritate the bowel, and so cause it to evacuate its contents. But, as we well know, any irritant when repeatedly applied loses its effect. And just as a bad driver will spoil a horse by constantly touching it up with a whip, and a well-meaning parent will secure an almost complete indifference to his admonitions by reason of their repetition, so the bowel learns to take no notice of such recurrent stimuli as seeds and undigested particles of food. It is from this reason that the remarks which I have just made about the fruit question apply equally to the great porridge heresy. Porridge, like some other things coming from the north of the Tweed, is excellent if you do not get too much of it. An occasional dish of porridge will be found a most useful addition to the child's dietary; but if given, at any rate to the Sassenach, every day, generally has the result of causing more constipation than existed before it was employed to cure this condition. The value of both fruit and porridge is frequently impaired through the amount of sugar, either in the form of syrup or of sugar, taken with these articles. This leads to fermentative processes in the stomach and bowels, and the result is flatulent distension, with accompanying motor palsy of the walls. I do not advise the daily administration of either fruit or porridge, but I know that, when given, say three or four times a week, their use is most satisfactory.

While on this subject I should like to point out to you what an advantage it is not to have too routine a diet in the nursery. In the adult there is the excuse that one cannot be bothered—I am speaking of men, for women I believe live on mutton cutlets and eggs with tea. A literary friend of mine having ordered a fried mackerel and some gooseberry tart for his dinner one day, being asked next day what he would have, expressed his satisfaction with the menu of the previous day and asked that it should be repeated; but when the third day arrived and

with it the recurring question, "What would you like for dinner to-day?" he irately told the landlady to go on just the same till he told her to stop. He told me afterwards that after about six weeks this diet begins to pall on the average man. I tell you this anecdote that you may remember the bitterness of *toujours perdrix*, and avoid similar errors in the dietary of children. I believe that variation and the element of surprise in children's food is beneficial. I do not refer to the surprises the average cook inflicts on her victims, but the absence of certainty that it is cold meat and rice pudding day; this element of the unknown adds an interest to a child's meals which is, within limits, as beneficial as it is natural. I trust you will not imagine, from my reference to rice pudding, that I wish to hold it up to scorn. At the risk of earning the contempt of my own children I repeatedly proclaim that I prefer a rice pudding to any other. Unfortunately, it seems one of the hardest things to get the modern cook to make a good rice pudding; so conscious does she seem of her weakness in this direction that she tries to mask the nastiness of her bad cooking by the addition of butter, eggs, coconut, and other abominations. Good wine needs no bush, and a good rice pudding wants nothing but rice, milk, and sugar. All material in excess of this is unnecessary, but there is one factor which it seems so difficult to get attended to, and that is the time required for cooking. No rice pudding is worth eating which has not had at least three hours' cooking. You will perhaps pardon me if I tell you how a rice pudding should be prepared:

Just cover the bottom of the pudding dish with rice, which may, but need not be, previously washed in cold water and subsequently dried; nearly fill up the dish with whole milk, add a little sugar, place this in a slow oven for at least three hours, and in the last ten to fifteen minutes bring it to the hotter part of the oven, so that the skin on the top may get nice and brown. Thus cooked the grains of rice will be found quite soft, thoroughly impregnated with milk, and the starch will have undergone partial conversion to sugar.

A constant difficulty which confronts us in the dietary of a child is the aversion children very frequently show to green vegetables. These are said, like many other nasty things, to be good for them. I am quite prepared to admit that they may be good, but I am also convinced that any benefit is largely neutralized by the dislike children evince to taking them, and the consequent upset to their digestion and even taking of food. It will be found that the domestic bubble and squeak is a very successful mode of getting children to take green vegetable food. I do not think it is advisable to insist on green vegetables being taken if it in any way puts the child off its food.

It is difficult with some children to get a sufficient amount of fat taken. This aversion should be overcome by gradually accustoming the child to take increasing quantities of fat with the meals. At first the fat should be cut up finely and hidden with the lean or among the potatoes, but it must be finely cut up so that it cannot be picked out. A not inconsiderable amount of fat can be taken by a child in the form of the gravy which runs from the meat when it is cut into, I do not mean the usual washy coloured fluid handed round in the sauce tureen. This gravy which runs from the meat is very useful as an addition to the diet of an infant after six or seven months of age. When used for the smaller children it can be added to milk or it can be soaked into bread or potato for children who have cut their teeth and who are capable of digesting starchy food. In giving this gravy to infants it will often be found that it is too rich, that is, that it contains too much fat. It will be found then that the best thing to do is to let the gravy cool, remove the greater part of the solidified fat from the top, and then heat the gravy before giving it. One incidental advantage of this plan is that the solidified fat forms a crust over the meat-juice and prevents contamination and decomposition, a point to be remembered when we order gravy for children in hot weather. Dripping is a welcome and useful manner of administering fat to children. In the artificial feeding of infants one of the commonest errors is to give an insufficient supply of fat. This we try to obviate by the addition of cream, and if the cream is fresh we shall do well. Cream, however, is a costly article, and, when purchased separately, introduces a fresh element of possible danger into the food of an infant. I think it safer to buy the whole milk, to separate the cream from a part, and to add this cream to the rest of the whole

milk. This little operation you will sometimes find has been already performed for you by the nurse. It is very easy to see that those who get the first look in at the milk after it has stood will have a very considerably higher percentage of fat in the milk they take than in the milk they leave. Attention should be drawn to this, for it is quite possible to send a very good milk up to the nursery and for the child either to get an excess of cream in its early and a deficiency of cream in its later feeds, or for the child to get deprived of the proper amount of cream altogether. When milk is delivered in bottles, as is so often the case, it is well to see that the milk is mixed up before it is used for the children. It is best poured out into jugs. One other point I would urge on you is the necessity of seeing where the milk is kept. Of course, when delivered in bottles, as long as the bottles are not opened it does not matter where they are put, provided that it is in a cool place; but when open or when the milk is sent up in cans or jugs it is of vital importance to see that contamination is as far as possible avoided. A bathroom or lavatory may be a cool place and a cupboard may be a place where the milk is safe from the children, but it is not so certain that the children are safe from the milk. Quite recently I saw in a case of feeding difficulty in an infant the milk carefully sterilized in the Soxhlet's apparatus, poured out into a jug, and covered over by a piece of a well known and widely-read halfpenny morning journal.

The question of boiled *versus* unboiled milk in towns is one in which I would discriminate between the older and the younger children. The younger should have all their milk boiled, but in the case of the older, when there is a distinct aversion to the taste of boiled milk—and this is far from infrequent—it is better to get the child to take a sufficiency of milk and run the very small risk which is incurred with unboiled milk rather than deprive the child of an excellent article of diet.

CLOTHING.

One of the commonest errors in the clothing of children lies in the exaltation of the decorative at the expense of the protective function of clothes. If we would only remember how much heat a child loses from exposed surfaces, we shall have no difficulty in setting our face strongly against those forms of outdoor clothing which appear to ape the ballet-dancer's sketchy costume. In healthy children there may, perhaps, be some question as to whether any portion of the lower limbs should be left bare, but in the case of delicate children, and especially those who are subject to bronchial or intestinal catarrh, as well as those of rheumatic stock, there ought to be no hesitation in forbidding such exposure. It is urged that this style of—shall I say clothing or unclothing?—hardens the child; but because a child can emerge from risks without injury, it does not follow that the running of the risk—for such it is—is justified. Whenever you have a case of bronchitis to treat, do not be content to order the customary stimulant expectorant and the liniment, but satisfy yourself that the child is being properly protected from exposure to cold from insufficient clothing. It is only too common to see the chest of a child so cluttered up with clothing that the act of respiration involves the movement of a heavy and often constricting mass of clothes, while the limbs in their pathetic blue-ness are begging for even a scrap to fall from the overlaid chest. Some years ago, when I was seeing out-patients, I was in the habit of ordering the parents to cover up the limbs with stockings, and we had a Sister who used to enable the mothers to secure such garments for the patients; if these children were brought up without such stockings I would not prescribe for them. This may seem to you rather drastic, but I believe that protection without ipecacuanha is better than ipecacuanha without protection. At the present time the primitive school of clothing seems to have the upper hand, but this is but a passing fancy; next year it will be different. The no-hat, no-stockings, and no-boot brigade seems to be victorious at present. While last year the children's hats were of a size and weight and decorative splendour which would have satisfied both a savage and a milliner, to-day I see two rosettes united by a piece of ribbon regarded as the appropriate protection from weather in which it is deemed inhuman not to provide both the chauffeur and the bus horse with protective straw hats. I cannot believe that it is a good

thing for children to walk about in hot weather without some adequate protection from the sun, especially when such a tendency to cerebral congestion is favoured by such acts as paddling in the water. I know of one doctor at the seaside who looks on the practice of paddling as a never-failing source of professional income, it being a proceeding which he absolutely forbids to his own children. It is quite true that our climate only occasionally renders precautions against insolation at all called for.

In the last two or three years there has been a boom in sandals—they are so classical, so good for the feet, allow full play to the muscles, and so on. Yes, some of this is true, but why, if they are so useful in the morning and afternoon, why are they replaced by the conventional shoe for the dancing lesson or for the evening party? I cannot think that sandals, either in town or in country, are sufficient protection to the feet; and the risks of the accidental inoculation with septic organisms, tubercle from expectorated material, or even with tetanus, should be borne in mind. Sandals may be economical in the matter of repairs, they may be classic, but I do not see my way to recommend them for outdoor use. In Scotland, as you know, children, and many of the bigger girls, go about without stockings, but I think Donald would have been a little startled had he met, as I did the other morning, a boy about 8 or 9 years of age, clad partly in a green silk jacket and vest, a kilt—tartan unrecognizable—and a pair of sandals. He was a victim, also, of the no-hat fad. Hygienic clothing for children need not insult one's sense of the beautiful, nor should a parent either sacrifice health and comfort to fashion or a sense of the beautiful to a passing so-called hygienic whim.

As we are all human, and as we are and shall be the slaves of fashion, if not of fad, let us insist on having every child protected from neck to knee, if not to ankle, with a suitable undergarment. Once this is conceded, provided that there be no mechanical interference with respiration and locomotion, we may let fancy, folly, and fashion amuse themselves with the unimportant superstructures. We should strive to obtain an equal distribution of heat over the external surface, and with this object we should prevent the too unequal distribution of the clothing. This unequal distribution of clothing is very common, and is to be discountenanced.

VENTILATION.

One of the cheering signs of an approach to more common-sense views as to the processes of respiration is to be found in the distinct advance which the public, as well as the profession, has made in taking advantage of the benefits consequent upon the utilization of fresh air. It is being gradually recognized that children do not catch their death of cold because the bedroom window is left open day and night. Doctors are even learning that the atmosphere contains quite an appreciable amount of the same gas which they purchase at no small cost in bottles, and that fresh air, provided that the body is kept sufficiently warm, acts as a great sleep producer and restorer of strength. While we are gradually waking to these facts, I think we still err in the very insufficient way in which we provide for the ventilation of the cots and perambulators in which infants pass so much of their time asleep. In the usual cot or bassinette the infant will be found lying at the bottom of an unventilated hollow, something like the Grotto del Cane at Naples. I do not think it is a good plan to have the sides of the cot completely shut in by impervious textures; some shelter from draughts is necessary in the case of infants, but along with this there should be small spaces left for the outflow of the respired air. I have recently seen a form of lethal chamber posing as a perambulator with a double hood meeting over the top to protect the finery of the unfortunate inmates from passing showers. Such a device must exercise a very injurious influence on the health of children, even though they be shut up in these hooded perambulators for a short time only. Quite apart from the question of these hooded perambulators, I am sure that there is often very insufficient ventilation in many perambulators, where, in addition to the child being sunk into a sleepy hollow, its face is covered up in a beautiful specimen of the lacemaker's art.

I cannot leave the subject of perambulators without trying to elicit your disapproval of the mail-cart, which at present seems to be popular. It may be cheap, it may be

compact, and it may be taken without extra cost by train but that is no reason why a child should be carried along with its nose, eyes, and mouth only about 2 ft. above the level of the road, meeting much more dirt and dust of all kinds than it would at a higher level, and certainly exposed to more perils from accidents in the way of collisions with things animate and inanimate than would be the case in the older form of mail-cart. If we remember that in these low carts the child takes the place of the cowcatcher of the transatlantic locomotive we shall have a difficult task to convince ourselves or anyone else that their use is advisable.

EXERCISE.

In the first place there is the question of walking. How often are we told that children should be kept off their feet, and how often do we ourselves order it! I do not think we need ever keep a healthy child off its feet. If a child wishes to walk I let it, even if it be the subject of active rickets, but please note that I make the very essential proviso that it should want to walk. For the last fifteen years I have not ordered a single child to wear a splint to keep it off its legs, and I have never had occasion to regret this advice. The evils—and they are undoubted—that arise from walking are due to walking a child, and not to the child walking. Children are very frequently walked too far. I often wish that fond parents would ascertain how far their young hopeful goes when he is sent out for a walk. So much depends where the nurse's friend lives or walks, or where other attractions are situated. If the shops are far off, woe betide the child. The nurse's desires should not dictate the distance or duration of the walk. What good can a walk taken in a crowded thoroughfare such as Oxford Street or Regent Street do a child who has continually to be dragged out of the way of every eager bargain hunter? and we know how utterly absorbed they are, and we also must remember that the nurses are very human, and can hardly look after children and alarming sacrifices at the same time. I do not wish you to think that I believe all nurses devoid of a proper sense of their duty to their charges, but I do think that parents certainly do not exercise sufficient control and supervision over the places to which their children are taken for exercise. If you will only think medically the next time you are in a hurry to get along Oxford Street, you will, I am convinced, allow the truth of my assertion that insufficient control is exercised.

Distance and locality, however, are not the only points which need concern us. The old sporting maxim that it is the "pace which kills" holds painfully true with regard to children. It may seem superfluous to say that sick children should not be hurried, but it is not. If any of you will come along in the neighbourhood of this hospital at about five minutes to ten o'clock and see the poor little children being dragged along to arrive by ten, at which time the doors of our out-patient department are closed, you will see why it is that, in spite of the most careful medication and in spite of careful injunctions against such things as hurrying, any good you may have done to a case is being more than undone by the carelessness of a mother who, leaving it to the last, endeavours to be in time at the expense of her child's welfare. As I said in an earlier part of my lecture, it would be a useful thing if we medical men would make a point of seeing to what extent our advice was being followed.

Evil truly is often wrought more by want of thought than by want of heart. But healthy children are not exempt from the evils that attend too rapid walking. Watch the nursemaid as she hurries along wheeling a perambulator and leading another child by the hand. How often is what we might call the medical limit exceeded! I have noted that in these cases the nurse often has a perambulator, because there is no doubt that the pace is greater when a perambulator is being wheeled than when there is none. It is difficult to regulate one's pace to that of a child, but it is essential unless we would do the child harm.

Among the poor the mother, unable to leave her children at home, is forced to take them with her while she does her shopping, and as she has to get back as soon as possible there is not much chance of the pace being limited by anything but the forced draught of the lamest duck of the squadron. Among the better classes there is no such excuse, and I am sure that we ought to direct

more attention to this evil than we do. It is this that too often makes the walk a thing hated of the children, and it is this too that accounts for many of the cases of curved legs and yielding ankles which come under our professional notice.

When I spoke of the increased pace which a nurse was apt to put on when wheeling a perambulator I did not mean to infer that a nurse should not wheel a perambulator and take care of another child or children at the same time; far from it, for nothing is so good for little ones who are able to get about as a judicious mixing of walking and being wheeled, neither being for any prolonged period. It is often well to have the child carried through the streets and then allowed to run about in the gardens, squares, or parks. After a child has been playing about and probably got tired, it has too often to hurry home to be in time for dinner; this is a very common error, and we should insist that a child has time for a rest before its meal and does not come in hot and tired to its meal. Those of you who have any knowledge of the open-air treatment of tuberculosis, in which we wish to raise the resistance of the body to as high a degree as possible, will remember the importance which is attached to the necessity of rest before meals.

SLEEP.

We are often asked whether a child should be allowed to sleep out of doors. I do not propose to answer this question with a Yes or a No; but of this I am sure, that the idea of getting children to sleep while they are being bumped or joggled in a perambulator is not good, for the rest is not as great as when the child is lying quietly in its bed or cot. A sleeping child out of doors may save the nurse much trouble while out of doors, but most children are best awake when out and put quietly to bed indoors. When there is only one infant in the house there is often an awful hush pervading the whole house because baby is asleep. It is a mistake to foster the idea of this necessity for silence. Children do not require all this quiet; when once asleep they will be oblivious to most noises, and it is as well that they should be accustomed to sleeping in spite of reasonable noises. Of course there are very nervous children who will wake at the slightest sound, but these are not found in large families. It may be advisable to darken a room for a few minutes when a child is put into bed to sleep, but it is a mistake to keep the room darkened, because the ventilation of the room is interfered with by the blind being drawn. With bigger children the terror of darkness and of isolation must be borne in mind, and the use of a night-light temporarily will make all the difference to a child's getting rest, mental as well as physical.

There is one point in connexion with sleep to which I wish to call your attention. There is a very natural fear that if we wake a child up and make him pass his water he will not go to sleep again. It will, however, be found that this fear is groundless, and, consequently, a child should be got up and made to pass its water during the night. The whole question of micturition is one which is too often neglected. Many children are allowed to go for far too long periods without emptying the bladder. This may arise from shyness, or much more often from the child not wanting to be interrupted in its play. In hospital the children pass their water every three hours. I do not, of course, refer to infants, who will wet themselves, when bottle-fed, nearly every half-hour. A child between 3 and 6 years of age should pass his water every three hours during the daytime.

BATHS.

Baths for children are essential, but a great deal more care should be exercised in the drying of children after the bath. Children are often put to bed after baths with their hair almost dripping wet, with the flexures of their joints undried; and, as this process of being put to bed is far too often a most undesirable training in the gentle art of dawdling, the evening bath and its accompanying circumstances are most undesirable. After a child has had his bath he should be put to bed, and have his supper in bed, and not be allowed to potter about in the nurseries. Bed-time is bed-time, and the bath, supper, and tooth-brush should terminate the day temporal.

There is much that I have left unsaid and much that

might have been better said, but, at the risk of being considered trivial and unmedical, I have ventured to bring before you certain observations about the occurrence of errors which exist in the management of children, and which I trust may prove of use to us as we medical men take our right place as the instructors of the community.

Remarks

ON

POST-PARTUM HAEMORRHAGE.

BEING AN EXTRACT FROM AN ADDRESS ON
UTERINE HAEMORRHAGE DELIVERED BEFORE THE
CLINICAL SOCIETY OF MANCHESTER.

BY JOHN F. LE PAGE, M.D.,

PRESIDENT OF THE SOCIETY.

OF *post-partum* haemorrhage it may justly be said that in the whole range of surgery there is no exigency which more imperatively demands instant action. There is absolutely no time for deliberation. No time for calling to mind the innumerable things which the authorities tell you should be done; for remembering the particular order in which you should proceed; the time you may spend on each attempt; for ascertaining the precise cause of the haemorrhage. There is no time for any one of these things. Time there is only for instant, as it were intuitive, action. Every man who has seen a really severe case of *post-partum* haemorrhage knows only too well that if he does not do something then and there his patient will, in a very few minutes, be past all that human skill can do or ingenuity devise. Something. Yes; not waste his priceless time in the framing of a line of treatment likely to most accord with conventional teaching based on absolutely false premisses.

I will not enumerate all the measures which, according to textbooks and many authoritative pronouncements, should be tried, and I could not if I would. But here are some:

Pressure on the fundus uteri and manipulations of the uterus.

Introduction of the hand to excite contraction.

Cold water applied with cloths to the abdomen or poured from some height.

Hot and cold water alternately, used in the same way.

Ergot by the mouth or ergotine subcutaneously.

Injection of ether over the abdomen.

Brandy by the mouth.

Barnes's or other bag introduced into the uterus and distended with cold water.

Hot water injected into the uterus.

Ice placed in the uterus.

Iced water injected into the rectum.

The faradic current.

Injection of, or swabbing the uterus with, perchloride of iron.

These and many other measures, equally unscientific and delusive, constitute the munitions of war of the unfortunate practitioner who with them has to combat death. I do not mean to say that not one, or not all, of these measures is ever followed by a cessation of haemorrhage. Syncope is a very effective haemostatic. And a very large number of cases of so-called *post-partum* haemorrhage are cases in which the haemorrhage is the result of the prevalent, but unmitigatedly bad, practice of forcibly following down the uterus at the end of and immediately after the second stage, and thus detaching and extruding the placenta before the uterine pause which normally follows its supreme efforts. If retraction of the tired muscle had not taken place the gaping sinuses naturally poured out blood, but with, or entirely without, any stimulative interference the uterus, after its normal rest, contracts and the haemorrhage ceases. This bleeding is of course *post partum*, but it is not what is meant by *post-partum* haemorrhage. In the same category may be placed cases of traumatic haemorrhage, of bleeding from retention of a portion of placenta, etc. These are cases which seem to favour a wrong and impotent treatment, and bring confusion on statistics.

I define *post-partum* haemorrhage as a haemorrhage which is the result of an atonic state of the uterine muscle, accidental, acquired, or constitutional.

In this—assuredly one of the most appalling and un-

nerving conditions we have to confront—it is absolutely necessary that we should have the very clearest conception both of what is going on and of what we should instantly do.

All the more is this so seeing that any man, one perhaps who has never seen a severe case before, may at any moment be called upon to face impending death. His patient has perhaps just thanked him with a grateful smile for all his kindness and help. He turns to her in a few moments to see a ghastly countenance and to hear a whisper imploring for more air. A moment more, he can find no pulse at the wrist, she gasps for air, her skin is livid, cold, and bathed in profuse perspiration; her eyes are half-closed and upturned; vision has completely gone, and respiration is evidenced only by short irregular gasps; he realizes that she is dying. Yes, it is so, if he does not instantly do something.

But all the textbooks, all the authorities, tell him what to do. They tell him he must bring to mind all the dozen or more possible causes, for they may influence him as to which of the innumerable things he has to try he will begin with. Will he inject ergot? Will he begin by kneading the uterus, and follow this up with cold water and hot water? Will he—what will he not do? Many years ago a practitioner, bewildered by the multitude of his resources, by their failure one by one, and by the consequent peril, knelt by the bedside and prayed for his unfortunate patient. She died, and—well, his name was struck off the *Register*. All this because he accepted the absurd, the altogether irrational dictum of the textbooks, that the one thing he must do was to get—to *make*—the uterus to contract.

Here is what some authors, whose teaching is still taught in our colleges, reproduced in our current textbooks, and required of students in their examination, say:

PLAYFAIR says: "There are only two measures—"those which act by the production of uterine contraction, and those which act by producing thrombosis in the vessels." "It is satisfactory to know that recovery often takes place." "If we can check the haemorrhage while there is still some power of reaction left, however slight, we may not unreasonably hope for eventual recovery." "The prolonged use of all these remedies, . . . if they fail to excite contraction rapidly, will certainly prove injurious."

FOTHERGILL says: "Contraction of the uterus, and, if that fails, thrombosis."

GALABIN says: "The essential point in treatment is to secure contraction of the uterus, and by far the greater part of the value of all means used for the arrest of haemorrhage consists in their efficacy in producing this effect."

DAKIN says: "In following this treatment the various manoeuvres must succeed one another rapidly."

BARNES says: "If the nervous exhaustion is so great that irritability is lost, these agents are useless or injurious. The patient may, indeed, rally after syncope, but it may be truly said that at this point the art of the physician fails." "It fails unless he has the courage to try perchloride or persulphate of iron."

Is it not abundantly evident that not one of the measures, iterated *ad nauseam*, can by any possibility be effective unless there is nervous force present capable of responding to irritation? A bolder spirit has even suggested recently, after following the same lines, and as a very *dernier ressort*, that we try the removal of the uterus. History, however, does not relate whether he has yet found opportunity for putting this heroic measure into practice. Short of this climax, you are told that thrombosis with iron is the very last thing that can be done. If it does not succeed, at this point, "the art of the physician fails." Very far from it. It is here that art and a juster conception of the truth which underlies much error, dawn.

But, Playfair says, "Recovery often takes place." Yes; in some cases Nature comes to her aid, and by syncope and thrombosis arrests haemorrhage, and the rested uterus eventually responds to the nerve call. In others, in which the actual loss of blood has been relatively small, the uterine muscle, wearied by prolonged labour, prolongs its normal pause until waked up, as it were, by the nervous energy still remaining after the haemorrhage caused by denusion, and probably extrusion, of the placenta by ill-advised manual interference. The result, however, often is incomplete retraction, pronounced anaemia, and subinvolution. The fact that some slighter cases—cases in which there is really no atony of the uterus, but simply rest after toil—do respond to stimulation, is no justification whatever for allowing a critical condition to develop