## INFANTHOOD

AND

# CHILDHOOD;

A Popular Guide

TO ITS

MANAGEMENT AND TREATMENT.

BY

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### INTRODUCTION.

Out of every hundred children that are born into this world forty die under five years of age. This statement is made out of the average of births and deaths from government papers, and may be fully relied on for its accuracy. What a fact for parents to ponder over! And what does it arise from but want of proper information being afforded to them? To assist in giving this muchwanted information is the task which the writer has set for himself in the present little book.

Human life was never destined to be cut short at its very commencement, and when it is so cut short, it is, in all but very rare cases, the result of ascertainable causes, which might have been, if known, removed.

Until this knowledge is communicated to and received by parents, thousands of children, who might be preserved, will continue to be cut off at the outset of existence, to the life-long grief of parents, to whose want of knowledge they have innocently fallen a sacrifice: and what more distressing to the feelings than witnessing a child's sufferings—sufferings to end in death?

Parents not unfrequently excuse themselves for not devoting their attention to the causes of disorder and bad health in their children, on the ground that medical men are always at hand to be had recourse to, to correct any mischief that may arise in the health of their families. Medical men certainly are generally accessible, and applied to when mischief more or less serious is done; but parents ought to know how to prevent that mischief from coming on; or when present how to detect it, early, and how to act for the best. But I shall begin with a few remarks on the General Constitutional Health of Children.

#### ON THE

#### GENERAL CONSTITUTIONAL HEALTH OF CHILDREN.

For the general constitutional health of a child to be good, it is required that it be born of parents also of good constitutional health; the parents ought also not to be nearly related—they ought not to be cousins for instance; they ought to be nearly of the same age; they ought not to have entered matrimony too late nor too early-in this country the mother not younger than eighteen nor the father younger than twenty-one. The influence of bad original constitution in parents on the health and even mental qualities of their offspring is apparent in some of the Royal and aristocratic families of Europe, in which scrofula and insanity have been transmitted from generation to generation. This law of transmission is visible throughout animated nature. Gardeners and cultivators attach as much importance to the quality of the seed as to the soil and cultivation. The law of transmission is recognized and acted on by the breeders of animals, from the race-horse down to the sheep. The human race forms no exception to this law, and the delicacy which would divert attention from a truth so important to happiness would be false and injurious. and would be setting at nought the well-known and valuable facts and observations of physiology and philosophy. Idiocy, insanity, consumption, scrofula, gout, blindness, &c., pass through generations, down to the fifth or sixth. But for our consolation we know this. that the same law that enables us to calculate the transmission of these diseases, enables us also to calculate with the same certainty on the transmission of sound health, whenever that has been the characteristic of families intermarrying.

Those therefore who wish their offspring to have sound constitutions, should carefully avoid uniting with individuals who are weakly, or who belong to families in which any serious disease is known to exist. When the constitutional disease is not very marked, and confined to only one of the parents, it may not be entailed if a judicious union is entered into, and a proper mode of life pursued; but where its injurious influence is aggravated by its being common to both parents, and no systematic efforts are made to counteract it, the offspring can scarcely be expected to escape free. If to predisposition to any constitutional ailment in two persons marrying there be added affinity in relationship, all medical testimony goes to show that we may expect not only a perpetuation of the constitutional affection, but in addition some morbid condition of the brain and nervous system, showing itself in idiocy, insanity, epilepsy, &c.

But as society is at present constituted, it is not to be expected that a couple marrying shall be in the happy enjoyment of every physiological requisite. Personal affection will induce disregard of objections which would be held insurmountable by a cool physician, as it also induces disregard of financial objections, so frequently urged by parents. And thus evils are generated; and the knowledge of the physician is only made available in mitigating them after they appear. In cases therefore of children arising from the union of illconsorted couples (so far as the conditions of health are concerned) it will be our duty to ward off from them as much as possible those circumstances, cut as short as possible those attacks of disorder incidental to their organization, and apply that general good management which will conduce to strengthening them, and which may happily place them on the footing of children coming from a healthier stock: such would be the parent's manifest duty. For instance, if a child inherits a scrofulous constitution from both parents, and is brought up under the same circumstances that brought on or maintained disease in them, in all human probability it will fall a victim, if not to the first serious acute disorder that may befall it, to some form or other of chronic scrofulous affection, to the shortening of its life. But if timely precaution is exercised, and all the conditions for improving the health are observed, it may altogether escape, and permanently enjoy a better state of health than fell to the lot of either of its parents.

Similar good might be done in other cases of family predisposition. The irritable children of parents whose brains have been disordered run great risk of exhibiting the same disorder, if brought up under circumstances tending to increase the irritability of the nervous system, and to call their passions and feelings into inordinate activity: such children will not only require their bodily health to be well looked after, but their mental faculties must be allowed to develop themselves steadily and progressively; for such children, when at the proper age, a careful selection of a school should be made; they should not be sent to one too early, nor to one where a forcing treatment is pursued.

It is predisposition or strong liability, rather than actual disease, that is transmitted from parent to child, and against which we have carefully to guard.

Next to the direct inheritance of a family predisposition, the tendencies to disease derived from the union of parents too nearly allied is the most prejudicial. All the marks of debilitated and irritable constitutions are found in the children of such unions—insanity, imbecility, eccentricity, nervousness, blindness, impairment of the senses, &c. These would seem to be marks of condemnation set upon such unions.

The period of life at which persons marry has effect also upon the children; from twenty to twenty-five on the female side, and on that of the male from twenty-five to thirty, are the ages in this country of maturity and full development. But while too-early marriages are bad, too-late ones are worse. In marriages when one parent is old and the other young, the offspring is seldom healthy. The state of the health of the parents at the time of conception will have a remarkable effect upon the child. I have met with numerous proofs of this, as well as of the fact that the child's permanent health of mind and body is much affected by that of the mother during the whole period of pregnancy.

## THE CONDITIONS OF THE MOTHER AS AFFECTING THE FUTURE CHILD.

There cannot be the least doubt that the influence of the mother's state is great in the early months of pregnancy over the future bodily and mental state of the child. I know a man with one arm, whose

mother, at an early stage of pregnancy with him, was shocked and alarmed by a sailor who threw off a wrapper from his shoulder and exhibited the stump of an arm which he had lost at sea. He had knocked at her door to beg, and, on on her opening it, exhibited his maimed limb, as if that would make a stronger appeal than any words he could use. I could relate many cases of the kind but I believe it is unnecessary. I know a woman with a very remarkable infirmity of temper. Her mother used to tell me that she could not allow herself to be "put out the way" by it, as she knew that her daughter had derived it from herself, as that was the state of her own mind and temper during the period of her pregnancy with her from peculiar circumstances: her other children, whom she bore under better auspices, were singularly different to this one: and what is worthy of observation is that her form is as pinched and crabby as her mind. And it is nothing but reasonable that this correspondence should be observable in such cases, for the child in the womb is virtually a part of the mother, and must as such exhibit the consequences of influences acting upon the latter. If the body of the mother is diseased or disordered, or if the nervous system is shocked or perpetually irritated, the consequences are felt and will be exhibited more or less by the child.

During pregnancy, therefore, the great aim of the parent, with reference to the child, as well as the mother, should be to cultivate composure of mind, and sustain the general health: the mother should pursue her ordinary avocations and manner of life; that is supposing them to be in accordance with the laws of health. Regular daily exercise, occupation and cheerful society, cleanliness, moderate diet, fresh air, early hours, seasonable clothing: here are, so far as the actions of the mother are concerned, the simple requirements for healthy offspring.

NOTE.—MARKS ON CHILDREN. I know, writes an eminent American author, a case of a mother being extremely terrified at a young cub when she was three months in the family-way. It was her twelfth child and it was born an idiot, while all her other children were extremely intelligent. It was a boy. He lived to fourteen years of age, and had many actions peculiar to a bear. A lady of my acquaintance saw the head of a lamb suddenly crushed; six months after she gave birth to a son with the sides of the head pressed in and the force.

#### THE INFANT AFTER BIRTH.

I have dwelt sufficiently long, but not unnecessarily, on those conditions which influence the infant before birth: I now proceed to treat of those which act upon it after it has entered upon its separate existence. What a change now in its mode of existence! But just now enclosed in the mother, its circulation and nutrition part and parcel of the mothers, it is now exposed to cold and hard contact, has to receive and digest its own food, and reject its own waste, carrying on in short its own existence as separately as the mother herself.

It is the electric effect of the air upon the sensitive nerves of the infant that first excites it to inspire the air; breathing then commences, and our new visitant to this sphere of existence cries more or less loudly and continuously; some philosophers say because it does not like thus to find itself cribbed, cabined, and confined, with a cold electric shock to greet it in its new existence. Endless have been the speculations as to why all children cry at birth; but we must leave all these alone and attend to the present state of the new-comer.

The pulse of the infant is 120 or 130 in the minute; this is owing to the comparatively small size of the lungs and heart, for hitherto they have only received so much as has been sufficient for their own organization, but now all the blood of the body has to be transmitted through them. Remember that this quickness of pulse and frequency of respiration renders infantile disorders of a more inflammatory ten-

head protruding as that of the injured lamb; in his case the intellect was not impaired. I once saw a girl who was destitute of a leg and an arm. A lady about two months advanced in pregnancy had a strong desire to see this girl. Her enriosity led her to examine this deformed object long and attentively. Her friends had almost to force her from the exhibition. She went home, but the image of the unfortunate object was too deeply impressed upon her mind to be forgotten. She talked of her by day and dreamed of her by night. She at length got the impression that her child would be like the object that thus haunted her brain. Her fears were realized; her daughter had but one leg and one arm! The Bible admits the principle even in its application to the brute race, in the history of Laban and Jacob. That history proves that the mental impressions of parents produce results upon the offspring. Jacob put speckled rods at the bottom of the troughs where the herds came to drink, and they produced speckled offspring.

dency than is the case in subsequent periods of life. The infant grows as much upon the oxygen of the air as food, and therefore pure air it must have. The impure air breathed by infants in the densely populated quarters of cities and town is the cause of the greater part of the mortality among them. Without good air the child cannot have good blood, its nervous system is disordered, it is disposed to fever and feverish irritability, and the foundation is laid for numerous So much for pure air. The child must have warmth. disasters. The internal source of animal heat in man is food. When food is sufficient and good, and the air is pure, the requisite animal heat is generated, and if the circulation is quickened in the adult by labour and exercise, it can be considerably augmented; but as the infant does not take exercise, and its lungs are small, the quantity of animal heat it generates is, in this climate, inadequate, and it must be kept warm by clothing. There is a nonsensical notion prevalent that infants are invigorated by exposure to cold. Let us take a hint from the instinct of the lower animals. See how careful they are to keep their young warm. Remember that the younger the animal the feebler is the heat it generates. Comfortable warmth is what you should aim at.

The food taken by an infant keeps up a continual supply of blood to replace what is thrown off, and maintain growth. Therefore not long after birth it makes significant signs of appetite. It is now ready to receive food into its own stomach. And pray let it begin with the mother's milk; this is very easily digested and passed into the infant's system. The evacuations of the child consist chiefly of the curdy portion of the milk, and the secretions from the liver consisting of used portions of the blood separated in the liver from the vital stream after it has served its growing purposes. Besides the liver and bowels, the organs of excretion for separating the refuse of the food and the used parts of the system are the kidnies, the skin, and the lungs. And unless a proper balance is kept between the nutritive and the excreting functions-between the supply and the waste, we shall have disorder either from repletion or wasting. An infant is disposed to suck generally more than the purposes of its system require. and in that ease it pukes frequently; it should, under such circumstances, be put less frequently to the breast.

## THE GENERAL CIRCUMSTANCES OF LIGHT, AIR, AND DRYNESS, AS FAVORABLE TO CHILDREN.

If parents who look forward with hope to a future family are so fortunately circumstanced as to have the opportunity of selecting an abode, their prime object should be to secure one with a dry, pure air, both within and without the house: yet a very high and bleak position for a residence is prejudicial, as also is exposure to the north, north-east, and east wind. Therefore in making a selection bear this in mind.—Light is no less necessary for healthy animal than it is for healthy vegetable life. Everybody knows that vegetables blanch by exclusion from the light, and that corn growing under the shade of a hedge or trees, is poorer and more feeble, and later in ripening than that which grows in the open fields: we do not keep sufficiently in mind that absence of free light acts upon man in the same prejudicial manner. Shut out from it man becomes pale and sickly. Look into the close rooms and cellars of large towns, and the children will exhibit plenty of proof of this. The development of scrofulous disease is much favored, if not often produced by the want of air, dryness, and light.

## ON THE MANAGEMENT OF THE INFANT IMMEDIATELY AFTER BIRTH.

Having thus reviewed the constitutional and the local causes affecting the health and well-being of the infant, let us now examine those which affect it immediately and specially.

We will suppose that the doctor or midwife has done with the infant, and committed it safe and sound unto the care of the nurse. We will suppose she has received it in soft warm flannel, and has taken every care that its natural warmth has not been lowered by exposure to the *cold* air of the apartment, that it has been kept in the neighbourhood of a comfortable fire, but not exposed directly to it. It will after a little be washed with warm water and a soft sponge, with not an atom more of mild soap\* than is absolutely necessary.

<sup>•</sup> The very best soap, without exception, for the nursery, is Pears' Transparent Soap. It is sold by perfumers. Although high priced it is as cheap as other fine soaps it is so lasting. It is chemically freed from every irritating ingredient; children with irritable skins should, if possible, have no other soap used upon them.

In doing this let it be remembered that the infant's bones are scarcely solid; move it about tenderly, and do not set it upright. It will only require water to its face, and to guard against irritating the eyes, a separate sponge and water had better be used for the eyes. The water should be what is called blood-warm. In drying the child, do not rub, gently dab and press the soft warm cloths against it. Let all its clothes be as nearly as possible of the temperature of its body, and of course well aired. The apartment should be comfortably warm and free from draughts. The child should be too well dried to require much dusting.

The infant being nicely washed and dried, the next thing to be done is to apply the bandage or roller. The object of this is partly for warmth, partly for keeping the navel string in its place, and partly to prevent rupture at the navel: for these purposes flannel in cold weather and calico in hot are the best materials; it should be 5 or 6 inches in breadth, according to the size of the child, and should go twice round the body, and should be applied with no greater tightness than is just sufficient to keep it in its place, and it should be tacked on. The general clothing of the infant should be light, soft, and warm, and should admit of the free motion of the chest and limbs. Attention to temperature is of the highest importance, and must be kept constantly in view. If the child is of premature birth, or otherwise weakly, it will require closer vigilance with respect to warmth than a perfectly vigorous child. But then, additional attention to temperature must not lead to diminished care in respect of cleanliness, and frequent changing. Never forget that the natural supply of animal heat in an infant is smaller than at any subsequent age, and that during Winter and Spring, extra warm clothing must necessarily be required. But don't err in this particular, and indulge in hot wrapping up, or keeping the air of the room too hot. One word about pins-they have in endless cases done a great deal of harm: a needle and thread for the roller and napkin, and the rest may be best fastened with strings.

And with respect to long clothes, these are all very well for the first few months, and during cold weather, but while nurses remember to keep the legs so elegantly warm, do not let them forget the arms; it is ridiculous to see two yards of skirt, and only two

inches of sleeve—and, moreover, it is injurious; no doubt by this custom the foundation has been laid for numerous after disorders of the chest. For the head, the best nursed children have been those, in my experience, that have been brought up without caps:—and I believe, that since the practice has been laid aside, of burying the child's head in hot caps, the disease of water on the brain has been less frequent. When the head is kept very warm, it stands to reason, that the nervous excitability is increased, and then every change makes an impression upon the infant, and every irritation from undigested food, &c., is more likely to be followed by fits.

But as soon as the strength and activity of the child will permit, let the clothes be shortened, and give the child the opportunity of moving its limbs about; but regard must be had to the weather, and care should be taken when the child is carried out, that its feet and legs should be warm. When it is short-coated, it should, of course, in the house, have socks and shoes suitable to the weather.

Too much attention, in the matter of dryness and cleanliness, cannot be paid, and let every article of dress that has been once wetted, be passed through water, and well dried and aired before it is made use of again.\*

For bed clothing, remember that while the child sleeps, it requires to be more warmly covered than when awake and in motion, but bear in mind, that if a child lies in a soft downy bed, it is already half covered, and will not need such a number of blankets as it will if it lies on a simple mattress. The nurse must use her judgment, and so regulate the night clothing and covering as to maintain only good comfortable warmth, and avoid producing a smothering heat, or weakening perspiration.

#### THE FOOD OF INFANTS.

For some weeks after entering this stage of existence, the child passes its time alternately in sleeping and taking in nourishment; and, therefore, its functions are digestion, nutrition, and excretion.

<sup>\*</sup> For cleansing and sweetening the clothes, &c., of infants, Manby's Patent Cleansing Crystal dispenses with the necessity of using soda, or much soap in washing. It ensures the most perfect removal of impurities without any irritating particles being left behind.

therefore, due regard being had to its sleeping, the next important subject is the supplying it with the proper materials out of which its bodily organs may be healthily developed, and the continual waste of the system be recruited.

Seven or eight hours then may have passed after its birth, (to begin at the beginning), partly in being washed and dressed, and partly in sleep, and then the infant will cry for food, and nothing better can be done than to put it, supposing the mother is sufficiently rested, to the breast. The first milk is thin, and rather purgative, and answers better than anything, unless advised to the contrary by a competent medical man. This is the best course, not only for the infant, but for the mother, for if the infant's stomach is turned with physic, or with butter and sugar, or any other stuff unsuitable to it, it will, perhaps, refuse to suck until it has recovered, and before then, perhaps, the mother has swelled breasts, and the foundation is laid for inflammation and abscess, or perhaps milk fever.

Unless under very particular circumstances, the child will, of course, be brought up by the breast: very well; now the next question is, how often is it to be put to the breast? If this is done too often, the child will not digest the milk; it will have vomitings, gripes, and flatulence. It is a bad practice to put the nipple into the baby's mouth every time it cries. You might as well, when the child gets old enough to eat cakes and apples, cram it with cakes and apples whenever it cries. You should ask yourself whether the child is not in pain-whether it has not already sucked too much? The only way the child has of expressing any uneasy sensation whatever, is by crying. It may be hungry, or it may be overfed, it may be pricked, it may be too tightly bound up, it may be in a painful position, it may be frightened. Look, think for the little thing, remedy the mischief, and its fit of crying will end in sleep. But a mother will soon learn whether her baby is what is called a crying child, and will make allowance for it: when crying does not indicate pain or uneasiness, it exercises the lungs, but do not let this healthy vigorous crying be confounded with the plaintive crying which indicates the uneasiness and restlessness of approaching disorder:

From two to three hours should be the interval of putting the child to the breast, and during the night, not so frequently: in early infancy, three times in the course of the night, but as soon as possible, break it off to night and morning. Regularity with respect to intervals in feeding is as essential to the health of an infant, as it is to that of an adult: and regularity in giving suck is also an important thing for the mother's health besides, and that is always to be regarded for the general sake of the child itself. The mother should, of course, avoid everything in her power which may impair her own health, for if that is impaired, the milk at once suffers. If at any time she has endured great fatigue, or been excited, she should allow sufficient time to pass until she has recruited or composed herself. For the same reason, she should be ever careful to observe the general rules of health with reference to her own diet and exercise. In attending to her diet, she need not make any alteration to that which agreed with her during her pregnancy. Many mothers imagine that some difference should be now made with respect to the quantity of beer they take, but this is a mistake. Total abstainers take milk instead of beer while suckling, and both mother and infant do better for it. Whatever change may be made, should be for the infant's sake, and the mother may be sure that such change will be good for herself.

Supposing the mother has enough milk, the child should have nothing but the breast until the teeth begin to appear. Infants may be reared on other food than breast milk, but they will have bad blood, bad health, and perhaps be cut off by convulsions. If they escape this, they will perhaps die off under one or other of the diseases incidental to childhood. But should the mother not have sufficient to satisfy the infant, let the deficiency be made up with good cow's milk, diluted with one-third of boiling water, with the addition of so much white sugar as will bring it to the sweetness of the maternal milk, and let the infant suck it from a feeding bottle.

When the teeth begin to appear, which in delicate children may not be until the twelfth, or even fifteenth month, we know that the child's constitution then requires a more solid description of food, wearing may be commenced;—give now, twice a day, a little rusk pap and milk, or arrowroot made with milk and water, and after a little, add plain broth to the pap. But in this you must watch what agrees best, and let the food be in accordance; for instance, if the bowels are disposed to act too often, arrowroot, made with boiled milk and water, will be more suitable than pap, or if not often enough, use some preparation of good oatmeal.—For a variety of Infants' Food, see Supplement.

One word as to a wet nurse, supposing from circumstances relating to the mother, the infant can only be brought up by a nurse, she should be as nearly as possible of the same age as the mother, and she should not have been confined more than a month previous to the mother of the infant to be suckled by her, and she should be healthy, sober, and good tempered—and putting herself into the place of the mother, she must accommodate herself to all the directions and suggestions which have been laid down for the mother's guidance.

In nursing, be careful to put the child alternately to each breast. There are several reasons for this: the infant will get a fondness for the one it is put most frequently to, which may become a source of trouble, inconvenience, and injury to itself and to the nurse.

#### ON ARTIFICIAL NURSING.

But suppose the child must be brought up by hand, if brought up at all. I have known strong and healthy infants, with very careful management, get through it: but such cases are exceptions to the But we will suppose it must be brought up by hand. The question then is, what is the best food for a child in such a cruel predicament? The nearest approach to human milk is cow's milk diluted with one third of water, and made a little sweet-say three table-spoonsful of milk, and one and a half of boiling water, with a small portion of lump sugar. This should be sucked through an artificial teat, from a feeding bottle. Teats are now made of india rubber: and these are best, because they can be so easily washed and prevented from getting sour; this should be also well attended to with respect to the bottle. With respect to the food, of course, no nurse in her senses will give an infant any but sound, good, and fresh prepared; she will never warm up again what was left the last time. unless she is perfectly indifferent as to whether the child becomes ill or not.

With respect to the quantity a child should take at once, let us take nature as our guide; just as often as we find infants who have the natural advantages of the breast take that, so often should the infant brought up by hand have the bottle, that is, once in two or three hours. The quantity most proper will be, in accordance with the capacity of the stomach, from three to four table-spoonfuls, gradually increased to six or eight. Children brought up by hand are generally too much crammed, they should not take so much as to excite vomiting, which is by no means desirable, nor so significant of health, as I have heard some nurses say; it is a sign of the stomach having had too much put into it.

If the child thrives and sleeps well, and its bowels act healthily, the water should be decreased in quantity gradually as it advances to the sixth month, when it may take its milk undiluted.

But suppose the bowels are too active with milk and water, then the milk should be mixed with a little baked flour and boiling water; if sluggish, use fine oatmeal gruel. Weak flabby children should begin early with broths, which should be added to the milk, thickened as above, according to the looseness or confined state of the bowels.

After feeding, as after suckling, the child should be suffered to sleep; let it first digest its food before being dandled, or tossed, or in any way excited.

#### WEANING.

When should the child be weaned from the breast? or, if brought up by hand, from the feeding bottle? The answer to this is, when the teeth begin to appear. Weaning should be effected in a gradual manner, beginning with the appearance of the first teeth, when some light food should be given once or twice a day, and the quantity be gradually increased and repeated in such a manner as to lessen the appetite for the breast gradual and progressively; by this plan the operation of weaning will be effected with safety and comfort to both nurse and child. The child should be in good health when weaning is commenced with. After weaning is completed, the child's principal nourishment should continue to be liquid, or semi-fluid,

until the canine teeth make their appearance, but be sure that the change made from the semi-fluid to more solid food be very gradual, and remember also that in proportion to the solidity of the food, so should the intervals of taking it be lengthened. The mother's should not be too abundant nor indigestible, unless she is indifferent as to whether the child become disordered or diseased. But should the child get disordered in any way, pray avoid giving calomel or blue powder (or so called soothing powders), or syrup of one sort or other; call in proper advice, or, if the symptoms require, give the medicine recommended further on.

#### CLEANLINESS, EXERCISE, SLEEP.

Frequent changes of well-aired body clothes are indispensable for the health of a child, because the child's skin is very active, and is perpetually throwing off perspiration; this insensible perspiration sometimes exceeds in quantity what passes off by the kidnies and bowels; this being the case, the necessity of frequently changing the linen is apparent. Besides the insensible perspiration, there is secreted from the skin a certain oily substance, the presence of which is shown by water running off from it, or collecting in globules upon it, as it will upon any oiled substance. This serves many useful purposes. In washing the child, you must keep in mind this oily exudation, and use no more soap than is absolutely necessary to remove impurities, and let your process of bathing or washing, and drying, be as expeditious as possible. The child should be washed twice a-day-directly on being taken from the mother's bed, and in the evening, on being undressed for the night. The temperature should be that which is the most agreeable to the child; but as a rule the water should be a little above the child's own natural warmth; should the child, as it gets older, prefer cold water, so much the better, but do not keep it wet long.

The exercise given to an infant should be very progressive. Pure air for its little lungs to exercise themselves upon is the first requisite, and at the end of the month it may be carried out gradually more and more in fine weather. In exercising the child's eyes, you should avoid its directly gazing at the sun, or the light of a fire or candle, and loud and sudden noises are also to be avoided, as much as

possible. In taking the child out, take care that it is warmly clothed. Let nurses remember that a child's muscles are not strong enough to keep it in a sitting posture, until it is four or five month's old, and even then it should only be gradually begun with. In lifting the child, take it up by the body, and do not press it too tightly, and if possible, practice nursing with both arms, which is of advantage to both nurse and child. Dandling, tossing, swinging, and so on, should all be done in a very gradual manner, and with no greater departure from gentleness than is evidently agreeable to the child, for it is the child's advantage that the nurse has to consider more than her own amusement.\*

After the first few months, when the child begins to take hold of objects, and to kick, it may be laid on the floor, and some soft toys given to it. By this time, of course, the child is short-coated. The little thing will roll, and toss, and crawl, until it has grown strong enough in its muscles, and firm enough in its bones to bear its own weight, and balance itself. Let there be no bandying, swaddling, leading strings, or go-carts, which only, by weakening the muscles, lay the foundation for narrow chests, curved spines, and deformed limbs. By the time the little thing is quite at home on his hands and knees, he will surprise you some day by a victorious crow, and looking round, you will find him upright, holding on to a chair. Now, let him practice his steps by himself, keep things away which are likely to hurt him, should he stumble or trip, let him see his difficulties, and he will learn to get over them, and by leaving him alone, he will just take so much of his new exercise as he will be able to bear, and will gradually enable himself to keep longer on his feet day after day.

As the child advances in strength and activity, he will not require to sleep so much, but still regularity should be observed as much as

<sup>•</sup> The contrivance called the Baby Jumper, recently introduced from America, is not open to any objection, when the child is strong enough. It consists of an apparatus of webbing, in which the child is seated, and easily secured and fastened. The apparatus hangs, properly fixed, from the ceiling by an elastic rope, which bears the whole weight of the child, yielding and contracting according to its movements, and enabling it to exercise and amuse itself. The movements may be made to imitate the tossing, dandling, and swinging of the nuise.

possible in this matter. And with respect to this, he should have slept from the age of a couple of months, weather being taken into consideration, in a cot by the mother's bed, an open cot not cooped up under hoods or curtains. Regularity in the times for putting a child to sleep should be observed as rigidly as regularity in feeding it. But the times for putting it to sleep will be best regulated by observing the tendency of each child in that respect. And when it sleeps, let it be as quiet and undisturbed as possible, and let it sleep its sleep out. If the child gets habitually restless, let there be no sleepy stuff given, but have professional advice, or, if required, give the medicine recommended hereafter. The bed-clothes and covering to a child should be frequently changed, and no more of them than sufficient to keep it comfortably warm, and let the cap it wears be very light; in warm weather no cap at all.

#### TEETHING.

When the child is about half a year old, the teeth may be expected to make their appearance. Generally speaking, the operation of teething is observed to occupy two distinct stages. The first marked by feverishness, with dribbling and increased redness and enlargement of the gums: the child will have general feverish disturbance: this disturbance will gradually subside; an interval of rest will take place, and then the second stage will come on, when the same disturbance will be observable in a greater degree, and will continue until subdued by appropriate medical treatment, or until the teeth have come through. Now this fever, which may properly be called the teething fever, is the main symptom to be attended to in all cases of dentition. If the fever is kept subdued, the operation of teething will go on naturally and comfortably. In the treatment of the fevers of children, I have experienced, in the course of more than twenty years' practice, such success that I have felt it a duty to make easily accessible to parents, the medicine which I have invariably found most beneficial when given in time; and to this course I have been urged by the oft repeated wishes of very many of those whose children's lives have been saved by it. .

<sup>•</sup> This medicine is in the form of powders, which are enclosed in an explanatory bill, of which the following is an extract, and which I recommend to the perusal of parents:—"In the process of teething there is always

The front teeth at the bottom are usually cut first, then e front top teeth, then the small grinders, and the canine teeth, and afterwards the larger grinders. If the teeth do not come in this regular order, then the child's constitutional health is not as it should be, and to improve that, the general rules of health should be the more rigorously attended to in respect of digestible diet regularly given, cleanliness and fresh air. The value of pure air to children during the period of teething, is shewn by the fact that of the number of children who die in towns, compared with the number of them who die in the rural districts during the age of dentition, is as five to one. Too much importance, therefore, cannot be attached to fresh air.

greater or less disturbance of the child's system, and sometimes serious dangers arise. There is nearly always a certain amount of uneasy restlessness, and more or less fever, even under the most favourable circumstances. The head frequently is hot, the face flushed, a spot of redness appears on the cheeks, and diarrhea, more or less weakening is common, with eruptions of the skin, especially of the face and scalp, cough, starting in the sleep, and sudden attacks of screaming. In worse cases we find spasms and convulsions, sometimes dropsical swellings of the hands and feet, swellings of the glands of the neck, and in nervous children, paralysis is sometimes the result of oft repeated attacks of suffering. The various secretions, the bile, the urine, the saliva, &c., are much affected during the process of teething, indeed there is scarcely an organ of the body but is disturbed in its action more or less seriously, and from the period of teething may be dated the coming on of many diseases, often of fatal termination, when the seat of the disease is in the head, or in the glands of the abdomen. But whether such diseases shall establish themselves in the system of a child is quite under the control of the intelligent mother or nurse, with these powders at her command; for in all these cases of threatening mischief, there is always fever present, and you will nip the disease in the bud if you will attack the fever as soon as it gets so high, or lasts so long as to disturb the general health of the little patient." The price of each packet of these powders, called Dixon's Fever Powders, is 1s. 11d., and may be obtained by ordering them of any respectable Chemist and Druggist, or Wholesale at Barclay's, and the other Medicine Warehouses, or from the Author, by enclosing twelve postage stamps.

Some medicines to be efficacious require to be prepared in certain considerable quantities, and with a careful observance of many points in temperature, &c. This, as is well known is the case with Dr. James's Fever Powders, and is more particularly so with this preparation, which is especially adapted to the constitutions of children, and therefore demanding the nicest care. The preparation, like Dr. James's, is well known to the profession, to many of whom Mr. D. has supplied it in a friendly way for their own use.

The dict, if the child be very feverish, should be simply farinaceous, consisting of the various meals and pap, with milk and water—until the feverishness abates, broth, &c., should be put aside; and if the child is not yet weaned, the mother or nurse, will do well to alter her own diet in order to render her milk milder and more suitable to the feverish state of the child.

Be careful now, not to confound mere passing disturbance of the child's health with serious disease. Bear in mind that the head is very likely to become very seriously affected, if the child is disposed that way by its constitution. If you give the powders I have previously recommended, and they have not produced immediate positive amendment, seek the best advice you can get. But I must say that by the timely aid of the powders, I have never found the fever to continue long unabated.

#### FROM WEANING TO THE END OF THE SECOND YEAR.

We have followed the infant from birth up to the time of weaming, we will now take it from that time up to the full development of its first or milk teeth; that is, to about two years of age. This is a most important period of its life, as is shown by the fact, that the rate of mortality between one and two years of age is, in this country, no less than one eighth. There is such sensibility of the nervous system, and activity of the circulation in children of this age, that any cause of disorder has tenfold greater effect than at subsequent periods. Little wonder then that disease should so often be fatal from mismanagement or neglect.

The process of teething exercises great influence on the health during this critical second year, and, therefore, claims serious attention. *Errors in dist* constitute so extensive a cause of disorder in children of this age that the attention of parents cannot be too strenuously called thereto.

Nurses wish to give a child strength and so they frequently give it food that is too stimulating, or they give it too much, or too often. To keep it quiet, they give it what they think it will like, or simply

to please it they will give it, or allow it to receive, cakes and other trash. All this is wrong. Broths, milk, sop, and farinaceous food of all descriptions may be given until the grinders appear, when experiments may be made from time to time with occasionally a little fresh meat, and if it agrees, well and good, but see well that it does agree before you resolve to continue it: how will you know that it agrees? by the child not being feverish or cross or uncomfortable in any way during the succeeding twenty-four hours.

Then don't let the child have too much at once: as soon as the child shows the least disposition to cease eating, stop; even if you throw the remainder away. Then do not feed the child until its previous meal is digested, -until the child has had sleep and exercise, and perhaps sleep again. Nature divides the child's day into several little days. Be observant, take notice of the times that it looks for its food. Don't feed it when it would rather be sleeping, or when it would rather be amused and exercised. The too common practice of quieting children with cakes and sugar stuffs is injurious in every way; it spoils digestion, breeds bad humours, and also bad habits. In fact the child should have nothing given to it between its proper and regulated meals. Observe all these remarks while the child is well and it will keep well, so far as disorders of the stomach are concerned; but if it is weak from illness, from cold or other causes, its diet should be regulated in accordance with the same principle. Remember in all cases that if any description of food produces feverishness or discomfort, so far from strengthening or restoring, it actually irritates and debilitates.

Some young children do really, in this climate, require animal food, but I am sure that more injury is done by too early giving it, than by too long delaying it. Therefore, in commencing with animal food, parents should feel their way, and act accordingly.

### AFTER TWO YEARS OF AGE.

We will now suppose the child has passed its second year. What variation should now be made in its diet? Let us begin with its waking in the morning. Its food should be at hand, namely, some

sop, pressed pretty dry, to be now moistened with some milk; as it gets older, bread, with a draught of milk and water; then, if the child likes, it may go to sleep again. This first meal should be unaccompanied with butter or sugar, so that the child should not be incited to take a morsel more than sufficient to satisfy hunger and thirst. After a few hours, a similar meal, with the addition of a trifle of sugar to the milk, or a little butter to the bread, according to the age. In the middle of the day, sop with broth, or according to the teeth and age, a little fresh meat, not over cooked, with vegetable, such as potatoe, cauliflower, or turnip, with water for drink. In the evening, its last meal, the same as that of the morning. A healthy child who has been exercised a good part of the day in the open air, as it should be, will be ready for bed shortly after its last meal, and will require nothing till early in the morning.

During the whole period of childhood, a similar regimen may be observed with slight modification; at the 4th or 5th year, for instance, bread and milk for breakfast and supper, warm or cold, according to the season; and the very early breakfast will not require to be continued when the child's sleep has become long and continuous.

But whatever modifications are made in the regimen of the child as it advances in age, let them be made in a spirit of regularity; a spirit which nature observes in all the acts of the human being. As the child gets older, it will require food progressively in larger quantities, but at longer intervals, but the increasing quantity should be regulated as the diminishing times should be regulated—with a nice observance of the child's natural and constitutional requirements. A great source of disorder lies in the non-observance of this two-fold regularity. The food should be not only regularly administered, but regularly apportioned in quantity, it should always be sufficient just to satisfy appetite, if more is given, it will be in excess, and disorder will ensue. But in attending to this, we must bear in mind that a variety of food keeps the digestive functions on the alert; and keeps off the dulness, and perhaps debility which comes on with the repetition of the same diet day after day. While the child is taking farinaceous diet, for instance, it may be varied in many ways, sometimes bread sop, sometimes arrowroot, or ground rice, sago, &c. : and so also with broths, when broths are taken. While adhering to this kind of diet suitable to the age, and constitution, it will be found easy to make an occasional and pleasant change in the details. (See Supplement for best modes of preparing various forms of diet.)

As the child advances in age, the tendency should be, in washing, to use water of a cooler and cooler temperature, always remembering to keep the child wet no longer than possible. As a rule, after the child has turned the first year of its age, the water should cease to be of that luke-warmth which is usual in nurseries. It is better not to wash the child for an hour after any meal, because by the bathing the circulation is drawn to the surface if there is healthy re-action, as there ought to be, and the digestive actions are thereby impeded.

Remember, that without a clean, warm skin, the child cannot have sound health long. And this brings me again to the affair of dress. This should be adapted to the two-fold purpose of absorbing the moisture of the skin, and maintaining a constant, and no more than comfortable warmth: it should be light in fabric, and easy in fit. If the child is not robust, flannel should be next the skin—in summer, cotton. Remember that a child has but feeble power to resist cold when very young, and when old enough to warm itself with exercise, it soon gets chilled, and in this getting chilled lies every danger of health. The child's dress should make it feel comfortable in the house and out of the house. The notion of making a child hardy by only half-clothing it is now happily exploded.

While the child is furnished with plenty of pure air, let there be no stint of voluntary exercise as soon as it can take it. Before it can walk or run, let it lie on its back and play, kick, and roll about at its pleasure. Let there be no teaching to walk; the best teaching is its own; and when it can run, let it expose itself freely to the open air in all dry weather. And then have no fear of the cold; if it is comfortably clad, it will voluntarily keep itself warm with its brisk movements; and with these two elements of warmth, it will be safe under any amount of cold it will be exposed to in this climate; but, if from inattention to clothing, or if made to stand still in the cold, there is no amount of mischief you may not look forward to.

Remember, there is no greater cooler to the body than wet and damp, therefore, if the child comes in wetted with a shower or with damp feet, see that it is made dry as soon as possible.

Now, in the matter of sleep; all the natural sleep a child can get, it ought to have; but yet the nurse, having observed the amount of sleep required by the child in the twenty-four hours, can do much in regularising the time devoted to it. In the necessary training with this object the child should never be hushed or rocked to sleep; when the child exhibits the signs of approaching sleep, let it be gently and comfortably laid down while still awake. Persist in this, and you will reap the advantage of it, as well as the little child: the child will not, when awake, be clamorous to be everlastingly dandled in the arms or lap, and the nurse will have the unresisted opportunity of laying it down comfortably at the proper hour for the coming on of its natural and timely repose. And with this management, let no visitors interfere: they will want to exhibit their fondness by nursing and dandling and what not, they had better exhibit their fondness of nursing at the proper time, that is, when it is usually wakeful.

#### THE DISEASES INCIDENT TO CHILDREN.

Hooping cough, measles, scarlatina, &c., constitute a great item in the bills of mortality, and, therefore, should never be treated lightly by parents. If the conditions of infantile health, as previously laid down, have been carefully attended to, the child is well prepared for a successful encounter with all or any of these. Do not delay placing the child, if attacked, under the best medical direction you can obtain, but in the absence, or unavoidable delay of the medical attendant, administer the Fever Powders \* I have already spoken of.

Vaccination, in the vast majority of cases, is performed at public

The value of these powders depends, in fact, upon their power in controlling any description of feverishness or fever to which children are liable, not only in Teething, but in Searlatina, Measles, Small-pox, Nettle-rash, and other cruptions of the skin; in which disorders the timely use of this medicine will prevent inflammations, and other ill effects. The inflammation of the throat in Scarlatina, of the eyes and lungs in Measles, of the eyes and skin in

institutions, and by appointed vaccinators, who confine themselves to performing the simple operation, without concerning themselves nicely about the exact state of the child's health before, or after the operation. If, before the period proposed for vaccinating, the child should be feverish, such feverishness should be got rid of by giving to it a dose or two, as may be required, of the Fever Powders ; - and so also, a few days after the operation, when the pustules are formed, or are forming, the feverishness, which is often accompanied by inflammation around the pustules, should be subdued, in like manner, by a powder or two given according to the directions. I more particularly speak of feverishness in these cases, because they are generally thought too trifling to require the attention of the medical man. And, indeed, in the other eruptive disorders of children, the feverishness, if not accompanied by disturbance of any one particular organ of the body, will be kept down to the point of safety by the powders, as I have said before.

#### DOMESTIC MISMANAGEMENT DURING ILLNESS

Is unfortunately not an uncommon cause of death in childhood. The free and indiscreet administration of purgatives of all sorts, doses of calomel, &c., is an evil of great extent, and cannot too loudly be protested against. Many mothers and nurses imagine that all

Small-pox, &c., is the effect of the fever in these disorders, and if the fever is kept subdued, inflammation will not take place, but if it is not kept subdued, it will in most cases establish itself, to the serious injury of some organ or other, according to constitutional predisposition and other circumstances, enfeebling the health and shortening life. Of course these powders may also be given with great advantage in croup and influenza, and in the common feverish and sore throat which follow what is called catching a cold. But in the various disorders mentioned above, remember I do not say that these powders will in all cases, do away with the necessity of medical attendance, but I do say, decidedly, that if given early in the coming on of an attack, they will lessen the severity of it, diminish the tendency to inflammation, and prepare the way favorably for the medical practitioner. In all sudden attacks where there is feverishness, if a medical man and his medicine is not immediately at hand, give a dose of the powder, and repeat it in a quarter or half an hour if the fever is not abated or sickness been produced; but if the fever returns before the medical man can attend, then have recourse to the powders again.

diseases arise, not as they do in most cases, from a febrile action of the system, but from something or other which may be purged away; and forthwith purging is proceeded with by means of all sorts of drugs. Beyond giving a dose of castor oil, when change of diet is inefficient, where there is sluggishness of the bowels, without fever, the nurse should not go on her own judgment. When the child is evidently ill, all the directions previously given with respect to its general management, should be the more vigorously attended to. Cleanliness, free ventilation, quiet, order, should all be strictly enforced.

But it is in matters of diet that mismanagement is most remarkable. If a child is weak, more strengthening food than is usual is often forced upon it, this, if feverish action be present, will only, by increasing the feverish action, increase the weakness. In such cases, the simpler the food, the more strengthening it is.

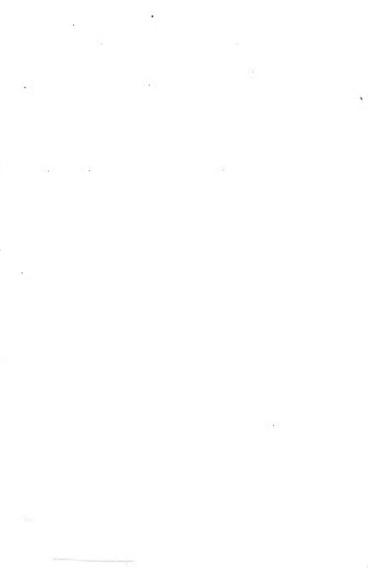
Now with respect to attacks of illness, it is much to be lamented that nurses are so prone to rely upon their own judgment in giving syrups and one quack thing or another, sending round to any chemist's shop for "a powder," Godfrey's Cordial, or I know not what besides. Dill water is a favorite thing in wind or flatulence, and being a simple thing, may be tried, but many of the diseases of infancy begin in a very imperceptible manner and can only be well encountered at the outset. When therefore the child exhibits an unusual appearance or a feverish condition after the removal of what may be thought to be the cause, seek professional advice; and if the cause be known and if its effect continue longer than prudence allows, rather seek for professional aid than have to find some day serious disease established. So also when any of the natural functions continues in a disturbed state for an unusual time, if the bowels, for instance, are too long confined, or too long relaxed, if the breathing is hurried and irregular, if the skin is too hot or too cold, if the sleep is too heavy or much disturbed, in many cases none but a professional man can discover the cause and indicate the removal. I have done all in my power to enlighten parents and nurses in these matters, more particularly in the most serious forms of children's disorders, namely the development of fever, inflammation, &c. But again I say, if the powders already

referred to be used in time they will save the child from danger, but if they do not speedily effect the object of abating fever, obtain the nearest and best professional aid.

And now my dear readers, I have said all that I think necessary to be said upon this vitally important subject, and if I have contributed to help you in carrying the little beings so dear to you through the most trying period of their existence, my object will be fully attained.

\*.\* Mr. Dixon is at home in the morning before 12; but should parents at a distance wish to communicate with him, he will be happy to reply promptly to their letters.

25, BEDFORD Row, Holborn, London.



### SUPPLEMENT.

As diet is of as much importance to children as medicine, I have thought it not unworthy to give the modes of preparing the various articles of food and drink that I have found best, and which I have been in the habit of recommending.

PAP.—Take a sufficient quantity of rusks, or tops and bottoms, or lightly toasted bread, with a sufficient quantity of water to moisten; set them in a saucepan over the fire until sufficiently softened; pour the superfluous water off, add a little sugar, and beat the whole into a soft pulp.

If bread is used, it ought to be a day or two old, and it will only require to be macerated a little while with boiling water. A little milk may be added sometimes, and as the child gets older. This is what I call sop.

Make it a rule not to give the child stale food. The food should always be prepared fresh as wanted.

FLOUR PAP.—Put into the saucepan a table-spoonful of flour and a cup of milk and water, mixing gradually and perfectly; simmer for ten minutes, stirring all the while, then add a little sugar or salt.

When the bowels are relaxed this may be made with baked flour, or rice flour. It is not appropriate the state of the state

BREAD AND MILK.—Put a couple of ounces of thin slices of bread into a basin, and in a little clean saucepan half a pint of milk; and

just when about to boil pour it over the bread and cover over with a saucer for five minutes.

When a child begins to take bread and milk the latter should be lowered with one half water, the proportion of milk being only gradually increased.

PORRIDGE.—In some parts of the country, porridge is in general use, and children thrive well upon it. It may be given instead of bread and milk. To prepare it put two table-spoonfuls of Scotch oatmeal into a saucepan, well stirred with half a pint of milk and water, and keep well stirred while boiling for ten minutes; add a little sugar or salt.

PANADA.—Break some stale penny roll into a saucepan, pour in just enough water to cover the bread, let it boil for five minutes, stirring well, then add a little salt.

ARROW ROOT.—Put into a basin a dessert-spoonful of the powder, and mix with it as much cold soft water as will make a soft smooth paste, then pour on to it half a pint of boiling water, and stir briskly, when it will become a clear jelly. Add a little sugar and milk.

Sago.—For children's dinner when recovering from illness. Take three or four table-spoonfuls of sago, and soak it in cold water for an hour to wash and soften it; then pour off, add a pint of fresh water and simmer until transparent, add milk, sugar, and a little cinnamon or nutmeg.

GRUEL.—A pint of gruel from groats may be made as follows: put on about two table-spoonfuls, in rather more than a pint of water; let it boil for at least two hours; when boiled, strain it through a hair sieve.

If you use fine oatmeal, take about a table-spoonful and a half, and mix with it gradually about a pint of cold water, braying it as you mix, and boil it for half an hour; it requires no straining.

If the coarse oatmeal be used, take a tea-cupful, and put it into a basin; mix it well with a small quantity of water. Pour this

water off, then take another water from it; in this manner about a quart should be taken, the coarser particles of the meal being rejected. Put all the waters into a saucepan, and boil for twenty minutes, stirring the whole time. It is now ready, and like other sorts of Gruel, may be seasoned to taste.

SAGO GRUEL.—Put two table spoonfuls of Sago into a small saucepan, which moisten gradually with a pint of cold water, set it over a slow fire, until it gets rather stiff and clear, like jelly, then add a little grated nutmeg and sugar, and it is ready. Butter, milk, salt, or wine may be added, according to circumstances.

Barley Water.—Use only one ounce of pearl barley to a quart of water; boil for half an hour, taking off the scum; add a little loaf sugar, and the quarter of the rind of a lemon while boiling, and strain it through a hair sieve. If barley water is made in this way children like it.

RICE WATER may be made in the same manner, using a handful of rice to a quart of water.

Toast Water should be made with plenty of bread, well toasted, not burned, over which boiling water should be poured and set aside till cold, and then strained through muslin into another jug. Made in this way it is really a valuable and an agreeable drink. But to make it with a bit of burnt bread, thrown into a jug, and filled up with any quantity of water, warm, or cold, and put to a sick child's mouth, unstrained, is absurd and useless, and moreover sets the child against good toast water when that is offered to it.

