



T is a well-known fact that some of the greatest blessings we enjoy are the least appreciated, and this may be truly said of light. We are so accustomed to it, that we fail to remember its importance, though did we but recollect that it is synonymous with life we could not fail to be sensible of the inestimable value of this essential of our being.

Deprived of its wholesome and enlivening stimulus children become pale and sickly in appearance, the blood is imperfectly oxygenated, and a proneness to disease or debility arises.

A dark, dull room, or one from which light is more or less excluded, should by all means be avoided, for it is injurious alike to the eyes, health and spirits of children. But necessary as light is (it is the natural food of the eye), it requires regulating according to the age. During early infancy the eyes should not be exposed to a concentrated or strong light; the sun's light should be softened by window blinds, and an infant ought never to be held too near a lamp or candle.

The best arguments in favor of the beneficial effects of light are found in the facts that nearly the whole of the vegetable kingdom will cease to flourish if deprived of it, and that those children brought up in the dreary dark slums of cities, although quite as well fed as those of an agricultural laborer, are invariably puny, sickly creatures, without a vestige of color in their cheeks.

The pernicious custom which obtains so much amongst the lower middle classes in the suburbs of living almost entirely in the basement breakfast-room cannot be too strongly condemned, where, as is invariably the case, it is dark. The room that is most in use should be "the best room," not on account of the amount of furniture it contains but owing to its being the lightest, and into this room the sun should be allowed to freely enter, all ideas of excluding it on account of the carpet being but false economy.

Notwithstanding, however, that a proper amount of light is necessary for a child when awake, equal care should be exercised in darkening the room when it (the child) is asleep, as too much light then will not merely prevent or interrupt sleep, but may act as a very injurious stimulus to the eyes and brain. It goes without saying that the nursery must, of course, have plenty of sunlight, and with this view should face the

south, east or west, but there is another place about which great care should be taken—the school-room. There is no doubt that the influence of a sunless schoolroom is most baneful to a young mind, and the want of interest in their study often displayed by children might in many instances be traced to this cause.

BATHING.

Macbeth's maxim, "If it were done, when 'tis done, 'twere well it were done quickly," is especially applicable to the bathing of children. There should be no nonsense about it. The object of bathing is not only for the purpose of cleanliness but as a means of invigorating the capillary circulation, and so fortifying the system as to enable it to resist atmospheric vicissitudes.

To do this, however, it is imperative that the child should not remain in the bath (presuming it is not warm) more than a minute or two, as when the body is immersed in water below ninety degrees there is a sensation of cold, a shrinking of the skin, and a rush of blood from the small capillary vessels of the surface to the internal vessels, which state of things should be speedily followed by a reaction by the heart and large vessels forcing the blood back again to the surface, and indeed to all the outlets; so that the skin glows and perhaps perspires, the secretory organs act more strongly, the liver and other organs show an increased activity, and there is a general feeling of liveliness and vigor.

But this will not be the case if there is any dawdling or delay, not only while in the water but during the process of rubbing and drying, which must be performed with the greatest briskness in order that the proper reaction, upon which the virtue of the bath depends, should take place; otherwise the child will get a chill, which will, in addition to nullifying the good, do it absolute harm.

Up to the age of three months infants should in all weathers be bathed in warm water, but after that age at the warm seasons and during Summer cold may be used, provided the child be strong enough, and is not frightened, but if the experiment is attended with convulsive screaming and great distress, discontinue it and substitute a warmer temperature. In washing a very young child the head should always be the first part damped, and a flannel is preferable for that purpose rather than a sponge.

With regard to all children there are not two opinions on the subject of a daily bath given immediately on rising being

beneficial, in fact it is a *sine qua non* of perfect health, provided, of course, the child is not too delicate, and for the elder ones a large sponge is a necessity, as by its use a much larger quantity of oxygen can be introduced into the skin than by any other means.

The addition of sea-salt is a most desirable adjunct, especially when the hips are weak, but even when in good health its occasional use will add greatly to the tonic properties of the bath. It should be added in such quantity to a bath that the mineral ingredient is equal to that contained in salt water; it will be far more efficacious than a simple fresh water bath, as it combines the advantages of temperature with the stimulating action of the salt upon the skin.

The advantages of such a bath taken at the time mentioned are twofold. It inures the body to a greater degree of cold than it is likely to be exposed to during the rest of the day, and so proves most serviceable in protecting it from atmospheric influences; and it tends to remove irregularities in the circulation, and, by exciting the healthy action of the skin, may aid that organ in removing disease.

All, however, are not strong enough to stand the shock to the system, and not only those who are extremely weak, or who have any organic disease, especially the heart or lungs, but there may be some idiosyncrasy or condition of the constitution peculiar to the individual which would render it impossible. The invariable test is that if after a bath the child remains chilly, languid and dejected, or suffers from headache, then it is not beneficial, but if the sense of cold rapidly passes off and a glow of warmth and animation of spirits succeeds and continues for some time, the cold bath cannot fail to be productive of good.

SLEEP.

Although much has been written, and rightly so, on the subject of laziness, there is as much, if not more, to be said on the necessity of enough sleep, for it is as great a necessity as eating and drinking.

Infants sleep almost continually, and (in this we know most mothers will heartily concur) they cannot sleep too much, owing to the necessity for providing the materials for growth. When they are unable to sleep for any length of time their condition is unnatural, and shows us that they are suffering in some way or other, the cause of which should be ascertained and removed; but not by the use of sirups, elixirs, etc., which, though they produce slumber, do not produce sleep.

For young children from twelve to fourteen hours' sleep is necessary, and this must be regular, the proper time for bed during the Winter months being about six o'clock, and in the Summer months about seven.

A proper desire for sleep is only obtained by a due amount of exercise, both mental and physical, which must not have continued sufficiently long to produce prostration. Exercise in moderation is most necessary before going to bed, but anything of a violent nature, like romping, should be avoided for at least half an hour before.

With regard to the hour at which children and others should rise, that must be determined by the time of their waking, and in order to wake at a proper time all that is necessary is that you go to bed at some regular early hour,

and then, says an authority, "within a fortnight nature, with almost the regularity of the rising sun, will loosen the bonds of sleep the moment enough repose has been secured for the wants of the system." To remain in bed after this, to indulge in that short morning doze into which so many allow themselves to fall because it is not, they think, quite time to get up, is a baneful practice.

Care should also be taken with regard to the quantity of bed-clothes indulged in, too much clothing having the effect of relaxing the body, and it is right therefore to have only sufficient to enable the individual to sleep, for it is better to wake with an inclination to draw the clothes round you than to feel oppressed by their weight and heat and a desire to throw them off.

With regard to the proper position of a sleeper all are agreed that it should be on the right or left side, because if you sleep on your back, especially soon after a hearty meal, the weight of the digestive organs and that of the food, resting upon the great vein of the body, near the backbone, compresses it, and arrests the flow of the blood more or less. If the arrest is partial, the sleep is disturbed, and there are unpleasant dreams, a state of things carefully to be avoided when we remember that "the man who dreams does but half sleep. The child who dreams scarcely sleeps at all."

Too much attention cannot be paid to the proper ventilation of sleeping-rooms. In too many cases this important subject is entirely neglected. The sleeper retires to rest in an apartment from which every effort has been made to exclude the outer air—until it seems almost hermetically sealed—and rises with a dull headache and a feverish, unrefreshed sensation to go about the duties of the day.

ON CATCHING COLD.

It is a very common, but a very great, mistake to attach little importance to catching cold. How frequently we hear the remark in reference to some one being indisposed, "Oh, it's nothing; only a severe cold." Considering that in adults severe cold is the cause of one-half "the ills that flesh is heir to," it will readily be understood that colds with children are of the greatest consequence, for, in the language of one whose revered name is the synonym for nursing, "It is as easy to put out a sick baby's life as it is to put out the flame of a candle."

The most common kind of cold is that in the head, professionally described as *catarrh*, which consists of inflammation of the mucous membrane of the air passages, and is ordinarily caused by the child having been exposed to a draught, having got its clothes wet and not been able to have them changed, or by not being sufficiently warmly clad when the body is getting cool after being heated. The latter is the most to be feared, as in this condition the body is incapable, from exhaustion, of reaction, and the exposure intensifies the depression.

Wet clothing does not frequently produce "a cold" if the child is walking or running about, and is able to get the things changed when the active exercise ceases, and avoids all exposure for some little time; but where exertion has been indulged in, and the body is in a state of perspiration, then, if the child receives a chill from wet feet or any other cause, and

does not continue its play or its active exercise, *catarrh* is almost inevitable.

When it is remembered that a neglected cold sometimes produces bronchitis, pneumonia, quinsy, rheumatism, erysipelas, toothache, neuralgia, inflammatory fever, consumption, etc., it is scarcely possible to impress upon mothers too strongly the great necessity for extreme care in this matter; and as prevention should be much more easy when the cause of a complaint is understood, I propose to try and explain in as simple language as possible the why and wherefore.

The action of cold is to partially close the pores of the skin, check the natural perspiration by constricting and obstructing the vessels of the skin, and so throw more blood inwardly, producing internal congestions; for the outer skin being incapable of performing its functions, and perspiration being an absolute necessity, the inner skin, or mucous membrane, has to do the work, and hence the inflammation.

The effect of cold is felt in a greater or less degree according to the capillary circulation. If this be weak, or be rendered so by excitement, exercise, or by sleep, the danger is increased; consequently children—and any one else, for matter of that—are most susceptible to cold when coming out of a hot room, after being unduly heated by running, or when sleeping.

From this it will be understood that the chilling influences enumerated derange the balance of the circulation, and by determining a corresponding amount of congestion inwardly, fix it in some part previously weakened and made susceptible to disease; or, in still plainer language, the cold flies to the weakest part, which accounts for one person getting rheumatism, another congestion of the lungs, a third a sore throat, and a fourth, perhaps, merely a cold in the head or chest.

To cure a cold is to restore the action of the skin and induce perspiration, and this, if done at the proper time, when the symptoms are first observed, is exceedingly simple. People may sneer as they will at the mention of the word gruel, but a basin-full of hot gruel, made thin, and taken when in bed, will invariably arrest an ordinary *catarrh*. If the chill be severe, the child's feet should be placed in warm water, a little extra clothing be placed on the bed, and the patient allowed to lie in bed a little longer than usual the next morning; but the apartment must not be too warm or close, or the additional clothing be too great, as, though the cure may be accelerated thereby, the susceptibility is increased, and the child rendered more liable to a recurrence of the attack.

To those who will not believe in anything old-fashioned or simple, the plan of a "wet sheet pack" will be found equally efficacious. This is managed by spreading three blankets on the bed and putting on the top a sheet, which has been saturated in hot water and wrung out. The child is then placed upon the sheet, enveloped in it, and the blankets wrapped tightly round the whole body excepting the head, and allowed to remain in this situation for about an hour, when a quick sponging of cold water should be given, followed by a brisk and thorough rubbing with dry towels.

Another remedy believed in by many of our medical brethren is the "dry" plan, which, at any rate, has the merit of

simplicity, for it consists in merely abstaining from every kind of liquid until the disorder is gone.

Although opinions may differ, however, as to the precise method of cure, and any of those given will be found equally efficient, there is no difference of opinion as to the cause and prevention. The too frequent cause is simply the result of carelessness or imprudence in not protecting the body against the variation of temperature, an insufficient use of cold or warm water to the body, or, plainly, uncleanness, sleeping under too much clothing, or by sleeping in badly-ventilated rooms; but the first mentioned, the passing from a hot room out into the open air, or into a room where the temperature is less, without being suitably attired, is the most frequent and the most to be guarded against with children.

The prevention of cold is best achieved by diminishing the susceptibility of the system by abstemious living, taking regular and daily exercise in the open air, and a morning bath of cold water if the child be strong enough, and if not, a tepid one; but the best prevention and cure for colds is "the cold water cure."

TEETHING

is one of the most distressing of the ordinary ailments of children, for it comes to them at an age when they are incapable of making the nature of their sufferings known, and as they do suffer most acutely sometimes during the process of dentition, it is very trying to mothers and nurses to have to witness their torture and be unable to alleviate it because the poor little mites cannot explain their symptoms.

Being one of the very common ills that flesh is heir to, it is a time frequently regarded by some as more troublesome than important—a great mistake, to prevent which a simple statement showing the action of one of the phases of the disease may be advisable. The chief disorders of the first set of teeth are caries and inflammation in the periosteal membranes, terminating in abscess, or what is commonly called *gumboil*. The first effect of inflammation in the periosteum is to create pain, tenderness and swelling in that part of the gum in close proximity to the tooth, and an effusion of fluid between the fang and its investing membrane, which is thus converted into a sort of cyst or tiny sack of skin. Repeated attacks of inflammation at length end in the formation of pus, which either bursts through the tumor in the gum or may be removed by lancing. Sometimes after the abscess has burst or been opened, a fungus springs up from the diseased membrane lining the cavity. With some children the presence of the abscess having produced absorption of a portion of the alveolar process at its lower part, it effuses its contents through the aperture thus formed, and matter forces itself along the surface of the lower jaw, and forms an external tumor near its base.

With regard to the process of dentition in actual infants, the time at which it takes place is naturally subject to slight variation, when it is stated that many medical men give instances in their experience of children being born with teeth, or having cut them almost immediately after birth—Louis XIV., of France, and Richard III., of England, being historic cases in point; the usual time, however, when babies begin to be troubled with the advent of teeth is at the seventh

month, the period of the first dentition lasting up to the age of two years or two and a half years.

The symptoms of teething in a healthy child are that for some time before the gums are much swollen, there is an excessive flow of saliva from the mouth, and the child indulges in what is known to most as "dribbling," at the same time evincing a very strong desire to drag anything upon which it can fix its tiny little clutch into its mouth, while, if we place our finger into its mouth we perceive at once a decided attempt to bite, which affords a relief to the irritation of the gums. Where the child is inconvenienced only to the extent described there is no remedy required provided there is no constipation, but where this is the case small doses of castor oil are the safest. As to the article it should be given to suck, I personally prefer an ivory ring or a "finger" of crust of bread, great care being observed in the latter case that it is taken away before there is a possibility of its being broken or bitten off.

When the child is extremely restless, cross and uneasy, crying bitterly without any apparent cause, and refuses all ordinary attempts at pacification, its suffering is very considerable, which is increased by its ineffectual efforts to sleep for any length of time. The cheeks become flushed at this time, and if the local inflammation continue to increase the gums may ulcerate; in this case apply a little borax and honey to them, but where the irritation continues and the pain is obviously great it will be necessary to lance the gums, for which purpose it is almost unnecessary to add the services of a surgeon should be secured at once. At this time it is more than ever necessary to keep the bowels well open, a mild attack of diarrhea being far more preferable under the existing circumstances than the reverse state of things.

All food requires to be carefully chewed in order that the various organs may perfectly perform their proper functions, and this can only be the case when the meat, or whatever it may be, is broken into minute portions and duly mixed with saliva, without which it will not be properly digested. The horrors and evils of indigestion are too well known to need commenting upon here, but the necessity for a due attention to the mastication of food by children will be seen when it is stated that a weak stomach acts tardily and imperfectly upon anything introduced into it not properly chewed; and the consequences are, the warmth and moisture of the stomach evolve gases, acids are formed, and then follow those distressing symptoms such as loss of appetite, flatulence, furred tongue, etc.

The period of "teething" is more than interesting, from the fact that, at this stage of child-life, the whole organization seems to undergo a transition. The features, hitherto more or less expressionless, become decided and distinct; the eye becomes endued with expression, through which the mind seems to speak, as it were; the round appearance of the facial outline appears elongated, the result of the teeth expanding the jaws; the forehead is perceptibly developed, and, in short, the entire face assumes an animation previously unknown, but most precious to mothers, on account of its being the ordinary time when "baby is beginning to notice."

The order in which teeth usually make their appearance

is, first, the two central incisors of the lower jaw appear; then shortly after those of the upper jaw, followed by the lower lateral incisors, and then by the upper lateral incisors. At the age of a year or fourteen months the four first molar teeth should begin to show, and at the sixteenth to the twentieth month the lower and upper canine teeth, followed by the four last molars.

Although the suffering of infants from the process of dentition arises mainly from irritation of the gums, owing to the teeth working their way through, it is not in the mouth alone that pain is caused; and where this is excessive, or in children whose constitutions are naturally irritable, the irritation is reflected by the nervous system to some other organ or system of organs.

The most ordinary effect of this is stomach-ache, or diarrhea, with griping pain, which, if in a mild form, is the least to be feared of all the unpleasantnesses arising from teething; and though its violence may be moderated, it should not be entirely arrested. Under these circumstances, a child soon gets weak and thin, and its flesh soft and flabby; but, generally speaking, this need not (except, of course, in an extreme case) be viewed with alarm; for, as soon as the teeth are through, nature soon rights itself, and the little one will resume its wonted good looks. When, however, the symptoms are very distressing, by the quantity and frequency of the discharge, a chalk mixture, with a drop or two of laudanum to the ounce, according to the age of the child, may be given, in the event of a medical man not being procurable. Where there is a great pain and flatulence, an occasional warm bath, and the use of liniment, composed of half a drachm of laudanum to two ounces of compound camphor liniment, or a mustard or linseed-meal poultice, composed of one-third of the former to two-thirds of the latter. When the foregoing symptoms are accompanied by vomiting, it is exceedingly troublesome, and, if the sickness is not relieved by the division of the gums, it should be checked by administering a half-drop or a drop of laudanum.

Besides the maladies mentioned that are the outcome of teething, there are many others, such as eruptions of the skin, spasm of the glottis, and affections of the nervous system generally, of too complicated a nature to treat in this article, as the remedies necessitated are as complex as the diseases; but there is one serious disorder connected with dentition unfortunately too common. I allude to convulsions, the treatment of which should be known to all.

Convulsions in their mild form consist of muscular twitchings of the face, accompanied by an obvious difficulty in breathing and a rolling of the eyes. When severe, the child becomes insensible, and the muscles of the head, neck, and extremities are convulsed in various directions. The eyes are insensible to light, and turned rigidly up to one side. The appearance and symptoms vary, of course, for, in addition to those named, with some children the face is congested, but sometimes pale, the lips livid, and there is frothing at the mouth. The hands are usually tightly clinched, and the thumbs turned inward, with the fingers on them, and in some cases the soles of the feet are turned together, with the great toe bent into the sole.

The treatment for convulsions is, as a rule, a warm bath, and, in the absence of a doctor, the best thing to be done is to immerse the child in warm water of about ninety degrees temperature for about ten minutes or a quarter of an hour, applying at the same time a cold, wet towel for two or three minutes to the little sufferer's head. Previous to the bath, which will take a few minutes at least to get ready, loosen all the clothing about the neck, chest and body, raise the head, sprinkle the face with water, and admit plenty of fresh air.

With regard to the general treatment of children during teething, their heads should be kept cool and their feet warm, and, if the weather will admit, they should be bathed in cold water, especially about the head, and taken out daily in the open air. At night it is equally essential that their heads be kept cool, and therefore no caps or coverings should be used.

As before stated, diarrhea during dentition, unless very severe, should not be stopped, but regarded as an effort of nature to relieve congestion to the head; and where the opposite effect is the case, purgatives should be avoided, and the bowels regulated by suitable diet; in obstinate cases by injections. Constipation in infants may be almost entirely attributed to defective diet, and if, while nursing, mothers and nurses would carefully avoid any article of food or drink of an indigestible or stimulating character, this ailment would be comparatively unknown.

HOOPING-COUGH.

This disease, almost absolutely confined to infants and children, is, luckily for them, more distressing in its symptoms than dangerous in its effects, a case of hooping-cough, *pur et simple*, being rarely fatal. Like croup, it is more common with very young children, the usual age when they are more subject to it being from two to ten years; but, unlike croup, it is more common to girls than to boys, and appears but once in a lifetime, though cases have been known where the cough continued daily at a certain hour for several months, and, after ceasing for some time, returned for two successive seasons.

The symptoms which usually precede this malady are those of ordinary influenza. First and foremost there is a languor, restlessness, feverishness and unaccountable irritation, except that the little one is thought "to have caught a slight cold," then loss of appetite, sneezing, coughing, follows, with a running at the nose; this is in the case of an ordinary and not severe attack. Where the disease is in an aggravated form the fever is more intense, the thirst greater, the pulse quicker, and the oppression and distress in proportion, the cough very frequent and painful, dry at first, but with excessive expectoration afterward. This may be called the first stage of the disease, and is the customary prelude to hooping, but it is perfectly possible to dispense with these preliminaries, and for a child to be suddenly seized with the too well-known cough. These symptoms ordinarily continue from ten days to a fortnight.

The second stage is marked by the dying-out of the symptoms of cold and the commencement of the fits of coughing, which are best described as a number of expirations made with such violence, and repeated in such quick succession, that

the child seems almost in danger of suffocation. The face and neck are swollen and livid, the eyes protruded and full of tears; at length, one or two inspirations are made with similar violence, and by them the peculiar hooping sound is produced; a little rest probably follows, and is succeeded by another fit of coughing, and another hoop, until after a succession of these actions, the paroxysm is terminated by vomiting, or a discharge of mucus from the lungs, or perhaps both. The duration of this stage is usually from six weeks to a couple of months, but sometimes continues for a much longer period, the disease, in some cases, lasting from the beginning of Winter until the end of Spring.

The debilitating results of the disease depend to a great extent upon the violence and duration of the attack, and the strength or weakness of the constitution, but as a rule, if there are no complications, these are of no great moment. The frequent vomiting decreases the appetite, and disturbs digestion, which interferes with nutrition, and the child naturally loses flesh, which is more or less flabby, and the skin is unusually dark, especially underneath the eyes.

The subsiding of the attack is marked by the fits of coughing becoming less frequent, though possibly they may be as fierce as ever, the paroxysms lasting from a minute to a quarter of an hour. In proportion to their violence and duration will be the child's breathlessness and fright and its efforts to respire. If in a recumbent position it will suddenly jump up and seize hold of whatever or whoever is nearest, in order to be assisted in overcoming the spasm. When the fit is over the child appears exhausted, and requires a short rest to recover itself; but then and during the interval to the next cough, it is comparatively easy and cheerful, often playing about as usual, and not averse to food, except where the case is a severe one, when extreme languor supervenes.

The period at which these paroxysms recur varies considerably; during the early part of the attack they are very frequent—about every half-hour, and in some extremely severe cases as often as every ten minutes—the chief cause of their return being the accumulation of mucus. Consequently, if this be got rid of by the coughing, the fit will be light; but if it is expelled with difficulty the efforts will be greater, and the cough renewed almost immediately. These fits are produced by many things—a hearty meal, a fit of passion, crying, fright or laughter, will either of them be sufficient to bring on an attack.

Although we have stated that this disease is rarely attended with fatal results, it must be distinctly understood that this statement applies to hooping-cough *per se*; it is perfectly correct, but for fear any one should not be sufficiently careful, it is a disorder which, if improperly treated, or if the case be one of an extremely acute character, may lead to something of a complicated and highly dangerous nature.

It is a complaint which lends itself a great deal more to careful nursing than to an elaborate course of medicine, for it will run its course, and requires guiding and watching more than checking, great care being necessary to note the symptoms, lest they assume a conspicuous or alarming character, and by appropriate treatment prevent the affection having those complications alluded to which constitute it a disease

of danger. On the slightest appearance either of inflammatory affection of the lungs or of a tendency to convulsion a medical man should be sent for immediately.

During the first stage an emetic of ipecacuanha, followed by an expectorant every four hours, should be given, the latter consisting of ipecacuanha wine, sirup of squills, a little sirup of white poppies and almond milk, and some mild aperient, such as castor oil or salts and senna, the emetic only to be repeated occasionally. The rooms to which the child should be confined should be of an equable temperature, about sixty-five degrees, the bedroom being ventilated during the day and the sitting-room during the night; but the windows of the apartment must on no account be opened while the patient is in them.

When the second stage arrives, while proper attention is paid to temperature, the cough will be found much slighter and the expectoration much less than if the child were permitted to be exposed to the external air, the emetic being continued occasionally, and also the mixture, with a few drops of laudanum added to it.

With regard to change of air, there is no doubt that while the attack is unsubdued, no matter what the weather may be, the patient should be confined not only to the house but to rooms, as already stated, but when the disease is on the wane the change from a cold situation to one of warm temperature is most beneficial in accelerating a return to convalescence, though the greatest caution is needed in this matter.

The diet of the child during the entire illness is a most important feature in connection with the treatment, and should consist chiefly of milk and farinaceous foods, meat being of too heating a nature, unless the child is very weak and low, in which case tolerably good broth will be the best mode of giving animal food.

VACCINATION.

Unfortunately that dangerous and much dreaded malady—smallpox—is prevalent, and it would be well for parents and others to be reminded of the necessity of revaccination every seven years.

It is astonishing that though this discovery is undoubtedly one of the very greatest blessings to poor humanity it should now be thought so little of, and that there should be some who actually decry and refuse to accept it as such, when there is no doubt that if every one had followed the instructions as to revaccination, by this time smallpox would have ceased altogether.

No language can be too strong to depict the horrors of this disease, or to denounce the culpable ignorance of those who, blinding themselves to the blessings of vaccination, set the law at defiance and thus endanger the lives of their fellow-creatures. Supposing it could be proved (which it cannot) that in some cases it has been the means of imparting disease, the overwhelming number of cases where it has not, but has been a preventive of this terrible malady, ought to show its necessity on the beneficent principle of studying the greatest happiness of the greatest number.

To children smallpox has ever been distressingly fatal, and

though it is impossible to give any course of treatment for its cure in an article of this character, as so much depends upon the violence of the case, the state of the patient's constitution, and the stage of the complaint, it may be said that the old practice of close, hot rooms, warm clothing, and hot drinks are proved mistakes; cool, well-ventilated apartments, comfortably cool bedclothes and cooling drinks having been found to be not only more pleasant but more successful in their results. When the disease first makes its appearance, if the fever be moderate and no professional advice be procurable, the patient should be confined to bed, and cool drinks and a dose or two of purgative medicine administered.

FEVERS.

Measles.—An acute specific disease—febrile and infectious, ushered in with catarrhal symptoms and characterized by an eruption on the skin, which appears usually on the fourth day.

Usual Symptoms.—After a period of incubation varying from twelve to fourteen days (the period of incubation in cases produced by inoculation is seven days), there is manifested alternate chilliness and heat, a quickened pulse, aching in the limbs, slight headache, soon followed by redness of the eyes, coryza, huskiness and hoarse cough. On the fourth day there is an eruption of soft, circular, very slightly elevated dusky red spots, which appear first on the forehead, and extend over the face, neck and whole body. The spots gradually coalesce and present a peculiar crescentic or horseshoe shape. The spots disappear on pressure. They attain their greatest intensity on the fourth day from their invasion, and by the seventh day they fade away with a slight desquamation of the cuticle. As a rule the fever does not abate on the appearance of the eruption.

The contagion of measles is active during the prodromic stage. Red spots are visible on the velum palati four, five, or six days before the eruption appears on the skin.

Occasional Symptoms.—There may be no prodromata whatever, or the attack may be ushered in with convulsions (especially in children), or there may be delirium, or there may be a great amount of fever, or there may be and often is sore throat; more rarely severe headache, and sometimes absence of the coryza.

The eruption may be scanty, or most abundant and confluent, but the quantity of the eruption *per se* does not affect the gravity of the attack; the color of the eruption may be dark, constituting so called "black measles"; there may be petechiæ, which do not fade on pressure and resemble purpura; these do not *per se* affect the prognosis. Miliary vesicles are often present, and when abundant the amount of desquamation will be greater.

Average Mortality.—One in fifteen.

Prognosis.—If uncomplicated, favorable. Unfavorable signs are great fever, great dyspnoea, sudden vanishing of the rash, together with an access of delirium; brown dry tongue, with special severity of some two or three symptoms; petechiæ, with a typhoid form of fever. Capillary bronchitis and pneumonia are the most frequent proximate causes of death.

Treatment.—The child must be kept in bed in a large, well-ventilated room, free from drafts—a point of vital importance, looking to the frequency and danger of chest complications. The diet must be low. Tepid drinks may be freely given. It is very important in measles, as in all infectious fevers, to remove all discharge and soiled linen instantly; the motions should be passed into vessels containing chloride of lime, carbolic acid, or Condy's fluid; this with ventilation will go far to prevent infection. There is no objection, if it be grateful to the patient, to have the body gently sponged with warm water; and if itching be much complained of, inunction with unsalted lard is useful. Cough is often the first troublesome symptom which requires special treatment. A mixture containing citrate of potash and ipecacuanha wine with a few drops of nepoche or Tinct. Camph. Co., will usually quiet this. If the fever runs high, the weak mineral acids sweetened and largely diluted will be very grateful. Or a mixture of citrate of potash and Rochelle salt may be given in an effervescent form. If the fever be of low type, with brown tongue and failing powers, large doses of chlorate of potash will be useful, and stimulants will be required. Yelk of egg beaten up with wine is excellent in such cases. Purgatives, as a rule, are not required; if employed they should be mere laxatives, remembering the diarrhea which usually sets in toward the close of the disease. In cases attended with much nervous excitability and convulsions or delirium, bromide of potassium in full doses will be useful. This drug will also procure sleep, and is better for the purpose than any opiate. Sudden recession of the rash attended with an onset of delirium should be met by plunging the child into a bath containing mustard, and leaving it in until the surface becomes red, which usually occurs in a few minutes. The child should then be rolled in a blanket, and the strength supported by nutritious diet, and stimulants are needed. For laryngitis, a sponge wrung out of very hot water should be applied over the larynx, and inhalation of steam encouraged. Pneumonia will call for a stimulating embrocation over its site, and the administration of stimulants, expectorants—carbonate of ammonia with senega is the best.

Lung and indeed all complications occurring during the early stages are best treated by endeavoring, with external stimulants, *e.g.*, the mustard bath, and internal gentle diaphoretics, to get the rash thrown out freely. Later on this is, of course, inadmissible, and the strength must be supported in every way.

As the disease declines the diet may be more solid, and tonics will be of service. Convalescence from measles is often slow, and as discharges from the ears, eyes, and nose are not uncommon, sea-air is very beneficial in re-establishing the health. Such discharges will require astringent lotions and the use of cod-liver oil and steel.

SCARLATINA.

An acute specific disease—febrile, contagious, and infectious, and accompanied by a peculiar eruption of the skin. After a period of incubation varying according to different authors at from four to forty days, and probably averaging from four to six days, there appears in children vomiting; in older persons

sore throat, and the onset is usually sudden. It is common for adults to be able to fix the hour in which the sore throat began. In children severe vomiting often prognosticates severe throat affection. Next there is noticed fever, a frequent pulse, commonly 130—170, a flushed face, a high temperature (103 or 104 degrees F., even on the first day), hurried breathing, furred tongue, hot skin and thirst. At the same time there is lassitude and restlessness, headache, and at night delirium. On the second day, usually about the root of the neck and upper part of the chest, appears the eruption, which is a scarlet efflorescence consisting of innumerable red spots at first separated by natural skin, but soon coalescing and producing a general redness; the skin is rendered pale by pressure, but the redness immediately returns—the rash is not elevated to the touch. It is most abundant about the hips and loins, and the flexures of the joints—in fact where the papillæ of the skin are largest. The eruption reaches its maximum intensity on the third or fourth day; by the fifth it has begun to fade, and by the eighth it disappears. It goes off in an order corresponding with its invasion. Miliaria are often present, perhaps more commonly in adults than in children; they in nowise affect the prognosis. The sore throat is very important, especially in children. A child may die from throat disease without any complaint about its throat having been made. The throat should therefore always be carefully examined. The tonsils will usually be found enlarged and inflamed, and often coated with a thick white tenacious mucus.

CROUP.

This disease is characterized by difficulty of breathing; hoarseness; a ringing cough, which, when once heard, will be distinctly remembered; the cough is followed by a "*crowing* inspiration."

There is inflammatory fever; frequent and hard pulse; thirst.

The attack is most liable to come on in the night—either altogether unexpected, or preceded by a cold, sore throat, or catarrh.

Treatment.—Apply to the throat very cold wet cloths well covered with dry. Keep the child in bed. Rub with the dry hand the back and limbs, and continue this until a hot bath is made ready; renewing the cold cloths to the throat every few moments. When the room is made very warm and the bath at hand, place the child in the hot water, as hot as can be borne, and rub the chest and abdomen and the whole body very briskly. Add more hot water, and keep the body (even to the neck) immersed.

Have a dry hot sheet ready in which to wrap and rub dry the little patient. If fever is high, now put on the abdominal bandage wrung from warm water. Cover well with dry flannel—a small blanket or even a good-sized one is none too much. Apply again the cold wet cloth to the throat. Keep the feet warm; and, if the breathing is not easier now, foment the throat and upper part of the chest for twenty minutes alternately with the cold compress.

Pat and rub the back and chest. Manipulate the arms and legs. Give drinks of hot water and of cold. Follow the symptoms with "all diligence." Do not relax effort until the

breathing is liberated. If the bowels are not free, give full warm enema.

If there is tendency to coldness of extremities, give hot foot bath occasionally; also apply dry flannels heated very hot to the throat, if they seem more agreeable than the hot fomentation.

Keep the patient in a warm, well-ventilated room. Give only baked apple, or toast water, or gruel as food, until the symptoms yield positively.

I have been told by my patrons that it often occurs in their domestic practice with children, that, by the time the patient is rubbed with the dry hand, having the cold compress on the throat until the hot bath is made ready, there is no need of the bath; the breathing is relieved. But it is not always so. I have treated cases of what is called "membranous croup," and it lasted persistently for days. I never lost a case of croup. But it is a dreaded disease, and justly so.

MUMPS (PAROTITIS).

This disease often prevails epidemically.

It usually affects children and young persons, and is contagious.

The parotid gland swells; swelling beneath the ear, the chin, and all around the neck, deforming the countenance curiously.

It affects one side only sometimes, but usually both.

The swelling is hot, tender, and painful; the lower jaw can scarcely be moved. In about four days the disease begins to decline, and usually lasts in all about ten days.

Sometimes the swelling suddenly becomes transferred to the mammæ in the female and to the testicle in the male, and may oscillate between the throat and the mammæ or testicle. Metastasis to the brain is known to take place also, but this is rare.

Treatment.—Very little treatment is necessary. Apply warm cloths to the swelling; let them be kept on constantly.

If there is general feverishness, a tepid sponge bath and enema of tepid water. A little gruel or bran tea as food.

Keep the patient comfortably warm and quiet. If metastasis to the parts named occur, a warm sitz bath or fomentation to the affected region will give relief. Keep the feet warm.

Should the brain become affected, give *very hot* sitz and foot bath ten minutes. Follow this with enema of hot water. Apply cool cloths to the head, or, if more agreeable to the patient, warm spongings. Let the patient be kept in bed and seek to induce perspiration by applying bottles of hot water to the back and feet and drinking of hot water.

In fact, the treatment now should be the same as for inflammation of the brain.

DIPHTHERIA.

In this to be dreaded and terrible disease, a false membrane forms in the throat, and if the larynx becomes affected the chances of recovery are very few indeed. Frequent vomiting, diarrhea, hemorrhage from the nostrils or elsewhere, frequency and fullness of the pulse, convulsions, delirium, and coma, are symptoms which denote great danger. Occasionally the muscles of both the upper and lower limbs are affected.

The chief objects in the treatment are to palliate symptoms, and support the powers of life by the judicious employment of tonic remedies, conjoined with alimentation and alcoholic stimulants. The latter are given in large quantities. The best advice to give to mothers in regard to diphtheria is, *send instantly for the doctor. Do not delay one moment!*

ACCIDENTS.

It is an accepted axiom that accidents will happen, no matter how well regulated the household; and though much has been written with a view to avert the more serious calamities supposed to be the outcome of accident, but which are invariably the result of carelessness, children still manage to burn themselves at fires, to scald themselves with hot water, to cut their fingers, to break their heads, etc.

As a rule, the remedies required to be of any service should be applied at once; and it is, therefore, no earthly use suggesting antidotes or appliances only to be met with in a doctor's surgery. I shall, therefore, in the few suggestions I make, more particularly dwell upon those simple remedies which may reasonably be expected to be found in every home.

In the Summer months, when the weather is seasonable, the heat is oftentimes sufficient to cause children to bleed at the nose. In such cases, if the bleeding be not excessive or too frequent, it is not desirable to stop it, as, when caused by an undue fullness of the blood-vessels of the head, it affords great relief. When, however, the bleeding is the result of a knock or blow, cold applications should be applied to the nose or forehead, and the child kept standing in the open air.

Another excellent way of arresting the bleeding is to cause the arms to be raised above the head, and kept so for a few minutes, which will usually have the desired effect. In the event of these remedies proving ineffectual, and it being evident that the bleeding is dangerous, the nostrils must be plugged with pieces of linen rag made into stoppers of oval shape, about one inch in the long diameter and half an inch in the transverse, sufficient linen being left hanging in order to withdraw them when necessary. The great thing to determine in cases where the bleeding is not the result of accident is whether it be a disease, or Nature's mode of assisting the removal of one; and this, of course, can only be arrived at by a knowledge of the child's state of health at the time.

CUTS.

With regard to the bleeding caused by a cut from a knife, or something similarly sharp, if it be only slight, after being bathed with cold water, the edges or sides of the wound should be brought together and bound with narrow strips of arnica plaster, if this is to be had; but if not, a simple band of linen, smeared with the white of an egg, will be the best substitute. If the band becomes tight, and causes pain owing to the swelling, don't remove the bandage, but insert the blade of a pair of scissors underneath the binding on the opposite side to the wound, and cut the linen across. Where it is necessary to remove the strapping on account of there being pain and throbbing, the part affected should be soaked in warm water, and a soft, warm poultice applied. When the wound does not show signs of inflammation, and the discharge is good, that

is to say, resembling cream in consistence and custard in color, the bandage may be put on again; but when the edges are inflamed, or pale and flabby, and the discharge thin and objectionable in its odor, a single strap of adhesive plaster should be used to keep the edges together, and this should be covered with a warm poultice.

When a mishap of this kind occurs, it is either a vein or an artery that is cut. In the former case the blood is dark-colored, and will flow in a steady stream, which can usually be stopped by the application of cold water or ice, and by exposing the wound to the open air. In the latter the blood is bright-red, and flows in jets, when, if the bleeding is excessive, a strong bandage should be tied around the limb, just above the wound, and between it and the heart, and compressed sufficiently tight (by means of a stick inserted underneath and twisted) until the circulation be stopped.

When the wound is not a clean cut, and there is any foreign substance, such as dirt, hair, etc., it must be carefully removed by sponging with cold water.

BURNS.

Accidents caused by burning demand immediate attention, and can only be cured in one way—by excluding the air from the part affected. Where it is a case of the clothes having caught fire, envelop the child in the heaviest article available, such as a blanket, tablecloth, curtain, etc., and roll it over and over on the ground until the flames are extinguished, in the event of there not being sufficient water at hand for that purpose.

This done, the charred garments should be quickly but most gently removed, and cut away, instead of being torn, from the body, in order that the damaged skin should not be unnecessarily irritated; but where a piece of the underlinen happens to be burnt into the wound, or is not easily detached, cut away all round it, and leave it to come away afterward. Then immediately cover the injured surface with something that will exclude the air, either with flour sprinkled thickly over the wound, with cotton-wool steeped in oil, or with a piece of linen on which is spread a layer of soap about the sixteenth of an inch thick. When procurable, a better remedy than either of those mentioned is to apply strips of lint saturated in carron oil, which dressing should be left on as long as possible until they become loosened or objectionable from the discharges, it being most desirable that these bandages be changed as seldom as possible, as their removal is apt to cause detachment of portions of the new skin, which is most painful and undesirable. Where there is much discharge it must be removed, and the place kept as clean as possible.

When the injury is of an extensive character, and a shock ensues, the shivering is best checked by the application of hot bottles to the hands and feet, and the administering of hot drinks—either warm sherry or warm brandy and water. To prevent disfigurement from accidents of this nature, the child must be carefully watched until the part is completely healed, and must be prevented from sitting or lying in anything but a straight posture, to avoid contraction of the skin.

The danger attending burns depends more upon their superficial extent than the depth of the injury—those to the body,

head or neck being much more dangerous than those to the hands or feet, the neck being the most risky portion of all.

Where the part is simply blistered, though these be extensive in character and large in number, it is comparatively of little moment as long as they are whole. They must consequently not be broken, but allowed to remain, and the fluid to accumulate till the new skin forms underneath. When this formation takes place, the part becomes distended and painful, there is a red line round the edge of the blister, and the contained fluid looks milky. It may then be let out by puncturing with a needle, so that it all escapes.

SCALDS.

Scalds from hot water, as a rule, are not so severe, as, excepting in extreme cases, the scurf skin is only raised like an ordinary blister, and the dressing being wet, can be removed without difficulty. Any of the remedies prescribed for burns are equally efficacious for scalds, but if the scalded surface be instantly covered with cotton-wool, it is, if the accident be of a slight character, sufficient. Another admirable remedy, more particularly on account of its usually being "in the house," is lard. That specially prepared by chemists is, of course, the best; but this only means the ordinary kind divested of the salt by washing. It should be thickly spread on pieces of old, soft linen, and when placed on the scald or burn be kept in its place by bandages of lint, or, better still, by strips of calico torn from an old garment, always bearing in mind that the great thing is to protect the damaged part from the air, and remembering on no account to apply cold water or similar cold bandages.

BRUISES.

Bruises from knocks and tumbles are by far the most frequent of the numerous accidents of the nursery, and where the injury is slight and the skin not lacerated, a warm application of arnica (which should always be kept where there are children) and water, in the proportion of one part of arnica to ten of water, is advisable; but in the absence of this, the old-fashioned remedy of covering the bruise with fresh butter should be resorted to.

Jammed fingers, through the unexpected shutting of a drawer or door, though not usually looked upon as at all serious casualties, may sometimes be attended by the most serious consequences, for if all the parts of the end of the fingers be injured, the whole (bone and flesh) may mortify. In ordinary cases of this kind the best and quickest way of obtaining relief is to plunge the finger or fingers into warm water as hot as the child can bear it. By this means the nail is softened, and yields so as to accommodate itself to the blood poured out beneath it, and the pain is speedily lessened; the finger should then be covered with a bread and water poultice pending the surgical treatment necessary where the fingers are badly crushed.

Instant care and attention in such cases will often prevent the loss of the nail, a result to be avoided if possible, since the formation and growth of the new nail are necessarily slow, and changes of shape frequently occur, sometimes resulting in permanent disfigurement.