Herald of Health

Vol. 4 Lucknow, U. P., August, 1913 No. 8

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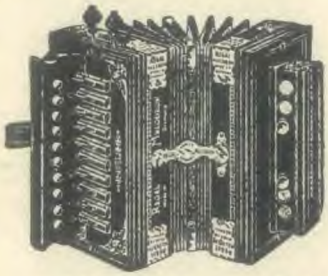

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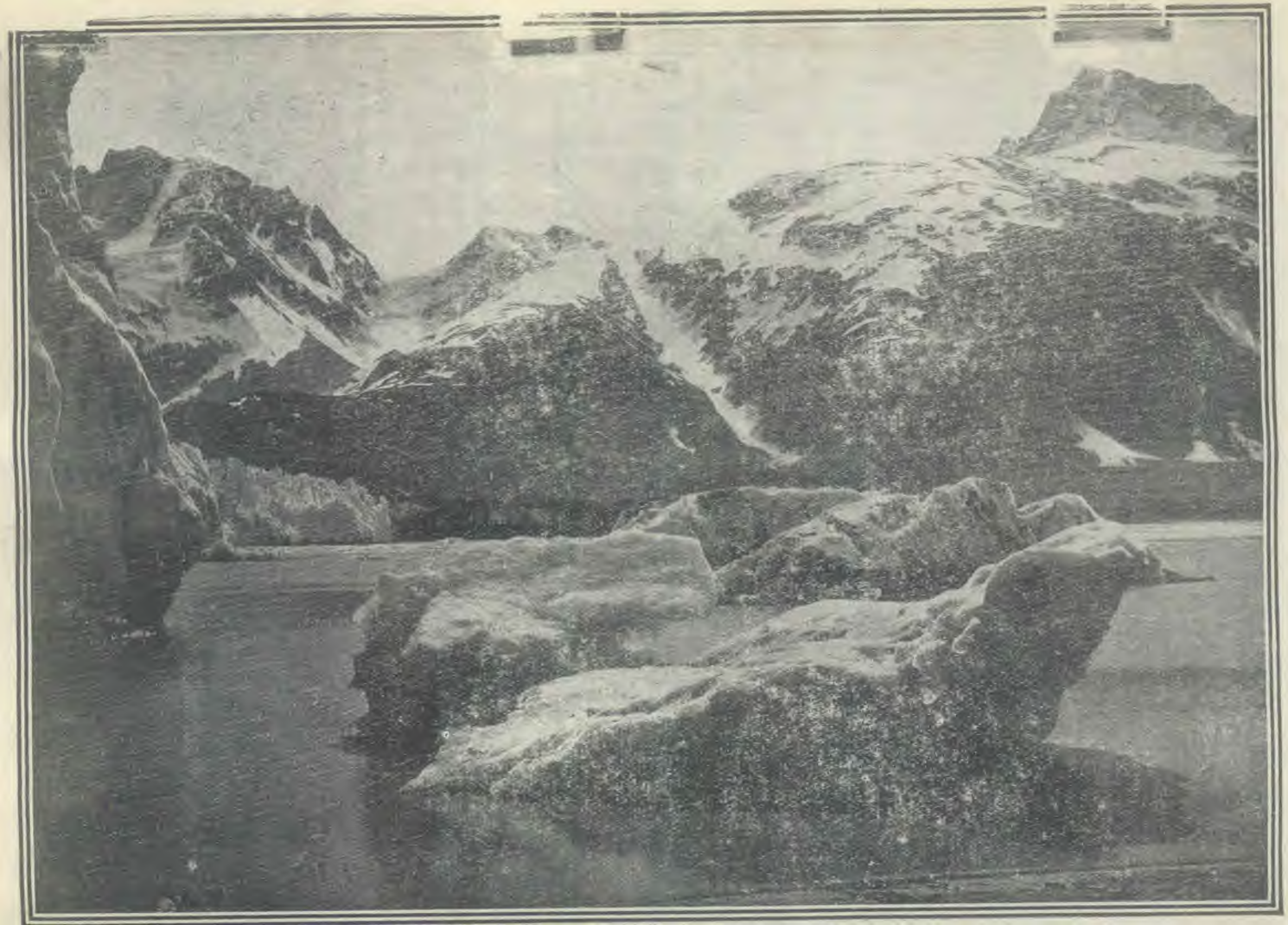


HERALD OF HEALTH

The Indian Health Magazine.

V. L. Mann, M. D., Editor - - - - - S. A. Wellman, Asso. Editor.

Vol. 4 Lucknow, U. P., August, 1913. No. 8

An Avoided Subject

As we stroll among the flowers we note the fragrance, the soft velvety texture, and the varied tints, and remark on the fascinating things of nature. On the other hand the scientist in his walk through a garden looks upon these same characteristics in the flowers as a means to an end, reproduction. He looks upon the flower as so many petals, sepals, stamens, and pistils, and to him these parts of the flowers are fascinating. To him the fragrance is to attract the humming bird, the sweetness of the pollen is a trap for the bee, the tints to entice the eye, and the velvety texture to make a soft carpet for the feet of the insect kingdom. All of these agencies serve to carry the pollen of one plant to the pistils of another and thus aid in reproducing their species. The whole domain of nature is engaged in this great process of reproduction.

The perpetuation of the species in man was ordained by the Creator, but it is a subject around which a cloak of mystery has been thrown because of the vulgarity and misuse to which it has been put. Custom has decreed that mere mention of this subject or things pertaining to it is vulgar. Ought this to be? Do not think for a moment that this subject should be a topic of common conversation either in the home or abroad. This would be to take an extreme position. But we as parents should take the time to instruct our children in the laws of life and health in these things as in others, and such instruction will act as a rudder in the stress of life. It will bring humanity into closer relationship with its own being and thus avoid the "sulphurous rifts of passion and woe."

In the last decade a strong sentiment has grown up among social workers and medical men of all lands that part of the early education of the youth should be along the lines of reproduction and sex hygiene. It is unquestionably a great mistake to let the child pick up his information on this subject, a bit here and a bit there from sources that are anything but wholesome in character. We believe that this early training should be given by the parents. But the great difficulty lies in the fact that most of the parents themselves are ignorant of the subject. The father and mother have themselves picked up the information they possess in this matter in a vulgar way during their childhood. The children follow in the parents' footsteps, and so on from generation to generation. Some survive such a training and turn out well, but while a few may survive unscathed apparently many lives are wrecked and ruined. Probably ninety percent are influenced for life by a wrong training in youth and childhood.

When should we begin such a training? What shall we teach? How shall we teach it? These are questions of vital importance. The foundation for this work should be laid early. We think that the instruction should begin with a

study of the reproductive processes of the plant kingdom. This will lay the foundation for the instruction in human physiology of sex which will follow when the mind is mature enough to grasp the analogy between the two. The child which gains its knowledge of this subject from the parents in this way and not on the street will look upon the vulgarity usually attached to this matter as foolish and unfounded. In after life his heart will be thankful for the early training that has saved his mind from the vulgarity of the usual training.

When the young mind is asking questions as to the origin of the baby of the family, and we are wont to tell the story of the doctor and the stork, or similar fables, it is time for the preliminary training of the child in these lines to begin. A proper training of the child will give the parents a hold upon their little one that could not be gained in any other way. The child will confide in the parents, and they will in turn have an opportunity for giving advice that is so necessary at this period of life.

As a child advances toward the age of puberty at 11 to 14 years marked changes take place in the processes of the body. It is a time when the health needs especial care. The mother and the father should take time apart from their busy routine of life to instruct the child in the best way to conserve his or her energies. At this age both boy and girl become markedly changed. The boy takes on strength of character, determination, and initiative which are representative of his sex and make for success later in life. On the other hand the girl naturally loses her frolicsome spirit and assumes a more retiring nature which if not warped will be a guard against wrong social influences in after years. Up to the time of puberty the life of the boy and girl has been much the same. From this time the girl begins to blossom into a woman and the boy to become a man.

The hygiene of adolescense consists in abundant sleep and good nourishing food, plenty of exercise, little responsibility, not too taxing school work, and a dormant condition of the animal propensities. If these rules are observed it would make a marked difference in the strength and physical make-up of the individual in later life.

In India there is no doubt but that the small average stature and lack of strong physical development is due, partially at least, to the early marriages that have been the custom of centuries. Women should not be subjected to the wear and tear consequent to motherhood before the age of 20, and even later than this would be better. What a strain it must be at the age of 14 or 15 years to assume the responsibilities of motherhood and the succeeding years of care while the bodily functions have not reached maturity?

The habits of the child at the age of puberty should be carefully guarded. Tobacco, alcohol, tea, coffee, condiments, spices, and rich foods should be avoided as they weaken the nerve forces of the youth, giving a poor start in life. Excitable reading matter, as wild adventure stories, novels, and trashy literature of all kinds should not be countenanced as they tend to excite the nervous system and increase the animal passions. This is a time of life that habits are readily formed, and the boy or girl should have the best habits set before him or her that these may become a part of the routine of their lives. Bad habits will but oppose themselves to the peace, happiness and longevity of our children. On the other hand the good habits formed at this period will act as an anchor in the temptations and trials and discouragements that will afterward come to them.

"A LAUGH is worth a hundred groans."

General Articles

The Divorce Problem--How Solved?

D. H. KRESS, M. D.

[Dr. Kress is widely known as a lecturer on hygiene, having conducted campaigns of health education not only in various parts of the United States, but also in England and Austria. Recently his lecture on divorce caused much comment in the daily newspapers. The doctor certainly has some original ideas on the subject of divorce, and he seems to be well fortified with sustaining facts.—ED.]

FORTY years ago divorce was seldom heard of in America. Since then each year there has been an increase entirely out of proportion to the increase in population, until at present it has assumed the form of an epidemic. Chicago and Cook County courts alone granted 33,906 divorces during the past twenty years. Not far from one million divorces were granted in the United States during the same period. It was estimated that during the year 1896 there were seventeen thousand divorces in the United States. Eight years later, or during the year 1904, there were over seventy-two thousand; and the present year there will be between eighty-five thousand and ninty thousand divorces, at the present rate of increase. Divorce is increasing two and one-half times faster than the population.

In the year 1906 there was one divorce to every twelve marriages; at the present time there is probably one to every ten marriages. In some States where divorces are easily obtained, the percentage is still greater; for instance, in the State of Maine it is one to seven, in California one to six, in the District of Columbia one to four. In the city of Los Angeles the divorce rate has reached one to every three marriages.

The fact that during the year 1900 there were seventy-three divorces to every one hundred thousand population, while during the year 1890 there were only thirty-eight to one hundred thousand of the population, affords some idea of how rapidly divorce is increasing. By many there is no more sacredness attached to the marriage ceremony than there is to an ordinary business union which may be severed whenever desired by either of the contracting parties.

This is a serious matter, for upon the stability of the home rests the stability of the nation. Anything that strikes at the well-being of the home directs a death-blow at the heart of the nation itself. It is one of the evidences of national decadence.

Divorce Prevalence a Symptom

Divorce is not necessarily an evil in itself. In some cases it is a blessing and a benefit to society. The real evil exists in the diseased social condition that makes necessary this surgical operation on the social body. The prevalence of divorce is a mere symptom of a sad and degenerate social state. The remedy lies not in stricter divorce laws, but in the removal of the causes of this unhealthy social condition.

It is, of course, unwise to make easy by law a custom that tends to ruin the home, for the easier it becomes to obtain divorce; the more pronounced will become the causes that are responsible for it. There is no doubt that many of the differences that arise in the home could and would be

smoothed out if divorce was not so easy to obtain.

Lax Marriages

To many the marriage vow no longer means "until death do part us." There exists a strange laxity in regard to this union. This is manifested in sensational marriages,—marriages in balloons, in an automobile while running at top speed, in a cage with a lion, etc.

Recently a young woman, in order to determine which of two supposed affinities she should take, decided the matter by tossing up a penny. Ten months later, with a helpless babe in her arms, she appealed to the court for a divorce because of cruelty and non-support. In another case a girl became infatuated with a prisoner during his trial. He was convicted of manslaughter and sentenced to two years in prison. They were married before he was sent to the penitentiary. After his term expired, they lived together four months. The woman asked for a divorce because ten times he had deliberately tried to take her life.

I remember a pure, innocent young woman falling in with a reformed morphin and cocain addict. Although he was much older than she was, they were married. To them was born a sickly, shriveled up child. Later reverses and disappointments, which should easily have been thrown off by one possessing a stable nervous system, caused him to return to the old habits. The home was ruined, the young wife having to find shelter under the roof of her parents. Young women can not afford to run the risk of marrying men in order to reform them, neither can they afford to run the chances of marrying reformed habitues.

Anciently, while none were required to marry those whom they could not love, it was customary for young men and women before taking so important a step, to seek the counsel and advice of their more experienced parents. This advice was generally heeded; and when not heeded, sorrow was usually the result.

Sentimentalism, passion, and impulse are responsible for most of the ill-mated marriages. With many it is not a question of whether such a union is conducive to the well-being of the contracting parties, and to their offspring, should they have any, but merely a question of "Do we love?"

Often good men have made grievous errors in the selection of their life companions. John Wesley, it seems, made a serious mistake. Later in life, when a young man wrote to Wesley for advice concerning which of two young women he should marry,—an amiable girl who was not a church-member, or a hot-headed, ill-tempered girl who was an active church worker,—Wesley replied, "Marry the woman of a loving disposition."

Divorces are more frequent in childless homes than in homes where the child is welcomed. The child forms a sacred bond between husband and wife, and helps to make the home attractive and desirable. Recently I was present in a court-room where three divorces came up in succession. Every one of these I found to be childless marriages. The presence of children in the home prevents many estrangements between husband and wife. The happiest homes are the homes where there are children and where they are desired.

Novel Reading as a Cause of Divorce

Some time ago it was announced that a certain sensational novel caused the death of a reader, the excitement produced being responsible for heart failure. Whether this is true or not, one thing is certain, that the free reading of sensational novels has ruined many a home. It is largely responsible for the abnormal man and the hysterical woman. The novel-reading habit is about as demoralizing as is the drink or morphin habit, and it is about as difficult to give up.

Probably not less that eighty per cent of the books in our public libraries are fiction. Boys and girls have access to these books, and, unguided, they select the most sensational ones. This makes the public library a menace and a source of evil. Novel readers live in an unreal atmosphere. They usually look for and marry, as they suppose, the hero of their favorite novel. If the real man fails to meet their ideal, disappointment results, and divorce follows.

Nature's Defences

WM. W WORSTER, A. M., M. D.

THAT the body is physically in constant warfare with an invisible foe is now a generally recognized fact. Though the enemy is unseen, its action in many instances is more ferocious than that of the wild beasts of the forest. This enemy consists of minute pathogenic bacteria, or in more simple language, disease-producing germs.

They attack us from without and within, and are no respecter of persons. In fact, more deaths occur as a result of their action than are caused by all the armies of the world. Being invisible, they are very deceptive. If we could see them, we should flee in horror; but because we can not, we many times become their victims. Hence it is necessary for us to be constantly in fighting trim, with our defences always safe and reliable.

The strength of an army depends as much upon its defences as upon its numbers, if not more. This has been demonstrated in nearly every military engagement. Three hundred Spartans were able to hold back the hordes of the Persian army. This was evidently due more to defence than to numbers. These defences may be either natural or artificial. They represent the usual artillery, embankments, trenches, forts, and the like. The body in its constant warfare against germs and their toxins, depends wholly upon its defence. These, like those of the army, may be the natural or artificial, more technically speaking, natural or acquired.

Natural Defences

The natural defences of the body may be divided into two classes, protective and destructive. The former include such defences as protect the body against the entrance of germs; the latter are those which destroy the germs in case they pass the first line of defence. Among the protective defences possibly the most important is the skin with which the all-wise Creator has covered the body. This is to the body what an armour is to a modern war-ship. The nose and throat are parts of the body unprotected by this armour, and as a consequence, need special protection to safeguard them against the inroads of the enemy.

The nose is protected by numerous hairs, which catch the bacteria from the germ-laden dust and prevent their entrance into the lungs. Perchance these should fail to filter from the air all the germs, or one should be a mouth breather, nature has a second and possibly more efficient protection. The trachea, or windpipe, is lined with short, fine hairs called cilia. These have a constant upward motion. The germs usually lodge in the mucus secreted by the bronchial tubes, and the cilia carry them upward until voluntary action expels them from the body by a cough. The mouth and throat would form the most easy route for the entrance of germs into the body, were it not for the gastric juice in the stomach. This juice contains a dilute solution of hydrochloric acid, which, when

in normal amounts, has a germicidal action. That the gastric juice contains this acid for its disinfectant properties is more evident when we consider that of all the digestive juices, it is the only one containing an acid.

If perchance the germ should gain entrance into the body, it at once begins the formation of a toxin that is more disastrous to the body than the germ itself. Fortunately, the body is provided by nature with defences to destroy the germ and to neutralize its toxin. The blood, the medium by which the germ would be carried through the body, manifests in health a decided germicidal action. But the body does not depend upon this. It has special and more powerful defences.

Germs that gain entrance into the body through an abrasion of the skin caused by an accident do not pass directly into the blood stream, but are picked up by the lymph, which passes through a series of lymphatic glands before gaining entrance into the general circulation. These glands have a decided and positive destructive action upon all germ life. Sometimes the first gland is not capable of destroying all the germs, and the remainder pass on to the next gland. Many times the glands filter out the germs, but are unable to destroy all of them. In this instance the glands are the seat of an inflammation which may result in suppuration. Tuberculous glands of the neck are good examples.

If the germ gaining entrance to the body with water or food escapes destruction by the gastric juice, it may be absorbed by the small blood-vessels and carried directly to the liver, where it usually meets death; in fact, the liver and the ymphatic glands may truly be called the life preservers of the body.

If, however, neither the liver, the lymphatic glands, nor the blood destroys the germs, the invaders are usually lodged in some portion of the body, and there excite a diseased condition. Now another means of defence is brought into play. Nature sends a large amount of blood to the affected part to "wall it off." This process we term inflammation. The white blood-cells are despatched to this infected field, and at once begin a hand-to-hand encounter with the germs. The blood-cells usually succeed in destroying them, but in case they fall victims to the germs, the dead cells manifest themselves in the form of pus. If enough cells succumb, an abscess is formed. The pus discharged from such abscesses, in the past was looked upon as corruption extracted from the blood, and as a result the body was considered to be in a much healthier condition than before. This is in no sense true. The body would have been stronger had it retained these white cells in the living form.

If the germs temporarily overpower the white cells, or the "struggle" is somewhat delayed, the germs are very active in the formation of their toxin, which is readily absorbed in the blood. It is the amount of the toxin that produces the severity of the disease, and not the amount of germs actually present. During the time that the white cells are carrying on their warfare, the blood is making a new substance called antitoxin, which neutralizes the toxin. This saves the body from a fatal intoxication. It is the amount of this antitoxin manufactured in excess of the real amount needed that determines the immunity of the patient against certain diseases. Some antitoxins are more stable than others, and for this reason immunities against certain diseases are more lasting than others.

Acquired Defences

Advantage is taken of the destructive defences to produce an acquired defence. Blood serum from animals that have been immunized against certain diseases is in

jected into the blood of human beings to give them a relative immunity against the same diseases. Special advantage is taken of this in the antitoxin administered in diphtheria. Another form of acquired defence is that used in the prevention of smallpox. This is an injection, not of antitoxin, but of the real toxin. The body at once begins the manufacture of its own antitoxin, and thus produces the same effect as when the antitoxin is injected.

Recently there has been discovered a new substance to increase the defences of the body. The introduction hypodermically of several million dead bacteria will produce a reaction in the blood which increases its power to destroy the live germs of the same kind. This not only gives acquired immunity, but can be used as a destructive defence if injected during the disease. It bids fair to revolutionize the treatment of germ-diseases.

In consideration of the defences with which nature has so amply provided us, it behooves each one of us so to care for his body that he will always be in fighting trim. It is better to prevent a disease than to cure it. An ounce of precaution is better than ten pounds of cure.

More About Adenoids

EULALIA S. RICHARDS, L. R. C. P. AND S. EDIN.

DURING recent years much has been said and written concerning adenoids, but even yet there is a tendency among parents to overlook or ignore this condition in their children. Since the results of neglecting the disease are so serious and far-reaching, it seems the part of wisdom to repeatedly consider the subject, giving "line upon line, and precept upon precept."

By *adenoids* is meant an excessive growth of lymphoid tissue in the pharynx, that is, the back of the nose and the upper portion of the throat. This lymphoid tissue is similar to that which occurs in the tonsils, and normally exists in the pharynx in small amount. In the condition known as adenoids, there is an abnormal development of this lymphoid tissue, resulting in varying sized masses of soft, fleshy, sponge-like tissue. The condition which leads to this excessive growth is most commonly that of chronic congestion or catarrhal inflammation of the nasal mucous membrane.

The immediate result of the presence of this growth is partial or complete obstruction to nasal respiration. Inability to breathe through the nose causes such inconvenience and discomfort to the child as to warrant the parents in seeking a prompt remedy for the defect. However, there are other far more serious results which must be reckoned with. It is not advisable in this short article to attempt an explanation of the whys and wherefores. A mere mention of the disastrous results of the disease should be sufficient for the parents who are deeply concerned as to the welfare of their children.

The Results of Neglected Adenoids

1. Inability to breathe through the nose.

2. Alteration in the facial contour and expression. The nose appears small and pinched, the lower jaw recedes, and there is a general expression of dullness or vacancy.

3. Alteration in the voice. The voice becomes thick and "nasal," and lacks that clearness and sweetness which should always characterise the childish voice.

4. Deafness either slight or serious, and tending to become permanent.

5. Various deformities of the chest, particularly the condition known as "pigeon-breast."

6. A marked tendency to tuberculosis

(consumption) and other infectious diseases.

7. Faulty development of both mind and body.

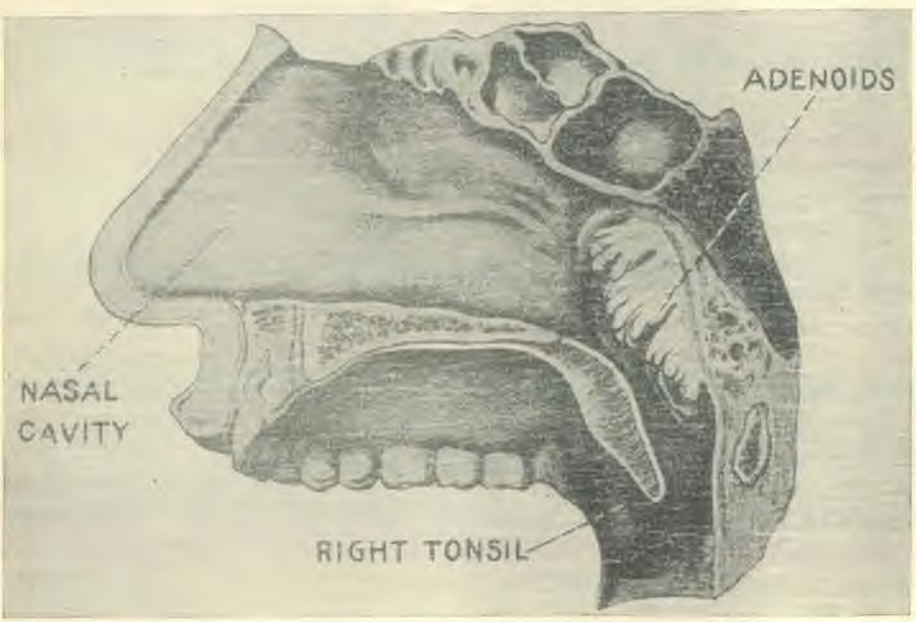
It will be seen from the foregoing that it is a great injustice to a child to neglect adenoids, as their continued presence may result in serious and life-long defects.

The Recognition of Adenoids by the Parents

Mouth-breathing is the first symptom, and one which should immediately arouse the suspicion of the parents. At first this symptom may be noticed chiefly at night, especially if it be accompanied by snoring, but later on the child will be observed to breathe habitually through the mouth by day as well as by night. Mouth-breathing, together with a catarrhal discharge from the nose and frequent complaints of sore throat, should be sufficient to lead the parents to seek the advice of a physician. It is most unwise to wait until the child's hearing is affected and his general health suffers noticeably. While it is well for parents to frequently examine the throats of their children for swelling and inflammation of the tonsils, it should be remembered that adenoids cannot be seen, their presence being determined largely by the child's symptoms.

The Treatment of Adenoids

The only satisfactory treatment of adenoids is complete removal by means of a surgical operation. The operation is, however, a simple one, and if performed by a skilled physician the dangers attending it are very slight. The danger to a child from neglected adenoids is far more serious than the danger of their removal by surgical operation.



A question often asked is, When should adenoids be removed? Our answer would be, Just as soon as their presence is determined. There can be no possible advantage in postponing their removal, even in the case of a delicate child, for their very presence prevents the child from gaining strength, and his condition is likely to grow worse rather than better.

But are not the adenoids likely to return after removal? asks another parent. No, it is very seldom that adenoids return if completely removed, provided the cause

of the growth be also removed. But even though there should be a subsequent return of the growth, it may again be removed, and thus the child's health will not be seriously affected.

A third question sometimes asked by parents who are doubtful of the advantages of operative treatment is this, Will not the adenoid growth disappear spontaneously later in life? It is true that as the youth develops into manhood or womanhood the adenoids tend to shrink or atrophy. But suppose these growths should entirely disappear during mature years their disappearance at this late period would not atone for the evils wrought by their presence through the long years of childhood. Many a man is obliged to carry about in his body through life the evidence of neglect through childhood. Deafness, a disagreeable voice, an uncomely face, and a weakened body, constitute a serious handicap to a man who would successfully perform his part of the world's work.

The After-Treatment of Adenoids

For a number of hours after the removal of adenoids the nasal mucous membrane is swollen, and the child may experience difficulty in breathing through the nose. This trouble shortly disappears, however, and from this time on the child must be encouraged to breathe through the nose. The older the child the stronger will have become the habit of mouth breathing, so that it may require a little time and oft reminding before the child realises that he can breathe in the natural and comfortable way. If there is a tendency to mouth breathing through the night, the child should be made to sleep upon the side rather than upon the back. In some cases it is necessary for a short time to support the lower jaw during sleep by means of a bandage tied tightly and secured over the top of the head. But in most cases the removal of the nasal obstruction leads promptly to the resumption of correct breathing.

The catarrhal condition which often accompanies adenoids is usually relieved by means of the nasal douche. To a glass of tepid water add half a level teaspoonful of table salt. Instruct the child to immerse his nose in the salt water, and to draw or breathe the solution up into the nose, allowing it to escape through the mouth. The nose will thus be cleansed from mucous or any dried secretion. For a time this nasal cleansing may well form a part of the daily morning toilet.

The Cause of Adenoids

For every effect there must be an adequate cause, or, in the words of the wise man, "The curse causeless shall not come." It is as useless to endeavour to cure a disease by merely removing the symptoms while the cause remains, as it is to attempt to destroy a poisonous plant by plucking the leaves while the root is undisturbed. We must remove the cause in order to cure the disease.

We believe that the chief cause of adenoids is the insufficient clothing of children's legs and feet. The effect of cold upon the skin is to contract the superficial blood vessels, driving the blood back into the internal parts, there producing various congestive and inflammatory conditions. Hundreds of women have experienced painful inflammations of internal organs brought about by an occasional chilling of the lower extremities. Yet these same women thoughtlessly permit their young and delicate children to have their limbs largely unclothed even in the coldest weather. We wish that the old-fashioned idea that exposure to cold hardens a child's constitution had never been thought of. The fact is that a child's constitution is more taxed by exposure to cold than is an adult's. The child has a larger skin area in proportion to his size than has the adult. This means then that the child must expend a larger proportion of his vital energy in keeping his body warm than does the adult.

It is quite true that over-clothing the body lessens its ability to resist disease. But it is equally true that habitual exposure of the limbs to cold tends to produce catarrhal inflammation of the nose, throat, and chest as well as of other internal organs.

The safest plan is to clothe the body itself rather lightly, so as to avoid overheating, and at the same time to see that the legs and feet are warmly clad. The extremities being small in circumference and farther removed from the heart, are more readily chilled than the body, and so require warmer clothing.

The children who come to the physician for the removal of adenoids are almost invariably the children whose legs are bare in winter as well as in summer. Let the children who have been obliged to undergo operation for adenoids always wear warm stockings (not socks) in the cold weather, and in ninety-nine cases out of a hundred, there will be no return ot the trouble.

Are Bad Teeth Caused by Bad Stomach?

H. F. RAND, M.D.

YES, and no. But usually the trouble which causes bad teeth also causes a bad stomach. Those who use largely of liquid foods for any great length of time injure their teeth and injure their stomachs. Solid foods are what give exercise to the teeth and stomach. If a person should abstain entirely from solid food for twenty-four months, the gums will recede, the teeth become loose, and the patient will decline in health very rapidly. If such a person could resume the eating of solid food, in a few months' time the gums would become firm and healthy, and the teeth would again become firmly fixed.

We have known of teeth being placed in the cavities in the gums and in the course of time becoming as firm as other teeth. There is no doubt that this principle will be used more and more by dentists as their practice and efficiency increase. When this is properly done the tooth is just as solid as an original tooth, and fully as serviceable.

And these teeth will be a great help to the stomach at the same time as they assist in the mastication of food. When the teeth are loose, massage to the gums properly applied, will be of great assistance, if not an entire relief from the difficulty.

By the use of carefully selected disinfectants the teeth may often be saved and fully retain their usefulness. The teeth should be carefully brushed, using warm water to rinse out the mouth, before and after each meal, thus removing the particles of food from between the teeth. At intervals they should be carefully cleaned with some good tooth powder. And occasionally they should be carefully examined by a competent dentist and any cavities or disorders attended to.

The teeth should not always be brushed in the same direction, but care must be taken to brush up and down as well as across, so that all of the particles of food may be removed from between the teeth. Water should be forced through the space between the teeth. This is the matter that in time decomposes and causes decay of the teeth. A good brush, properly applied, will do much to prevent decay, and there is nothing better than warm water as a tooth wash. You may add to this, with benefit, one part of dioxygen to ten of water. Care should be taken not to chill the teeth. You would be surprised to see how much matter could be removed from the teeth in this way, if you could take the water and look at it through a

microscope, even after you have brushed the teeth as carefully as you can. It is also a good practice to use a thread to work backward and forward between the teeth. You will see that this attention makes a great deal of difference in the health of the teeth, and in the general health of the body as well.

Rheumatism

W. HOWARD JAMES, M. B., B. S.

ACUTE rheumatism (rheumatic fever), subacute and chronic articular rheumatism, rheumatic arthritis (sometimes called chalk rheumatism on account of the deposit of white substances around the joints), and gout may be looked on as a family of diseases, for all are dependent on similar causes. Our knowledge of bacteriology enables us to understand to some extent why one person on exposure to cold contracts bronchitis, another pneumonia, another pleurisy or consumption, but we cannot as yet state why under similar circumstances one person should contract rheumatic fever, another articular rheumatism, and a third gout. Some peculiarity of constitution, idiosyncrasy as it s conveniently termed, seems to determine whether certain causes will produce rheumatism in one of its varied forms, or gout. Heredity is undoubtedly a very important factor. The scriptural statement that the "iniquity of the fathers" is visited "upon the children unto the third and fourth generation" is a scientific fact. "The fathers have eaten sour grapes, and the children's teeth are set on edge." Bad habits, carelessness in eating and drinking, often produce worse effects in future generations than in the primary individuals; thus to sin against one's own self is to sin against humanity and against those we most love. Even the child at the breast will suffer from its mother's excesses or intemperance in either eating or drinking.

It is now generally admitted that the causation that lies behind the rheumatic family of diseases is a retention in the system of unoxidised nitrogenous waste products, insufficiently burned "physiological ashes." Nitrogenous products, when sufficiently oxidised or burnt up, form urates which are readily soluble in the fluids of the blood and quickly excreted chiefly by the kidneys. When, however, these products are not sufficiently oxidised, uric acid, xanthin, hypoxanthin, and similar poorly oxidised substances, are formed which are not readily dissolved in the fluids of the body, and which are consequently only excreted with difficulty. Dr. Haig demonstrates that headache, epilepsy, mental depression, or melancholia and suicide, high blood pressure, angina, asthma, Raynard's disease, are produced by uric acid in the blood; and that gout and rheumatism are due to the presence of uric acid "outside the blood" in the structures around the various joints and muscle sheaths.

All the warmth and energy of the body are produced by the oxidation of our food in the various tissues and organs of the body; the foods, after many vital changes in the digestive organs, glands, and blood, are first stored in the tissues, and then burnt up as the various energies are required. In the burning up of non-nitrogenous foods there is but little "ash" to be removed, for the waste products are chiefly represented by carbonic acid and water. The nitrogenous foods, however, are not so completely burnt up; they leave ashes of a more solid nature, the urates, uric acid, etc., already referred to. As long, however, as these are properly burnt up no harm results, but the only partially burnt up products, uric acid, etc., have a great tendency to remain in the system. Under normal conditions about sixteen

grains of these products are excreted daily by an average individual. If more than this amount of these products are formed in or added to the system daily, they remain in the body, and thus create a predisposition to disease. Dr. Haig, in his exhaustive and excellent work on "Uric Acid and the Causation of Disease," clearly demonstrates that the accumulation of uric acid and similar products, what we may call the rheumatic and gout poisons, in the system is not due to the system producing an extra quantity of these products, but to an increased intake or decreased excretion. In a paper in the "British Journal," 1894, Vol. 2, on the "Direct Introduction of Uric Acid into the Body, Its Bearing on the Prevention and Treatment of Disease," Dr. Haig points out that "Judging from the quantities of various substances taken, and the quantities of uric acid or xanthins they contain, a man may easily introduce nearly two grains of uric acid with an ordinary dinner, . . . and the percentage of uric acid from which this is calculated is probably decidedly under the truth, so that the introduction of four to five grains with a carnivorous dinner is by no means extraordinary." In the flesh of animals there is always some amount of free uric acid or xanthin, and the consumer has consequently to excrete this addition as well as the sixteen grains formed in the body. If he takes in five grains with his meals he must excrete twenty-one grains to maintain normal health. This he probably will not do. Perhaps the uric acid excreted will rise to twenty grains, with the result that one grain is retained in the system. This one grain in a month would mean thirty grains, and in a year 365 grains, and thus a foundation is laid for an attack of rheumatic fever or other form of rheumatism or gout. Clearly, then, a part of the treatment for rheumatic or gouty affections is to avoid adding uric acid to the system by the continual consumption of animal flesh. All medical authorities are agreed on the advisability of greatly restricting the use of flesh foods in all rheumatic and gouty affections. Dr. Haig enumerates some of the foods ordinarily consumed which contain uric acid and xanthins, and gives the number of grains in each pound. We will quote a few:—

Lamb (cold roast leg)	3.5	grains per lb.
Hospital beef tea ..	7.0	,,
Kidney of sheep ..	3.5	,,
Liver of sheep ..	6.5	,,
Fowl (breast) ..	1.7	,,
Herring (Loch Fyne's kippered)	6.4	,,
Meat juice	49.7	,,
Meat extract	63.6	,,
Tea	175.0	,,
Coffee	70.0	,,
Cocoa	59.0	,,

"As regards," continues Dr. Haig, "the animal foods, their infusions and extracts, the figures given represent uric acid plus other members of the xanthin group; and tea, coffee, and cocoa contain xanthin compounds, not uric acid; but as I have pointed out, these may, for all pathological and physiological purposes, be regarded as one and the same substance, producing throughout the body and its tissues the same effects. . . . It needs also but a very simple calculation from the figures in the foregoing table to show that tea is by no means the harmless substance it has been supposed to be, and that in place of causing a little dyspepsia by tanning the gastric mucous membrane, it may really bring about, in the course of a year, the introduction of a huge quantity of uric acid, and thus account for some of the most serious effects of collæmia, or arthritis." Hutchison, in discussing the dietetics of gout, shows that caffeine (the alkaloid of tea, coffee, and cocoa) plays an important part in the amount of uric acid or xanthin added from without ("exogenous uric acid") to the blood. "While the nucleins (nitrogenous elements) of the food are the main, they are not the ex-

clusive, source of the exogenous uric acid. Part of it is also derived from such substances as caffeine, and from free 'purins' contained in the food."

It should also be remembered that the pulse foods (peas, beans, and lentils) contain from 0.1 to 0.2 per cent. of uric acid, or xanthin, and should be avoided by the rheumatic. We believe these foods are too largely used by vegetarians, and that the grain foods generally contain quite sufficient nitrogen for the maintenance of health and strength. Eggs and milk are a valuable source of nitrogen, and these contain no uric acid.

The state of the blood is a very important consideration in relation to rheumatic affections. In a perfectly healthy state the blood will dissolve quite a large quantity of uric acid and xanthins, and thus enable them to be freely excreted by the kidneys. The blood is in the healthy state of an alkaline reaction from the presence of sodium bicarbonate in solution. While this alkalinity is maintained, the rheumatic poisons are freely excreted with the urine, but if the alkalinity be lessened, the poisons are held in the system, producing primarily headache, depression, sluggish circulation, and impaired general nutrition. It is a remarkable fact that a dose of uric acid will often relieve these symptoms, and headache, depression, and impaired circulation vanish for the time. The blood thereby loses to some extent its alkalinity; it consequently cannot keep the uric acid in solution, with the result that it is driven out of the blood into the tissues and organs of the body. In this way blood freed from these poisons circulates through the brain and nervous system, and relief is obtained; but this relief is only temporary, the poisons being still in the system quickly find their way into the blood again, and the old symptoms return. A strong cup of tea probably acts in the same way. Animal foods are certainly stimulating. Is it not quite probable that the stimulation is largely due to the free uric acid and xanthins which they contain? The uric acid taken with a meal which partly consists of meat lessens the alkalinity of the blood, with the result that the uric acid is driven into the joints, and thus the individual is increasing his liability to disease of a rheumatic or gouty nature. Sometimes; however, the lining membranes of the heart (internal and sometimes the external) suffer from the rheumatic poison, and heart disease is produced; sometimes the muscles become affected, and the various forms of myalgia result—lumbago, stiff neck, pleurodynia, etc. Even pleurisy is sometimes of a rheumatic nature. Exposure to wet and cold is a frequent exciting cause of rheumatism. The exposure lessens the action of the skin, the acrid secretions are not excreted, with the result that the alkalinity of the blood is lessened, and the uric acid, etc., is driven into the joints. The uric acid in the blood and tissues is the predisposing cause, the most important factor, the exposure is but the match that kindles the flame. Apart from excessive uric acid, cold and wet would not produce rheumatism.

Again, disorders of digestion undoubtedly predispose to rheumatism; improperly digested food and a sluggish liver, which only partially separates the impurities from the food, must lessen the healthiness of the blood, and prevent it from dissolving the rheumatic poisons out of the system. Again, deficient exercise diminishes the excretion of acid from the skin in the perspiration and the intake of oxygen. Exercise always means increased breathing and quicker circulation, The oxygen burns up the nitrogenous waste products, and makes urates instead of uric acid and xanthins, and these, being more soluble, are quickly passed out of the system. The increase of circulation drives the blood more quickly through the skin and the kidneys, and thus the acid secretion of the skin is increased, and the uric

acid excretion of the kidneys improved. A man working in the open air is not anything like as liable to the uric acid diseases as the man with indoor sedentary occupation. A warm, dry climate is helpful in rheumatic and gouty cases on account of the increased activity of the skin and the excretion of acids which would otherwise interfere with the healthy alkaline action of the blood. Abundance of mature fruit with the meals (except when vegetables are taken) will be very helpful in rheumatic cases, the acids of the fruits unite with the soda and other salts always contained in our foods, and produce the salts necessary to maintain the healthy alkaline action of the blood. Dr. Haig's advice is, "When any man feels a twinge in a joint, let him cut down albumens and acids, and take potatoes and apples, and he will soon be all right again." Fruits are not included in the acids, for, as already pointed out, they help in forming the natural alkalis of the blood. Vinegars, malt liquors, wines, however, are prejudicial, also foods producing acid fermentations in the stomach.

Tobacco Destroys Efficiency

EVERY careful estimation from the standpoint of conservation and economy of labour goes to show that the highest skill in the trades and labour is not compatible with the use of tobacco, even with the so-called moderate use. While certain unusual intellects may surmount its depressing influence and still shine out for the benefit and advancement of mankind, it is in spite, not because of tobacco. The drug is not and never was a brain or nerve stimulant after the first, most temporary influence has flown by. The sequel is an invariable depreciation of every ability. Many the bright mind that has been irretrievably dimmed, that dies out, or that barely glimmers at a time that should mark its fullest radiance.

Many of our heart and lung diseases would result in arrest or cure, and many might never have occurred had there been no attendant or antecedent poisoning and tension or depression by the twin drugs, alcohol and tobacco. No one knows exactly the influence of tobacco upon tuberculosis. We do know that the bronchial tubes and the air vesicles of the tobacco subject—the moderate user—are in a state that invites lodgment of any infection that happens to stray along. On this point there is general agreement, that the case of tuberculosis of the lung is rare that recovers while tobacco is being drawn and absorbed into the blood. I have seen more than one otherwise goodly physique yield to tuberculous infection or to pneumonia in which the factor that decided the battle was doubtful, but seemed at least probable to have been some such influence as a failure to react because of alcohol or tobacco.

Do the doctors smoke? Yes, in spite of their knowlege of these medical facts, and often in spite of teaching them. Doctors also use now and again opium, cocaine, and alcohol. In the last two years I have seen an army officer, a clergyman, a prominent actor, and two physicians die in the wards of a general hospital as the result of one or another drug habit. Always the addiction was in association with the tobacco that is supposed to protect against the taste for other drugs. All but one of these died in the public wards, charges of the city.—*Robert N. Willson, M. D.*

"WHOEVER is satisfied with what he does has reached his culminating point; he will progress no more. Man's destiny is, to be not dissatisfied, but for ever unsatisfied."

Omelets

To make an omelet is very simple when one knows how, but it requires a little practise and a little skill to make one to perfection. The omelet is not an expensive dish because a given number of eggs can be made to go farther if made into omelet than in any of the common ways of serving eggs, so that one is repaid for the little extra pains taken in the making of the omelet, both from the standpoint of economy and by the attractive dish which is the result.

One should have an omelet pan kept especially for making omelets. This pan should be kept clean and smooth. It should not be washed, but should be wiped with paper or a soft cloth after using.

An omelet must be served as soon as made. The eater may wait for the omelet, but the omelet must not wait for the eater, or the omelet will be pronounced a failure. Allow one egg for each person to be served. I shall not attempt to give directions for making all kinds of omelets, but will give only a few sample recipes. There are two classes of omelets, those that are light and foamy, and those that are more solid. The latter are more simple and more easily make. An example of this kind of omelet is the—

Plain, or French Omelet

4 eggs
4 tablespoonfuls hot water
⅛ teaspoonful salt

Break the eggs into a bowl, and beat them enough to thoroughly blend the yolks and whites, but not enough to make them light.

Beat in the hot water and salt. Turn into a hot oiled omelet pan. As the part of the egg next the pan sets, lift it by running a spatula or thin-bladed knife under the edges, and allow the liquid portion to run underneath. As soon as all is set, roll the omelet up beginning next the handle of the pan, by tilting the pan and running the spatula under the omelet. Allow it to stand a moment over the stove to give a delicate brown to the under side, then turn on to a hot platter, with the brown side up. Garnish with parsley, and serve at once.

Many variations of this omelet may be made by adding different kinds of garnish to the eggs, or by spreading it over the top of the omelet before it is rolled, or by serving it around the omelet. I might suggest the following:—

Omelet With Peas or Asparagus

Sprinkle nicely seasoned green peas or asparagus tips cut small over the omelet before it is rolled, and serve some of the peas or asparagus around the omelet.

Omelet With Croutons

As soon as the egg mixture is poured into the omelet pan, sprinkle on it a few croutons (thoroughly toasted one-half-inch cubes of bread), and proceed as in making the plain omelet. Garnish with parsley.

Corn Omelet

Add two or three tablespoonfuls of canned corn, or stewed new corn, or fresh corn grated from the cob, to the egg mixture before it is put into the pan. Proceed as in making the plain omelet. Garnish.

Nut Omelet

Sprinkle chopped nuts over the omelet before rolling.

Rice Omelet

Use boiled rice in place of corn in corn omelet.

Olive Omelet

Use chopped ripe olives in place of rice. Serve ripe olives around the omelet on the platter.

Parsley or Mint Omelet

Add a little chopped parsley or a table-

spoonful of finely chopped spearmint to the omelet mixture before putting it into the pan.

Celery Omelet

Sprinkle a little chopped celery over the omelet before rolling. Garnish with tender celery leaves.

Tomato Omelet

Use fresh tomatoes cut into dice instead of croutons in omelet with croutons.

Cheese Omelet

Sprinkle a little cottage cheese over the omelet before rolling.

Orange Omelet

Peel an orange, taking care to remove all the white portion of the rind. Separate the orange into sections. Cut the sections into small pieces. Sprinkle with sugar, and allow to stand one-half hour. Put some of this orange on the omelet before it is rolled, and serve the rest around the omelet on the platter. Garnish with parsley.

Jelly Omelet

Spread jelly over the omelet before rolling, and serve a bit of jelly on the omelet or on the platter beside the omelet. Garnish with parsley.

The other variety of omelet is a little more trouble to prepare; but as one writer says, it makes "a more 'showy' looking omelet, and one which appears larger for an equal number of eggs."

Puff Omelet

3 eggs
¼ teaspoonful salt
1 teaspoonful flour
1 tablespoonful cream

Separate the yolks from the whites of the eggs. Beat the yolks very stiff (success in making this omelet depends as much upon beating the yolks stiff as upon beating the white stiff). Add flour and cream to yolks, and beat again. Add salt to the whites, and beat till stiff and dry. Save out a little of the white. Fold yolk mixture into the whites. Turn into a hot oiled omelet pan. Put the egg white which was saved out along the edge of the omelet farthest from the handle of the pan. Allow the omelet to set for a moment on the stove, then place in the oven on the grate and bake till risen and set; if allowed to bake too long, it will shrink. Make a crease across the centre, and fold one-half over the other half so that the egg white will come between the folds. Slide on to a hot platter. Garnish with parsley, and serve at once.

Instead of putting the egg white between the folds of the omelet, it may be put on top of the omelet after the omelet is folded, and the omelet set into the oven long enough to brown the egg white.

This omelet may be made with the same variations as the French omelet, or may be served with cream sauce, parsley sauce, or tomato sauce.

OTHER RECIPES

Lemon Bread Pudding

Soak one cup of breadcrumbs one hour in one pint of milk. The bread must be just right; second day bread is best, not dry nor broken in pieces, nor grated, but moist enough to be crumbled. Add one-half cup of sugar—more if liked—the grated rind of one-half a lemon and the beaten yolks of two eggs. Bake slowly about one-half hour. Cool and place on ice. Just before using, if made the day before, beat the whites of the two eggs until stiff, add juice of one-half a lemon and a little sugar. Place the meringue on the pudding and brown in the oven. Then cool quickly and set on ice, for it adds to the flavour if very cold.

Potato Fritters

While living in France I learned from a French *cuisiniere* the following recipe for most delicious potato fritters. *Baigners*, she called them. Into one cupful of mashed potatoes stir two well beaten eggs and three tablespoonfulls of flour, seasoning to taste. Beat thoroughly and let stand for half an hour. Drop in small spoonfuls into hot fat in a sauté pan. Only a small amount of fat is needed. They should rise quickly like small puff-balls.

Sponge Cake with Whipped Cream

Beat the yolks of four eggs until thick. Add one cupful of sugar and beat again; add three tablespoonfuls of cold water to one and one-half tablespoonfuls of corn starch, and enough pastry flour to make one cupful. Sift with one-half teaspoonful of salt, and one and one-quarter teaspoonfuls of baking powder. Add to the yolks of the eggs, and when mixed cut in the whites of the eggs, beaten until stiff. Add one teaspoonful of lemon juice, and bake thirty minutes in a moderate oven. Split and serve with whipped cream between the layers and on top.

Mother and Child

Baby's Food in His Second Year

By Emelyn Coolidge, M. D.

"Baby will be one year old in a few days; what changes shall I make in his food then?" asked the young mother of her doctor.

"As you have almost weaned the baby the one breast meal you are now giving should be discontinued as the first step. It is very seldom that a mother can nurse her baby with any advantage either to herself or the child after he is a year old," replied the doctor. "You will have no trouble about this complete weaning, because you have been gradually accustoming the baby's stomach to other foods suitable for him to digest, and now that you are to stop the breast milk entirely the baby will not feel the change and you need not dread upsetting him. It is *sudden* weaning in cases where the baby has never had modified milk, nor any form of correct food other than the mother's milk, that usually results in an illness for the baby and much anxiety for the mother. Your baby has had one bottle of modified milk from the start; then you have gradually given more bottle meals and fewer breast meals, as he grew older and needed the extra food, in place of the breast meals. You have also commenced with orange juice, a well-cooked cereal and the white of a coddled egg, so that now he is well started on an easily digested, mixed diet and will take without trouble the food we will next add."

"Baby weighs twenty-one pounds, has six teeth, can stand by holding to something, and can say a few short words. Do you think his general development has been satisfactory and that he is up to the average hild of his age?" inquired the mother.

"Yes, he is just about normal in all these things, for he weighed seven pounds at birth and has therefore tripled his birth weight at one year of age, which is just what he should have done," replied the doctor.

"I am still using one ounce of barley-water to each bottle of his milk, and the limewater and milk sugar are still in the formula; shall I make any change now that he is one year old?" asked the mother.

"Yes, you may omit the barley-water entirely now, also the lime-water and milk sugar. For the first two weeks after you have made this change add a quarter of a teaspoonful of bicarbonate of soda to twenty-six ounces of whole milk which you will require for his meals during the day. When the milk is delivered shake up the bottle and measure out twentysix ounces, add your bicarbonate of soda and then pour eight ounces into two bottles and five ounces into two more bottles, making four milk feedings in all. Cork with clean cotton and place on ice until mealtime, when the food should be warmed by standing the bottle in hot water. Begin now to teach the baby to take one meal a day from a cup. Usually the two P. M. meal is the best to begin with. Then gradually have him give up the bottle entirely and use only the cup, so that by the time he is from sixteen to eighteen months old all his meals will be taken from a cup, and no more will be given from the bottle. Eighteen months of age is the very latest that a child should be allowed to have a bottle, and the earlier he will give it up after he is one year

old the better it is for all concerned. The six ounces that you have left out of the quart of certified milk you take each day for your baby should be saved in a bottle for his cereals, so that in twenty four hours he will get the entire quart of milk. No more is needed when he is taking solid food as well."

"What other new foods may I add to the baby's list now?" asked the mother. Well-cooked rice, the yellow as well as the white of the coddled egg, prune juice, peach juice and scraped apple, or apple sauce, Zwieback or dried bread with a very little butter on it, dried bread and milk, the cereal jellies, and any of the cereals you can cook *thoroughly* at home, junket, and an occasional Graham or oatmeal cracker, if given *with* a meal, never between meals," said the doctor.

"May I not give him some baked potato? I am quite sure he would like that," said the mother.

"No! He is much too young for this very starchy food yet. He should not have any potato until he is at least two years of age," replied the doctor.

THE CHOICE OF A HOME

A lesson is needed by those upon whom rests the responsibility of selecting a home. They should not allow themselves to be diverted from the highest aim. Let them remember that the home on earth is to be a symbol of and a preparation for the home in heaven. Life is a training school from which parents and children are to be graduated to the higher school in the mansions above. As the location for a home is sought, let this purpose direct the choice. Be not controlled by the desire for wealth, the dictates of fashion, or the customs of society. Consider what will tend most to simplicity, purity, health, and real worth.

The world over cities are becoming hot-beds of vice. On every hand are sights and sounds of evil. Everywhere are enticements to sensuality and dissipation. The tide of corruption and crime is continually swelling. Every day brings a record of violence,—robberies, murders, suicides, and crimes unnamable.

Life in the cities is false and artificial. The intense passion for money getting, the whirl of excitement and pleasure seeking, the thirst for display, the luxury and extravagance, all are forces that, with the great masses of mankind, are turning the mind from life's true purpose. They are opening the door to a thousand evils. Upon the youth they have an almost irresistible power.

One of the most subtle and dangerous temptations that assails the children and youth in the cities is the love of pleasure. Holidays are numerous; games and horse racing draw thousands, and the whirlwind of excitement and pleasure attract them away from the sober duties of life. Money that should have been saved for better uses is frittered away for amusements.

The physical surroundings in the cities are often a peril to health. The constant liability to contact with disease, the crowded, dark, unhealthy dwellings, the prevalence of foul air, impure water, impure food, are some of the many evils to be met.

The great majority of the best and noblest men of all ages were reared in country homes. They knew little of luxury. They did not spend their youth in amusement. Many were forced to struggle with poverty and hardship. They early learned to work and their active life in the open air gave vigour and elasticity to all their faculties. Forced to depend upon their own resources, they learned to combat difficulties and to surmount obstacles, and they gained courage and perseverence. They learned the lessons of self-reliance and self-control. Sheltered in a great degree from evil associations, they were satisfied with natural pleasures and

wholesome companionships. They were simple in their tastes and temperate in their habits. They were governed by principle, and they grew up pure and strong and true. When called to their life work, they brought to it physical and mental power, bouyancy of spirit, ability to plan and execute, and steadfastness in resisting evil that made them a positive power for good in the world.

Better than any other inheritance of wealth you can give to your children will be the gift of a healthy body, a sound mind, and a noble character. Those who understand what constitutes life's true success will be wise betimes. They will keep in view life's best things in their choice of a home.

Instead of dwelling where only the works of men can be seen, where sights and sounds frequently suggest thoughts of evil, where turmoil and confusion bring weariness and disquietude, go where you can look upon the works of nature. Find rest of spirit in the beauty and quietude and peace of nature. Let the eye rest on the greenfields, groves, and hills. Look up into the blue sky, unobscured by the city's dust and smoke, and breathe the invigourating air in its purity. Go where, apart from the distractions and dissipations of city life, you can give your children an education that will train them for lives of integrity and usefulness.

Our artificial habits deprive us of many blessings and much enjoyment and unfit us for living the most useful lives. Elaborate and expensive furnishings are a waste not only of money, but that which is a thousand fold more precious. They bring into the home a heavy burden of care and labour and perplexity.

In many a home the wife and mother has no time to read, to keep herself well-informed, no time to be a companion to her husband, no time to keep in touch with the developing minds of her children. Little by little she sinks into a mere household drudge, her strength and time and interest absorbed in things that perish with the using. Too late she awakes to find herself almost a stranger in her own home. The precious opportunities once hers to influence her dear ones for the higher life, unimproved, are passed away forever. Let the home makers resolve to live on a wiser plan. Let it be your first aim to make a pleasant home. Be sure to provide the facilities that will lighten anxiety and promote health and happiness. MRS. E. G. WHITE.

WHEN THE BABY IS "CROUPY"

SINCE 1895, when anti-diphtheria serum was put into practical use generally by the doctors and every reddened sore, or patchy-looking throat has had its exudates submitted to the alert eye of the bacteriologist, the medical man has breathed easier. Now when he receives the homemade diagnosis, "croup," he knows the trouble to be either diphtheria (quickly ascertained), or not; usually not. Nine times in ten the baby awakening from sound sleep with that menacing, dry, rasping, metallic, sharp bark, has either been breathing through its open mouth, in a room with hot, dry air; or it has enlarged tonsils and adenoids; or is exposed to a chilling current of air; or has a catarrhal spasm of the throat muscles; or is having the first coughs of bronchitis or whooping-cough; or is lying on his back and has allowed a relaxed tongue to fall backward a bit onto the palate.

The true or membranous croup of twenty years ago and more, has finally, unanimously, and for all time, been positively proven to have been due to the diphtheria bacillus. To-day, therefore, whenever a child begins in the morning with hoarseness which grows worse as the day proceeds; when the breathing toward night becomes almost as noisy as a sawmill; when at night the child struggles with short, parched coughs for air—when the observant practitioner notes these ominous signs, he does not wait for the laboratory to confirm his worst fears, but gives the infant a large does of anti-toxin at once.

Unfortunately, in remote country districts the serum may not be immediately available. The efficient doctor then gives an emetic and fumigates the lungs and throat with calomel inhalations, until the specific is obtained in haste from the nearest supply.

In any case, the doctor is to decide. The hasty administration of ipecac or paregoric has no justification.—*Leonard Keene Hirshberg, in Good Housekeeping.*

MEAT AND APPENDICITIS

THE St. Louis *Medical Review* has a department entitled "Little Things That Count." In this department in the January issue was the following significant advice to physicians, well worth considering also by the laity:—

"The colon bacillus is the commonest primary cause of appendicitis. A diet of the near-vegetarian order discourages this organism in all its protean activities."

From some of the investigations made by Herter on carnivorous and herbivorous animals, and from some other investigations, regarding the effect of a meat diet on the nature of the intestinal bacteria, it is conceivable that under dietary consisting largely of flesh, the colon bacilli may become more virulent, or possibly a foreign race of more virulent colon germs may become implanted in the intestinal tract, replacing the normal inhabitants. Inasmuch as the colon germs are always present in the intestines, even in the best of health and on any and all types of diet, the pathogenic quality of the germs in causing appendicitis and other disorders, must be attributed to some change in the character of these germs. The fact is, in practically all cases of appendicitis the colon germ, a constant inhabitant of all intestines, seems to have been the invading organism, and this is difficult to understand except on the basis of change in the virulence of the germ brought about by the nature of the diet or otherwise.

Whatever the explanation, it seems evident that the person who restricts his consumption of meat is thereby lessening his liability to appendicitis.

"FRAGRANT" TOBACCO

Says the *Medical Review*, "The best reason in the world why a doctor should not smoke is his wife." We are not prepared to dispute the statement. The odour of a man addicted to the use of tobacco is unmentionable, and one whose sense of smell has not been partially destroyed by the habit can detect the presence of a smoker as soon as he enters a room where one of this genus is present; and if a man's regard for his wife were any higher than the sensual attachment to the weed, he would not subject the object of his affections to such an annoyance. If the love of a woman is so great that she is often willing to endure anything, even the reeking odour of a tobacco-steeped body, because of love, such love is worthy of a better reward.

But if the above is the best reason why a doctor should not smoke, there is another excellent reason; namely, his patients; for why should a weak and sensitive patient be forced to endure even for a few moments the sickening odour of spent tobacco? I once worked in a dissecting-room until I could bring my nose quite close to the cadaver on which I was working without perceiving anything unpleasant in the odour. In the same way the tobacco user's nose is so educated that he fondly imagines that he is not an offense to all clean people.

WHY NOT BEFORE

The following advice is given by a physician of experience to physicians who have to treat persons showing signs of old age:—

"When we first discover a moderately high pressure, of say 150 mm. mercury or over, a certain amount of rest and moderate exercise should be enjoined, and alcohol, tea, coffee, and tobacco in many cases should be interdicted."

It is all very well to tell a man that he must give up these things or drop into the grave; and perhaps he does give them up for a while, but on account of the long-established habit, he more likely will, in a short time, give up the attempt to reform, preferring to live comfortably even if he lives a shorter time.

Now, in all honesty, why not begin such reforms before the time that they come to a person as an alternative for death, and when death would almost be preferred to giving them up? Why, in fact, form the habit of using such articles when one

can be just as comfortable, just as happy, just as efficient, if not more so, by doing without them?

When we form a habit of indulgence of any kind, we add one more to our *necessities* which *must* be supplied in order to be comfortable. And when it is fairly certain that some day we shall have to decide between the alternative of giving up this created necessity (which has grown immeasurably during the years of indulgence) and dying prematurely, is it rational to begin?

FRIEDMANN'S TREATMENT OF TUBERCULOSIS.

The arrival of Dr. Friedmann, a German physician, in America to prove the efficiency of his treatment of tuberculosis caused quite a sensation. Some physicians seem to think that his actions are very quackish, and rather mistrust his motives in going to America. It has been said that his treatment did not meet the approval of the best physicians of his own country, therefore he is determined to try the land of Dollars and Cents where greater freedem is tolerated. Later reports tell of the sale of the rights for his cure at a fabulous sum, but that the government, the American Medical Association, and others refuse to recognize the efficacy of his turtle serum in this disease.

NUTS

"Bread, butter, and beefsteak are furnished by nuts, in a nutshell, in tablet form, in sealed individual packages, water free, concentrated, and uncontaminated." This concentrated statement is no exaggeration of the virtues of the nut, which is not appreciated as it should be, possibly for the reason that it is not grown in sufficient quantities to make it a staple article, selling at a price within the reach of all.

Man's teeth would indicate that once he lived largely on nuts. He could thrive well on them now, or on a bill of fare containing much more nuts than is usual in the ordinary bill of fare.

If it is a fact that "there are few acres of tillable land in the United States that will not yield one hundred dollars' worth of nuts to an acre, with less care than for almost any other crop," there is no reason why every farmhouse and many city dwellings should not be surrounded by a number of nut-trees, and the shade-trees along our roads and in our streets might well be nut-trees, doing double duty. An acre of nuts will certainly go farther to feed human beings than an acre devoted to the raising of cattle.

Questions and Answers.

ALBULACTIN AS AN INFANT FOOD.

What do you think of Albulactin as an infant food? T. N. B.

In the average case of infant feeding any proprietary food is not to be recommended. In some rare cases where the proteins in the infant's economy are at fault infant food may be used, but the best specialists in children's diseases contend that the fats and sugars are more often at fault than the proteins. It ought to be a rare case where the physician, for the proper management of infant feeding, should have to resort to proprietary infant foods of any kind.

THE CASEIN OF MILK.

Is it true that the latest investigations have proved that beside casein there is another protein in the milk called milk albumen and that human milk contains a very large percentage of milk albumen, compared with cow's milk? T. N. B.

This is a fact that was brought to light some years back, and not by late investigations. The following table will show the protein percentage in milk—

Human Milk:—Fats, 3 to 4 percent; Milk Sugar, 6 to 7 percent; Proteins, caseinogen .59, Lactalbumen, 1.23, in all 1.82 percent.

Cow's Milk:—Fats, 4 percent; Sugar (Milk), 4.5 percent; Proteins, Caseinogen, 2.88, Lactalbuman, .53, in all 3.41 percent.

This idea of using the statement that human milk contains a large percent of Milk Sugar is a good catch in advertising even though it may not affect the problem of infand feeding.

Trouble Caused by Casein in Milk.

A decade or two ago it was thought that the proteins were the cause of a great deal of the disturbance in the infant's digestion. It no doubt is the case that occasionally the proteins are at fault, but not often enough to pay a manufacturer fancy prices for something which is of less value than an inexpensive food. The most recent in-

vestigators have shown that the fats and sugars are more often the cause of trouble in the digestion of the infant than are the proteids.

NOURISHMENT IN COW'S VS HUMAN MILK.

Is it true that cow's milk diluted with water into which is put sugar of milk and a little cream, has only one-tenth the nourishment of mother's milk (because of the practical absence of albumen in the mixture)?

No. If you ascertain the percentage composition of the milk of the herd of cows from whom you are obtaining your milk supply, and know definitely the amount of fat, sugar, caseinogen and lactalbumen it contains, you can vary at will any of these ingredients and imitate any mother's milk. The only thing that we cannot imitate with cow's milk are the ferments with which the mother's milk has been endowed by nature. The next proprietary food that is put upon the market will without doubt be asserted to have these necessary ferments, while the purchasers will reap nothing in results from lacs spent.

SUBSTITUTE FOR MOTHE'RS MILK.

What do you consider the best substitute for mother's milk?

Cow's milk of which you know the percentage composition and modified to meet the needs of the child.

A CASE.

My baby is four months old, is being fed artificially on Albulactin, is very thin, does not put on flesh, but is otherwise healthy. Give advice.

Unless a baby's daily gain averages about 2-3 of an ounce there is generally something wrong, and if not rectified, a crisis is liable to follow. Under circumstances of this kind the child ought to be put under the care of a good physician who can take the time to adapt the food to suit the needs of the infant. One who has not acquired the proprietary food habit.

The offending ingredient of the cow's milk will have to be ascertained, whether fats, sugars, caseinogen or lactalbumen, and the food changed to suit the infant's stomach. The fats are increased by adding or taking away cream; the sugar content by dilution or by the addition of milk sugar, cane sugar or maltose dextrin: caseinogen can be decreased by removing the curd and

lactalbumen can be increased by using whey (milk with the curd removed) as a dilutent. To do this the percentage of the cow's milk being used should be known. This can be done by sending a sample of the milk to your nearest health department. At this distance it would be impossible for us to work out a food for this infant as we would have to examine the baby first.

PROBLEM OF INFANT FEEDING.

Does Albulactin solve the problems of infant feeding? T. N. B.

Albulactin does not solve the problem of infant feeding, neither will any other infant food.

What is your opinion of Allenbury's food? T. N. B.

It is one of many others. The tendency of all infant foods is to allow the users to go into rickets. Those foods that prescribe milk at the same time are not so dangerous in this respect.

Would you recommend the use of honey in the modifying of cow's milk? T. N. B.

The writer has had no experience with honey in infant feeding, but on general principles would say that honey is too variable in its make up routinly as sugar in infant feeding. Honey has been known to produce severe poisoning because it was made from poisonous flowers. Honey made from the yellow jasmine and one species of rhododendron has been known to cause serious and even fatal results. The best sugars to use in infant feeding are milk sugar, cane sugar, and maltose dextrin. The latter will the more often agree with the infant.

BOOK NOTICES

"HINTS TO DRESSERS."

By Samuel Anderson, B. Sc., M. B., C. M., D. T. & H., I. M. S.

This little book gives the needed information in a small space. One thing in the book that particularly appeals to us is the acquaintance it gives one with the things of medicine that are pecular to this country. It tells how to do things as they are generally done in India, and not in some other country. It also helps in making up many little devices to take the place of more expensive apparatus. We agree with the author that the small sponge is best kept

out of the operating rooms, as the most noted surgeons have been known to leave one of these little nuisances in the abdomen before sewing it up. If they are dispensed with, this mistake will not occur.

After operations "Sleeping draughts should never be used as a routine practice." We think that the doping of patients after operations is a pernicious habit. It is perhaps in some cases a necessity, but we believe that a dose of morphine or chloral can turn the balances in the wrong direction.

We also note in the treatment of burns the commonly used filthy carron oil treatment is interdicted.

Major Anderson would have better results with his fomentations if he used half wool and half cotton material and changed the application every 5 or 10 minutes instead of 30 to 60. On the whole this book is a very valuable addition to our medical literature. It is published by Thacker, Spink & Co., P. O. Box 54, Calcutta. Price Re. 1.

"THE INDIAN MANUAL OF FIRST AID"

By Major R. J. Blackham, D. P. H., R. A. M. C.

In accidents and emergencies this is a handy little work. It treats of cases in which, if we can do anything at all to save the life of the patient, it must be done at once. The itemizing of the various points under each subject is a good thing as it is more quickly scanned by the eye.

We are not in harmony with the commonly used oil dressings in the treatment of burns. Most surgeons to-day agree that oil dressings make a very favorable medium for the growth of germs, which we must do our best to avoid in these cases. Major Anderson's treatment of burns is the better. Some advocate the dry antiseptic, open method of treating burns.

We are glad to get a sympathizer with the idea that light is as necessary in India as it is in the cooler countries when we read the words of Major Blackham, "The popular delusion that a dark room is cooler than one into which indirect sunlight enters freely dies hard in India." After reading this statement we should keep it in mind in the construction of our bungalows. Thacker, Spink & Co., P. O. Box 54, Calcutta, Publishers. Price Re. 1.

"HINTS TO DISTRICT WORKERS"

By Amelia N. de Souza, M. D., L. R. C. P., & S.

This pamphlet contains a great deal of information on the prevention of three of the most serious diseases prevalent in India. This work in the vernaculars would no doubt fill a greater field of usefulness in the prevention of these diseases.

According to our definition of infectious and contagious diseases, we are not so sure that cholera or enteric fever are "neither infectious, nor contagious."

The emphasis placed upon greens, vegetables, and salads as a factor in the spread of cholera, enteric fever, and dysentery is worthy of note. Also that the fly is a very dangerous carrier of these diseases is in accordance with the most recent investigations along this line.

The seven hints for the prevention of cholera, with which we might include enteric fever, are good. The people of India are very careless in the use of ice in water, fresh fruits, and vegetables. Published by Thacker, Spink & Co., P. O. Box, 54, Calcutta. Price Ans. 12.

NEWS NOTES

"EAT what you like," says Dr. Woods Hutchinson, but suppose you can't afford to?

THE PAINLESS BULLET.

One of the inventions of modern warfare is the painless bullet. In the bullet is placed a dose of an anodyne, as morphine, which on being carried into the system by the destructive missle exerts its physiological effect and thus mitigates before the arrival of the surgeon the severe pain usually present.

KILLED BY TOBACCO.

A little girl of six and one-half years, with pinworms but otherwise in good health, was treated by her mother, who gave her an enema of a pint of water in which was dissolved an ounce and a half of smoking-tobacco. The child immediately became so faint that she was unable to stand, was taken with nausea, vomiting, and purging. These symptoms after fifteen minutes were followed by convulsions for twenty minutes, and then quiet; the child died in collapse forty-five minutes after the administration of the enema.

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The circulation of HERALD OF HEALTH for the last issue was 2,850 copies, including single copies. The actual list was 2,469. This makes HERALD one of the best advertising mediums of its class as it finds its way into the homes of the very best class both Indian and European. For advertising terms address the publishers as above.

A GENTLEMAN in one of the cities of India said to one of our agents when asked to subscribe for HERALD OF HEALTH recently, "Why certainly, I have wanted it ever since I bought a single copy from a gentleman a year ago," and wrote down his name. "Herald" has a message of Health each month. If you are not a subscriber, you should be. If your subscription is about to expire do not forget to send in your renewal early.

THE November number of that excellent religious and home journal, *Oriental Watchman*, is to be entirely devoted to the subject of Temperance. A special cover design showing a Himalayan Water Fall through an open window is one bright feature. Seventeen striking illustrations on temperance themes will make it still more attractive. And above all a wealth of stirring articles, sketches, poetry, and stories make it the very best ammunition possible for the cause of Temperance. If you believe in the destruction of the liquor curse in India you should circulate it; if you are undecided as to your attitude on the question you should read it. In any case you should give it your careful consideration. Address the publishers, 17 Abbott Road, Lucknow.

A CORRECTION

In the June number of Herald we made a clipping from the daily press for our News and Notes column stating that there was an epidemic of cholera in Benares. We are informed by the Health Officer of Benares that the extent to which cholera existed in Benares was exaggerated. That they only had a few cases in the city proper and one case in the Cantonment.

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