Herald of Health

Vol. 6 Lucknow, U. P., January, 1915 No. 1

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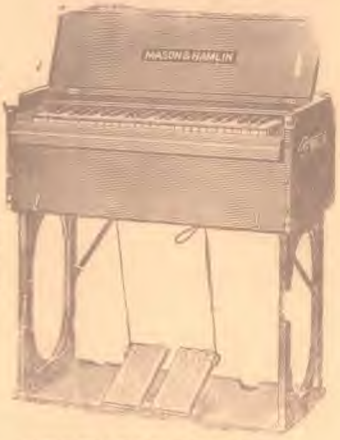

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VOL. VI NO. 1

Contents, January, 1915

BE KIND TO-DAY

By R. Hare

HY don't you love me to-day mama?"
Whispered a wee little girl,
While mother, with face darkly shaded,
Combed out each clustering curl,
"I've folded the napkins all ready,
And helped little brother at play,"
And the big tears fell while she murmured,
"Why don't you love me to-day?"

Oh mothers, I leave you the question,
Once lisped in that pleading refrain,
"Why don't you love me to-day mama?"
I whisper it yet once again,
It may be the burden is heavy,
Just two hands to keep things straight,
While you rise in the morning early,
And toil till the hour is late.

Then sometimes, perhaps in the gloaming,
You sigh o'er the changeless lot
That keeps your heart in a struggle,
Your life in the humble cot;
But say, have you thought of the sorrow,
If life were silent as well,
If no little lips in their prattle,
Cast over it love's sweet spell?

If no little head touched the pillow
That lies in the snowy bed,
And you had to murmur in sadness,
"The blossom I loved is dead,"
Would you fret at the childish questions,
Or jerk at the tangled hair?
Would the patter of little footsteps,
Then add to your load of care?

And would the tattered dollies
Crowd into your too-hurried way?—
Oh mothers, read the sad picture,
And love your girlie to-day,
Yes, love as you would if to-morrow
Placed white fading flowers at her head,
Just love as you'd wish you had loved
It the sweet little blossom were dead,

General Articles

Beyond Money Value

When Dan Crawford returned to England on his first furlough after a service of twenty-three years in the heart of Africa, some one asked him what most impressed him after the lapse of the years. He replied, "The passing of the smile." Mr. Crawford's declaration may be verified by observation. We are losing the art of laughter and are more inclined to count the rainy days than those of sunshine; to brood over disappointments and sorrows than to "count our many blessings."

The wise man declared that "the cheerful heart hath a continual feast." Among the various classes enjoying this feast are, first, those who are cheerful by nature. With them laughter is spontaneous. Generations back of them have been optimistic and they have entered into that optimism. They have fallen heirs to the philosophy:

The inner side of every cloud
Is bright and shining;
And so I turn my clouds about
And always wear them inside out,
To show the lining."

Again there are those who remain cheerful by avoiding the unpleasant. Like Goethe, they confess that they deliberately turn their backs upon the painful and look only at the agreeable aspects of the world. They studiously avoid every appearance of poverty, suffering or distress lest their inward calm be disturbed.

A third class is composed of those who can give a satisfactory reason for the cheer that is in them. Who believe with Browning:—

"God's in His Heaven,
All's right with the world."

Their cheer can not be defined in terms of hilarity or frivolity, for these are intermittent and come like the lightning flashes out of the dark clouds, and like lightning, may be accompanied by evil. The cheerful heart of which the wise man speaks is like the summer sun which warms the field and forest and brings to life the best that is in them. It is not like the geyser with its periodic streams but like the artesian spring, always flowing from the depths The cheerful heart is not indifferent to the stern facts of sorrow and suffering. It may feel their chilling effects but, like Mlle. Adele Kamm, "riveted to the bed" it believes that "joy is a duty" and that even sickness can be a source of great blessing, and then proceed to prove the proposition:—

"This cheerful heart forever sings,
And feels as light as it had wings;
Come good or ill,—
Whate'er to-day, to-morrow brings,
It is His will."

It may see the cherished plans of a lifetime suddenly shattered, the possessions which men regard as indispensable swept away, but though feeling the crushing blow, it will again shine resplendent. It is never alone in the enjoyment of the continual feast. It has numerous guests who come under its influence and join its order. One item of its creed is:—

"Smile a while, and soon another smiles,
And then there's miles and miles of smiles
And life's worth while because you smile."

Or it may state it in another way:—

"Clouds may darken the fairest sky,
Keep the song and forget the sigh,
Gather joys as the days go by,
Get all the sunshine you can.
"Wear a face that will smile at grief
Bear no grudge, for the time is brief,
Lives are many that need relief,

Make all the sunshine you can.
"Scatter the brightness wherever you go,
Lift the souls by their sin laid low,
Bind up hearts that are crushed by woe,
Give all the sunshine you can."

If it sees your lower lip drop it bids you

"Just whistle a bit if your heart be sad,
'Tis a wonderful balm for pain;
Just pipe some old melody o'er and o'er,
'Twill heal like the summer's rain."

The cheerful heart is worth while. It enriches all with whom it comes in contact. It doeth good like a medicine. It can not help revealing itself in the countenance, words and actions. It reacts in the healthiest, happiest way upon one's self. It maketh rich and addeth no sorrow. It will drive the clouds away, cheer and brighten every day. The smallest dose has marvellous remedial powers; nor need one fear an overdose. This medicine requires no antidote.

R. R., in Penn. Medical Journal.

Fresh Air a Necessity

Work and Sleep Outdoors as Far as Possible—Value of Deep Breathing and Pure Air—Health and Stuffy Rooms Are Antagonistic

MARY ALICE HARE LOPER, M. S.

"MORE 'tand outdoors!" was the urgent plea of a tiny tot who was a dear lover of nature. Every child enjoys outdoor life if the surroundings are pleasant; for the loving Creator made His great outdoors to be the home of the human race, and implanted in the heart of man a love for the beautiful in nature. The Garden of Eden, planted by God Himself, was the ideal home given to man in the beginning; and one of our poets has beautifully said, "The groves were God's first temples."

God created the invigorating atmosphere surrounding our earth, for the purpose of perpetuating life. It is one of those distinctively free blessings bestowed by a loving Heavenly Father, which should be rightly appreciated by all who would possess the priceless boon of health.

We cannot imagine Adam sitting down in a stuffy office in a sky-scraper while seeking to accomplish the great task of giving appropriate names to all the numerous representatives of the animal creation. Adam did his "office work" outdoors, and breathed the life-perpetuating air of heaven while doing it.

Sleep in the Open

Much has been said and written, during the present century, concerning the importance and necessity of outdoor life; but the world seems slow to heed the advice. It is quite generally admitted that outdoor air is necessary to health while one is asleep. Surely it is high time that the world realise the fact that outdoor air is necessary to health during one's waking hours also. Very many have been laid to rest in untimely graves, whose epitaph might truthfully read, "Died for want of pure air."

Will Not Grow in a Cellar

Anyone who has ever made a success of gardening, knows that it cannot be done in a cellar. Plant life requires sunshine and fresh air; and the human plant is no exception. I once knew a mother who was bereaved of a number of her children while they were yet in their infancy. It would seem that the poor little things slowly smothered to death. They were kept so closely covered, with so little fresh air, that it is highly probable they died of mistaken kindness. Babies, as well as grown people, require pure air; and fortunate is that baby who is permitted to receive his full share of this tonic. The child who early becomes accustomed to plenty of fresh air and sunshine, may overcome hereditary tendencies which otherwise might prove disastrous.

Horticulture and agriculture constituted the regular employment of the first family

of the human race—occupations which consist wholly of exercise in the open air. The more man has departed from God's great plan, the less has become his resistance against disease. But while the human race has deteriorated physically, God's laws remain unchanged. It is just as important now that man should exercise properly in the open air, as it was when the first representatives of the human race lived an outdoor life amid the beauties of nature. By coming into harmony with nature's laws, it is possible for many to find the highway to health who are now treading the dangerous pathway of disease. It is possible for many who have a tendency to tuberculosis to escape that calamity by taking the precaution found in proper exercise in the open air, without which the disease may be easily contracted. Pure air—how much we need it! Multitudes persist in living apart from the fulness of this great blessing of heaven, who are becoming puny and sickly as the result, while pulmonary and bronchial troubles are widespread.

The Log Cabin and the Fireplace

During the log cabin days, the huge old-fashioned fireplace served as a sort of life-preserver, as it afforded a means of exit for contaminated air in many an ill-ventilated home. That primitive form of dwelling-house, with its one or two rooms, in time gave place to the spacious mansion, with its darkened parlours and ghostlike spare bedrooms. How many deaths were due to committing guests to those unfrequented haunts of disease germs, no one can tell. But the proverbial spare bed in time came to be looked upon as a sort of whited sepulchre by those who were aware of the danger lurking in it.

Sweet memories cling round the days of long ago; but the damp, germ-infested spare bed has no place in the list of tender recollections. As a student boarder in a private home, I for some time occupied a precious (?) apartment of this kind myself years ago, and I am still grateful that the experience did not terminate my earthly career.

Blessed thought—the world is evolving from death-dealing rooms to "livingrooms" in the modern dwelling. The sentiment of the guardians of home to-day is, "Let the blessed sunshine in," and along with it plenty of life-giving air. The architecture of the home of to-day is fashioned with a view to preserving health rather than for mere beauty of outline, and since the blessed dawn of the era of wire screens, windows have come to be considered more for use than for ornament.

The Sleeping-Porch

The sleeping-porch is surely to be encouraged, for the screened room is the up-to-date sleeping-apartment of the twentieth century. It has come to stay, although some who are still afraid of fresh air, may look upon it with grave apprehensions, imagining that increased bronchial and pulmonary disorders will be the result. But the most thoroughly scientific physicians are prescribing outdoor sleeping for just such patients, and are meeting with gratifying results. Sleeping in the fresh air will tend to cure a fresh cold, rather than increase it. An excellent exercise for one who has weak lung power, is to stand in the fresh air and inhale until the lungs are well filled, then gently percuss them for a few seconds, and then exhale. This simple exercise, if followed a few minutes twice every day, will be found of great benefit. Pure air in abundance, with habitual deep breathing, is a great barrier against tuberculosis, and should be rightly appreciated by every one who prizes longevity. To one who is accustomed to sleeping where there is nothing to prevent the free circulation of pure air, a night spent in a close sleeping-room is torture.

Modified in Rigorous Climates

There are climates too severe for outdoor sleeping in midwinter. Good judgment should be exercised upon this point.

It is well to have the screened sleeping-

room supplied with adjustable canvas covers for the screens, which can be brought into service when necessary to prevent the influx of too great draughts of cold air. Each individual should be "a law unto himself" in this matter, as some possess much greater resistance against cold than others. Those who are especially sensitive to cold, may find a sleeping-cap of valuable service during the midwinter season.

The all-wise Creator never intended that human beings should be penned up in sky-scrapers all day, and in stuffy, ill-ventilated flats all night. Pure air is nature's great life promoter in both the animal and the vegetable world; and intelligent human beings should recognise this fact in regard to themselves, and, if possible, cease to work and sleep where plants would surely die.

Slow Suicides

Thousands of people employed in office work are slowly committing suicide because they are out of harmony with nature's laws. Since outdoor exercise was Adam's daily programme, it would be but folly to seek to improve upon God's original plan for the human race. Everyone who is employed in office work is under obligations to take outdoor exercise sufficient to meet the demands of health. A crusade in this direction in our cities is surely greatly needed.

How to Escape Influenza

By A. B. Olsen, M. D., D. P. H.

There are three facts of vital importance with regard to influenza which very few people recognize.

The first fact of supreme importance is that influenza is a very serious disorder, and if we take into consideration, as we ought, the disastrous after results which frequently follow, we must look upon influenza as a comparatively fatal disease.

The second vital fact is that influenza is a typical germ disease, and that it is both contagious and infectious, and therefore readily spreads from man to man.

The third and perhaps most important fact of all is that the fresh air and the outdoor life are the best preventives and antidotes for influenza.

A Serious Disease.

Not until people begin to recognize the serious and even grave character of influenza shall we be able to accomplish much in diminishing its mortality. There is every reason to believe that influenza is quite as "catching" as smallpox or scarlet fever, and infinitely more so than typhoid. Nevertheless, practically no effort is ever made to isolate the patient as one would in a smallpox case, and thus protect the family, the relatives, the friends, and the public generally from the contagion.

Influenza is at the present time one of the most prevalent if not the most prevalent of winter epidemics, and the toll of deaths which can be traced directly or indirectly to influenza is a very large one, much larger than is ever appreciated by the public. According to Dr. M. K. Robinson, M.O.H., the deaths in Dover from influenza for the first quarter of 1913 amounted to just over eleven per cent of the total mortality, or more than one in ten.

Bacillus of Influenza.

Influenza is an acute infection caused by a specific microbe called the bacillus of influenza, which chiefly attacks the respiratory passages, causing the well known local symptoms of a very hard cold. But there are also numerous constitutional symptoms which are due to the distribution by the blood of the poisons generated by the germs. It is this grave poisoning which accounts for the extreme prostration and the severe aches and pains from which the patient suffers.

Isolation.

All persons coming in contact with a patient suffering from influenza are extremely

liable to catch the disease; and the spread of influenza through the household, through the school, or through the office or workshop, or in other places where people gather daily is a common occurrence. The only efficient method of controlling the epidemics of influenza is to isolate the patient from the earliest stage of the attack. Just as soon as the head becomes congested and there is sneezing and a general feeling of languor or malaise, or other symptoms of the disorder develop, the patient should promptly return home and go to his bedroom and get into bed, and remain in the room for a period of ten or twelve days, or until the symptoms of the infection have passed. Such treatment is not only wise for the sake of the family and the community, but equally advantageous to the patient, who has a far better chance for a full and complete recovery than if he attempts to drag around a day or two and tries to keep at work. Complete rest in a well-ventilated room with an abundance of of fresh air, plain feeding, and good nursing, afford the best chance of escaping from the grave disorders which are prone to follow an attack of influenza.

The Treatment.

Little more needs to be done for the patient than providing the necessary quiet and rest and nursing. A cleansing enema should be given before the patient is put to bed, and repeated daily as long as is necessary. The bed should be warm and a hot bottle provided if the feet are cold. Daily tepid or warm baths are soothing and assist in alleviating pain. Hot fomentations and hot packs bring the greatest relief from the intense aching and may be given as often as necessary. The patient should also be encouraged to drink water freely. Sponging with tepid water or equal parts of alcohol and water serve to refresh the patient and ameliorate the fever.

The diet should be light and consist largely of fruit juices, baked apples, stewed fruits, and also fresh fruit and especially oranges, grapes, and mellow pears and apples. Cereal gruels and other preparations may be taken, as well as stale bread, zwieback, and plain biscuits. Albumen water, Metchnikoff soured milk, and plain egg-nogs are nutritious and easily digested.

The Best Antidote.

We cannot sufficiently emphasize the importance of providing an abundance of fresh air. Those who would escape influenza must cultivate the fresh air life, and live in the fresh air constantly whether out of-doors or not. This means the freest ventilation possible and the ever open window. There is little danger of taking influenza when out for a tramp in the country or for a row on the sea or the lake, for in the fresh air the microbes are readily dispersed. Fresh air is also of the greatest importance in the sick-room, and whether a fire is required or not, the windows must be kept wide open. This does not mean placing the patient in a draught, or in some other way causing a chill which might bring on bronchitis, pneumonia, or other mischief.

Hot-Beads of Infection.

But the foul air of close-ventilated or ill-ventilated rooms should be avoided as you would the plague. All over crowded living-rooms, offices, and workshops, are simply hot-beds for infection not only for influenza, but for the common cold, consumption, and many other contagious diseases. The germ-laden, musty and dusty atmosphere of the average church, chapel, hall, theatre, variety house and cinematograph show, and similar public places of congregation, is always a serious menace to health, and thousands of people have caught colds, influenza, bronchitis, pneumonia, consumption, or some other infection from visiting these places. If the public would protest against the foul, vitiated air of so many of these public meeting-places by remaining away, the authorities concerned would soon provide the necessary ventilation, and would also take care to see that the hall or church or chapel was

thoroughly aired and renovated with fresh air before every gathering.

Bracing Effects of Cold Air.

Winter is the bracing season of the year, and the majority of people ought to experience an increase of health and strength in the cold weather. If the proper precautions were taken with regard to equable clothing, protection from the damp and wet, and the provision of an abundance of fresh air, we should find winter the healthiest season of the year, and the cold would become a real tonic which would serve to brace us up and invigorate us the rest of the year. The cold, fresh air is nature's greatest and best tonic, and those who would increase their vitality and fortify themselves against disease should take deep draughts of the cold fresh air daily and many times a day.

A Pure Milk Supply

IT is encouraging to note that public opinion is at last beginning to make itself felt with regard to our milk supply. Officers of health and medical authorities generally are giving more and more attention to this vital problem. The "Journal of the Royal Sanitary Institute" for February contains a most valuable article entitled, "A Pure Milk Supply," by Henry Kenwood, M. B., D. P. H., one of the leading officers of health in the kingdom. We should be glad to reproduce the entire article if space permitted, but we take pleasure in quoting the following extracts:

"We all realize that there is a great need for a purer, and therefore safer, milk supply; it is the need more particularly of the infant population.

"By far the greatest danger arises from the large amount of dirt which is at present allowed to get into milk; careless and dirty handling also increasing the risk of human infection.

"It has been truly said that if our public water supplies contained a one-hundredth part of the filth found in average samples of milk, no government would exist a week unless it adopted means to remove the scandal. Had the subject aroused the concern that it should have done, Mr. Burn's Bill, so long promised, would not have been tossed about on the 'party waves' in danger of loss.

"To obtain milk only from healthy cows, and to keep it clean and cool from cow to consumer, is no simple problem; but very substantial improvements can be introduced without an expenditure of money that will necessitate an increase in the present price of milk, *so soon as those engaged in the business are properly informed and trained.*

"Everyone, in this or any other country, who has an intimate knowledge of all the facts, shares the view that the essential factor in the solution of the milk problem is this education and training, in order to secure the practice of the many details to be observed in the sanitary collection, distribution, and storage of milk. The most that a casual inspection can achieve is some improvement in external appearances; and these, in comparison with the importance of sanitary practice, count for very little indeed. . . .

"For the solution of the milk problem it is essential to raise the standard of *all* the milk sold for human consumption, and not a part of it only; and as this result can only be achieved by the creation of a class of tradesmen trained in the production of clean milk and a general public educated to demand it, sanitary authorities must make it more their business to *educate* the producer, retailer, and consumer. By greater supervision of the industry, and by securing the infliction of penalties for any neglect to adequately guard the health interests of consumers, they will promote this education. It is in the rural districts, whence the large bulk of the milk

comes, that the slow and difficult process of education has most to achieve. It is for the Local Government Board to clearly define, and (by order) to make general and uniform, the conditions of the licensing and the sanitary standard of production and distribution; and it is to be hoped that in future no dairy farm will be licensed without that prime necessity of a water supply sufficient in quality and quantity for every purpose all the year round, or without adequate provisions for raising large quantities of this water to the boiling point for the purpose of cleansing the utensils employed. . . .

"But the key of the situation is in the hands of the general public. They must demand a clean milk; and until they do this the work of the sanitary authority in this direction will lack some needed encouragement and assistance. There is no sentiment in commercial matters; public demand and competition govern everything, and when once the demand for clean milk becomes general it must be met. In default of that demand, why should the trade go to extra trouble and expense to produce what is not asked for? They truly point out that dirty milk will fetch the same price as clean; that even the medical boards of nursing homes and hospitals often make no distinction when they give their contracts; and that if clean milk is supplied it is generally allowed to get dirty in the home. The unscientific and absurd idea that milk must be exposed to air is responsible for much of this contamination."

Choice Health Hints

DAVID PAULSON, M. D.

Good health is the best form of life insurance.

When you sell health for money you exchange wealth for trash.

If you want to have health you must fight those things that cause disease.

Fresh Air and Sunshine

No one has a corner on the air market. There is no fresh air trust.

Your lungs can't be washed, but they can be aired.

You wouldn't offend your stomach with dirty water; then why offend your lungs with filthy air?

A flood of sunshine in the home may fade carpets, but it puts the bloom of health upon your cheeks. Take your choice.

An open window is better than an open grave.

Warm, stuffy rooms have killed more people than ever froze to death.

Those who sleep with their windows open, can get along with an hour's less sleep than others. They are that much ahead by breathing fresh air.

One of the most certain ways of producing not only unhealthy blood but also an unhealthy mucous membrane, is to poultice the lungs sixteen times a minute with impure air.

Deep Breathing

You will live longer if you take longer breaths, for you will have better blood.

You ought to practise deep breathing until it becomes natural, and then you are not far from the kingdom of health.

Deep breathing improves the digestion. Practise it frequently during the day. More die of air starvation than food starvation.

After each meal breathe as deeply as you can ten times in succession, then breathe normally for a minute, then take ten more deep breaths. Increase this by one round every day until you take from three to four hundred deep breaths daily as a regular habit.

Dietetic Suggestions

Do not eat a morsel between meals.

If you keep your digestive mill constantly grinding, it will soon wear out.

Food must be well relished in order to be well digested.

Many dietetic errors are due to a low conception of eating.

Avoid iced foods and drinks.

Do not make a cold storage plant out of your stomach.

Fletcher has well said: "Do not eat when you are mad, or bad, or sad; only when you are glad."

It is not only necessary to bring a good appetite to the table, but it is also important to come with a good state of mind.

Remember your teeth are put in your mouth, not in your stomach; so the first thing to do is to chew. Chew for your life. If you chew long you will live long; and you will not need to eat so much.

If you taste your food before you swallow it, you will not have to taste it afterwards.

Eat your bread with gladness.

"A merry heart doeth good like a medicine."

When one eats in an ugly, dissatisfied, contemptible, hateful state of mind, he is sinning toward God and is wronging himself. The great ideal is to continue feeling thankful all through the meal.

Drugs, Spices, and Condiments

Intemperate eating is infinitely more common than intemperance in drinking.

"Avoid patent medicines as you would a pestilence."

Use salt sparingly. Condiments should be wholly discarded, because they irritate the stomach, tending to produce gastric and intestinal catarrh.

Tea and coffee are drugs, not foods, and should come from the drug store instead of the kitchen.

Avoid mustard, pepper, and highly spiced foods that taste hot when they are cold, for they continue being hot after they are swallowed and even after they are absorbed into the blood. Mustard plasters may properly be applied externally, but they should not be used internally.

It is because we have so little scientific cookery that so many have to resort to mustard, pepper, and other fiery condiments and spices. These things that taste hot when they are really cold, that give the palate a twist, also injure the nervous system.

Water-Drinking

Do not drink while eating, nor eat while drinking.

If you drink at mealtime you should drink between the mouthfuls instead of with the food.

Drink a glass of water on rising and retiring, an hour before each meal, and one to three hours after eating.

During the winter months many people almost forget to drink water. Such should be reminded that water drinking is simply taking a bath on the inside. The average mortal would live much more comfortably if he drank a larger quantity of water.

Exercise

When we are resting, only one third of the blood in the body is in the muscles, while when we are exercising two thirds of it is in the muscles. There is no better way of relieving congestion of internal organs. The benefit of active exercise remains a long time after it has been taken.

There is no better all-round exercise than vigorous, energetic walking. It should be taken with the head erect, chest up, abdomen drawn in, breathing deeply through the nose, maintaining at the same time a cheerful state of mind, trying to be in harmony with nature and nature's God.

A capital way of strengthening the abdominal muscles is to sit well forward in a chair with chest well up, and then tilt forward and backward, raising the knees each time. Do this a few times a day when you have nothing else to do: you will be astonished in a short time how it will strengthen the abdominal muscles, and it is far more important to have strong abdominal muscles than it is to have strong muscles in the arm.

Religion and Health

Health and happiness result from obedi-

ence to God's laws. Misery and unhappiness result from disobedience.

We shall make but little progress in this campaign for better health until our souls are gripped with the great truth that the laws of health are the laws of God, that sickness and suffering are directly or indirectly due to the violation of these laws.

If we co-operate intelligently with God in the restoration of health, making use of such opportunities as are within our reach, discarding such things as God has clearly shown us are wrong, God will give us health, and He will bless to our own good, and to the good of His work, whatever infirmities He permits us to retain, just as He did in Paul's case.

Every invalid should heed the divine injunction: "Come unto Me, all ye that labour and are heavy laden, and I will give you rest," and have implicit, personal faith in that power that upholds the universe and has promised, "I will never leave thee nor forsake thee."

Colic

A. B. OLSEN, M. D., D. P. H.

AN acute, spasmodic, sharp, griping pain in the region of the stomach or bowels is usually described as colic. The term itself is derived from the Greek *kolon*, colon, or large bowel, and would indicate that originally at least, the disorder was connected with the bowels or stomach. We may also have colic of the liver or kidneys, and certain forms of poisoning, such as lead colic, are described. Colic is one of the most common of summer complaints, and babies and children are perhaps even more susceptible than adults. Indeed, the commonest of all complaints of nursing infants is colic, which accounts for most of the suffering of the little ones in their early months.

Causes

In this brief article we shall deal solely with that form of gastric and intestinal colic which is associated with indiscretions of diet such as over eating, bad combination of foods, indigestible food, unripe, stale, or decayed fruit, and decayed fish, fowl, or flesh, preservatives in milk, cream, butter, and in many other foods, and especially tinned and potted meats and fish.

Symptoms

The cardinal symptom of colic is, of course, a sharp, griping pain which is usually located in the vicinity of the navel. The attack is usually sudden, and the pain is so intense that the patient feels like doubling himself up. If he is lying down the knees are drawn up, for pressure upon the abdomen seems to give relief. The pain, which is often excruciating while it lasts, is believed to be due to spasmodic contraction of the muscular walls of the stomach or bowels. With the pain there is often the feeling of faintness, and more or less prostration. The skin feels cold, and a cold sweat is often present, but as a rule there is no fever. Flatulence and wind are also common symptoms of colic and are particularly noticeable in little children.

One would naturally expect that, after taking something which is disagreeing with the stomach, there should be an effort on the part of nature to eject it, and this is what occurs. If the patient is able to vomit freely there is almost always immediate relief, and therefore vomiting should be encouraged in every possible way. As regards the bowels they may be either constipated or loose. Diarrhœa is perhaps more common than constipation, and indicates again a strenuous effort on the part of nature to get rid of the offending matter whatever it may be.

The Treatment

The indications for treating a case of colic are obvious, for all one has to do is to assist nature. If there is not prompt vomiting it is always a good practice to give emetics,

such as lukewarm water to which a pinch of salt or mustard may be added to make it more efficacious. A pint or more of such lukewarm water may be given, and if that is not successful it is an easy matter to tickle the throat with the finger or a feather and so get the stomach emptied. In some few cases it may be necessary to use the stomach-tube in order to get the contents away, and then the assistance of a doctor or trained nurse will be required.

As soon as the stomach has been emptied attention should be given to the bowels in order to cleanse them. Large, hot, plain, saline or soap enemata are in order. If such enemata are not speedily successful in clearing out the irritating material which has accumulated in the bowels, it may be necessary to give a dose of castor oil, liquorice powder, or Epsom salts.

The patient should be put to bed, and hot-water bottles or hot fomentations applied to the seat of the pain. When the measures which we have already recommended have been freely used, heat rarely fails to give complete relief, and in the ordinary case the patient is soon convalescent. A tablespoonful of finely-powdered vegetable charcoal may be given in a glass of hot water. Essence of peppermint is also recommended, and may be given in quarter or half-drachm doses in half a glass of hot water.

The diet

Any one who has suffered from an attack of colic should be very abstemious as regards diet for a few days. After such an attack both stomach and bowels are in a sensitive, irritable state, and it is a wise practice to give them an opportunity to recover their normal condition before taking much food. Therefore it is wise to skip entirely two or three meals, sipping hot water in their place. Then one can begin with mild fruit juices, such as fresh apple-juice, grape-juice, orange juice, or the juices of other fresh, glass, or stewed fruit. If fruit juices are not available a glass of boiled milk and water in equal proportion may be taken every two or three hours; and later on the white of an egg which has been pressed through a fine sieve and mixed with an equal quantity of water. It is a good thing to adopt a fruit diet for a few days, taking baked or stewed apples, stewed prunes, stewed sultanas, and also fresh fruit, and especially banana puree with or without the addition of cream, oranges, grapes, etc., together with freshly-toasted zwieback, or some plain wholemeal or barley biscuits, taking care to masticate the food well, and to avoid too great a variety. A mealy baked potato is both a wolesome and easily-digested article of diet, but other vegetables, and especially the coarser ones, should be avoided for a few days until the digestive organs have completely righted themselves.

Prevention

But prevention is naturally the most successful treatment, and in civilised lands at least an attack of gastric or intestinal colic should be regarded as a disgrace, and the result of sinning against the laws of health. If every one were as careful about his diet and what he puts into his stomach as he is with regard to financial transactions, there would be little danger of an attack of colic. Eating for the purpose of sustaining life and maintaining health and strength is the underlying principle. When such thoughts are uppermost in the mind in gathering around the table to partake of breakfast or dinner, rational feeding is more likely to prevail, and when that is the case there will be little chance of colic or any other digestive disturbance.

First of all there is simplicity in the selection of the food. A simple meal of wholesome and carefully selected food, which has been plainly but thoroughly cooked, will rarely give trouble to anyone who has a fair digestion. A dish of well-cooked porridge (boiled three hours) and stewed fruit at breakfast, with a piece or two of buttered zwieback, a soft-boiled egg, and a couple of baked apples, make an ample breakfast for a hard

worker. Really the egg is not necessary, but we include it for those who want something in the place of bacon or ham.

It is interesting to note that colic rarely follows breakfast, but more often comes after the dinner or the largest meal of the day. There is no doubt but that a large number of people take altogether too great a variety of food at the principal meal of the day. A plain vegetable soup with some hard bread in order to ensure good mastication, a mealy baked or steamed potato and nut roast is all that is essential. For those who wish it, fresh salad or a milk pudding may be added, but these must not be looked upon as necessities. It is wise to avoid drinking with the dinner meal as well as at breakfast, for the taking of a quantity of fluid in connection with any meal prevents chewing and retards digestion.

The third meal may well consist of stale brown or wholemeal bread and butter, and a dish of stewed fruit or some fresh fruit if preferred. It is important to bear in mind that well-made wholemeal bread is of itself a perfect food, and that there will be little or no difficulty in maintaining good health for weeks at a time on such bread alone. But this complete abstinence is not necessary, and scarcely desirable. A few nuts may be added to the breakfast or dinner providing they are properly masticated, and then they make a very nutritious and wholesome food.

The Blessings of Science on the Battlefield

THE French expert, Dr. Helme, in an article in *Le Temps*, seeks to show that, if the science of killing and wounding has made great advances in the last two or three generations, the healing art has not lagged behind.

Military surgery, indeed, appears from this statement to have undergone what may fairly be called a revolution since, say, the war of 1870. And the sum total of results in the contest between the agencies of death and the agencies of life is, in regard to recoveries from wounds not instaneously fatal, that the average number of deaths in 1870 has been reduced by one-half. Dr. Helme begins by noting three great changes in the principles upon which those who minister to the wounded in battle must hereafter work. First, there can be no more rescuing of wounded men while actually within the zone of battle. To allow surgeons and stretcher-bearers to move across the line of fire would be to surrender them to certain death, besides assisting the enemy by presenting him with an unerring guide for his artillery fire. Secondly, the fate of the wounded soldier, judging by the most recent wars, may be regarded as settled almost as soon as he is wounded; if the wound be properly dressed at the outset, and thus protected against secondary infection, there will be no cause for anxiety; if not, a fatal issue may be expected. Lastly, the days of rapid rough-and-ready military surgery—of bullets extracted and limbs amputated on the battlefield—are gone by. Modern surgery, with its audacity of scope and ultra-refinement of methods, demands too great attention to details, too perfect a quiet in its environment, and too much time for operating, to permit of its being practised amid the din of battle.

Dr. Helme is of the opinion, at the same time, that our generation, with its over-stimulated and over-cultivated nervous system, is quite incapable of enduring the pain and nervous shocks through which the *grognards* of Napolean's armies managed to live.

The actual course of events with the wounded soldier is thus dramatically detailed. With eyes fixed straight in front of him, and filled with the warlike intoxication which eliminates the instinct of self-preservation, the soldier follows the orders of his leaders until he feels himself hit. Then another instinct than the ardour of battle takes possession of his whole being; he now thinks of nothing but finding his way to the wretched company of the stricken, to share his sufferings with them. In this way there are formed on the field of battle what General Troussaint (the surgeon-in-chief of the French army) calls "nests of wounded," to which correspond "nests of assistance." Here the medical students and young doctors have congregated in the midst of the troops, provided with morphine to lull pain, caffeine

to stimulate the heart, and serum to repair the tissues wasted by loss of blood. The three grave dangers to be met in these early stages of the case are asphyxia, hemorrhage, and infection. Against the last of these three the French soldier is fortified by a little package which he is obliged to carry with him as part of his regular field kit. Within its outer covering of grey linen this package contains another, an impermeable envelope, and inside this again is a provision of aseptic lint covered with fine gauze, besides a large bandage and two safety pins. Outside is a label on which are printed explicit directions for the use of this first aid *(or pansement individual)* apparatus. If the soldier is wise and provident, he will have thoroughly mastered these printed instructions long before the necessity for applying them arises; if he is only the average human recruit, and has never looked at them until his hour of anguish arrives, he ought even then to be able to understand their large, heavy type and simple precision of language.

The next thing for the victim to do will be to take advantage of the first lull in the fighting to drag himself to the nearest medical post, or "nest of assistance," which ought to be 1,500 metres (4,921 feet) or 2,000 metres (6,562 feet) to the rear of the firing line. Here his wounds will receive their first scientific dressing with antiseptics. At the same time his case is diagnosed, and a ticket is pinned on to his coat—a red ticket, if he is to be removed to the base hospital; a white one, if he is to be left where he is. In the former case, he will be carried off on a scientifically constructed stretcher *(brancard)* the French type of which is the Fybert, a contrivance so constructed as to be available for transporting the wounded man either in a waggon, on the back of a mule, or on the back of a hospital orderly. For the last of these means of transportation, the *brancard* is strapped, nearly upright, to the forehead, shoulders, and hips of the bearer, so that the patient may keep the sitting and slightly prone position desirable in cases of abdominal lesions, and known as "Fowler's position." So much for the routine of gleaning the human harvest while and where the battle still rages. When the turmoil and acute danger have shifted elsewhere, it is possible for the ambulances to make their rounds and pick up the wounded. The modern army ambulance (there are sixteen to every French army corps) is a field hospital on wheels, equipped with facilities for immediate treatment of cases in which delay would entail serious danger. The "field hospital" of thirty years ago is now only a memory. The ambulance, an automobile, takes its load as quickly and with as little jolting as possible to the base hospital, where the veteran surgeons, Red Cross nurses, and all the healing resources of modern science are to be found, amid quiet and orderly conditions almost as favourable to the patient as those of a well-conducted hospital in times of peace.

Dr. Helme makes an important point of the increasing usefulness of women in tending the victims of war. "Yesterday," he says, "a young surgeon, lately returned from the Balkans, Prof. Rene Le Fort of Lille, told me in a voice broken with emotion of his feelings at seeing these benevolent phalanxes of nurses. The societies of Help for the Wounded, the Austrian Cross of Malta, French, Russian, English, German, and Czech women—in the hospitals at Nish, Belgrade, or Sofia you see only these white angels bearing the red cross of redemption." To return to the battlefield, the work of the surgeons and their orderlies does not end with day. At night they have to scour the country, and gather in wounded men who have been unable to find their way to any aid station. These nocturnal gleaners of stricken humanity are, of course, provided with lanterns, and in this connection Dr. Helme describes the Gossard-Berthier light, which is especially constructed for the service of the wounded in war. It is an acetylene light, provided with a reflector, which brilliantly illuminates the ground within a radius of 8 metres (26¼ feet), but is quite imperceptible beyond 400 metres (1,312 feet)—a safe distance, considering that hostile armies nowadays never encamp within anything like so short a range.

The greatest difficulty of modern military surgery seems to be in abdominal wounds. Their healing depends on the early application of treatment and on the feasibility of keeping the the patient quiet for a long period. Wounds of this type wrought great havoc in the battle of Spion Kop, where the wounded had to be conveyed down a rocky cliff before undergoing operation. On the other hand, a large number of Russian soldiers suffering from abdominal wounds at Mukden were successfully treated, with laparotomy, by the skill and admirably organised resources of the Surgeon Princess Gedroitz.

Sanitation and Hygiene

CHOLERA

The public should try their best to prevent occurrence and spread of a dangerous disease like cholera among them. Cholera is characterised by rice watery motions, collapse and suppression of urine.

The cause of cholera is a minute form of living organisms which from their fancied resemblance to the stop (,) are called comma bacilli. They are too minute to be seen without a microscope.

The disease is very infectious.—If a case of cholera occurs in a basti or other locality, it spreads from the patient to other inmates of the house as well as to the neighbouring people; thus in this town over hundreds of persons on an average die every year of this disease. But if measures be taken to stamp out or eliminate the means of its spread, it ceases to prove a danger to other people; in hospitals, the doctors, attendants and patients suffering from other diseases never catch infection from cholera patients.

How does cholera spread from the patient to healthy people? The stools of a cholera patient teem with comma bacilli. It is from the stools that the disease is spread by the following agencies:—

1. *Hand.*—If one handles or touches a cholera patient or his soiled clothes, etc., some comma bacilli may stick to his hand.

2. *Water.*—Tanks, wells, rivers or any other sources of water used by the public may be infected with comma bacilli by throwing cholera stools, in or near them. It is a matter of deep regret, that the people wash the soiled clothes, etc., of the patient in the very tank they use for domestic purposes; some do not hesitate even to throw "saras" (earthenware pots) full of cholera stools into or near the water edge of such tanks.

3. *Food.*—Milk and other articles of food are inoculated with the comma bacilli:—

(1) By being touched with infected hand;

(2) By flies which drop on them after lighting on cholera motions; or,

(3) By being mixed with wa er or by being kept in vessels washed with such water.

Through which channel does it get into the body? If the hand thus infected be put into the mouth, or if water or food so infected be taken, the comma bacilli enter with them through the mouth into the intestines.

Once in the intestines, under suitable conditions they multiply rapidly; thus a few only may bring about a virulent attack.

SIR WILLIAM OSLER ON MILITARY HYGIENE

Addressing officers and men in a military camp on the prevention of disease in active service, Sir William Osler remarked that formerly it had been said that an army marched on its belly; now it marched on its brains. Only by utilizing fully existing knowledge in all grades, from the commander-in-chief to private, was the maximum success obtainable. Bacilli were a more important enemy than bullets. In the South African War the former were responsible for 14,000 deaths, the latter for only 8,000. So far only one great war had been waged with the weapons of science against these unseen foes. The Japanese went into the Russian compaign prepared as fully against bacilli as bullets, and their percentage of deaths from disease was the lowest recorded. We were not likely to have to fight three of the greatest scourges of armies—typhus, malaria and cholera, though the possibility of the last had to be considered. But there remained dysentery, pneumonia and typhoid. Dysentery

could be prevented only by boiling water. Pneumonia was much more difficult to prevent. Coughs and colds should not be neglected. The exhaustion produced by long marches, by exposure to wet and cold, and by wounds lowered the resistance of the body so that the pneumococci could attack the lungs. Above all others typhoid was the most fatal disease in modern warfare. Over and over again it had killed thousands before they reached the fighting line. In the South African War it killed more than the bullets of the Boers. Osler advised his hearers to take advantage of inoculation to protect them against this disease. In the British army, unlike foreign ones, inoculation is voluntary.

In the Absence of the Doctor

A PRESCRIPTION

How dear to one's heart are the scenes of his childhood,
Which fond recollection brings back to his view—
Oh, the apples so tempting and green, that the child would
Ingest, though his mother had told him not to;
Oh, the pangs of remorse; Oh the very sick feeling
That griped the insides of that penitent elf;
Oh, the blessed relief from that wellspring of healing—
The castor oil bottle that stood on the shelf;
The good old reliable castor oil bottle;
The caster oil bottle that stood on the shelf.

TREATMENT OF SORE FEET.

The British Red Cross Association has issued a leaflet giving directions for the prevention and treatment of sore feet in troops:

1. Feet should be washed with soap and water, and very gently dried—not rubbed.

2. Dab with methylated spirit on cotton wool, except where the skin is broken.

3. When dry, dust with powder composed of equal parts of starch and boracic powder or fuller's earth.

4. Bandage with clean bandage, preferably of domette, not too light—or else put on clean socks. All dirty socks should be washed and dried before use.

5. Reddened skin or recent blisters should be protected by strips of strapping.

6. All corns should be protected by strapping. Open sores require surgical advice, and this should be sought whenever possible, especially if the surrounding redness of the foot is extending.

7. Toenails should be cut short.

8. Hard boots should be well greased—mutton fat is the best. They should be well dusted inside with starch and boracic powder.

TREATMENT OF WEAK AND FLAT FEET

We must aim to make passive motion possible without pain, spasm or deformity, and to strengthen the muscles, thus restoring function and overcoming deformity and obstruction. In mild cases or when the feet seem normal at rest, but abducted on weight bearing, the shoes may be modified in such a way as to correct the abnormal position. The next stage is when muscular spasm develops with increase of pain and abduction of the foot. It will be necessary now to put the foot at rest, and this can generally be done in the milder spasmodic cases by adhesive plaster strapping, the foot first gradually but rather forcibly being put into the corrected position. Arch supports may be used later in these cases but should not be used until spasm and resulting pain are relieved. In the more severe cases of this variety an anesthetic must be given, and plaster of Paris applied after the foot has been overcorrected. It is very important also to maintain dorsal flexion as well as adduction. If adhesion or bony changes have taken place, the same effort should be made to correct the deformity if possible by manipulation.

: Mother and Child :

The Children's Sand Box

By A. Neely Hall

Nothing yet devised gives little children a safer and better pastime than a sand box. It will engross their attention for hours at a time and afford them unending pleasure in the open air, where they can dig and play to their hearts' content without being lured off by counter attractions.

The children's sand box is the mother's delight, too, for she always knows what to do with the little ones when she is too busy to be continually with them.

Now a pile of sand in the yard is not a very desirable thing, as the sand soon spreads and becomes mixedwith dirt and rubbish, and before long the children are sitting on the bare ground; therefore if these objectionable features are to be avoided it will be necessary to confine the sand. But it is not enough just to make a large box for it; the box should be raised ten or twelve inches from the ground, as shown below; then the sand will dry quickly after a rain and it will be raised high enough to keep the dogs out and to make it harder for the cats to get in.

If a wide and slightly sloping shelf is built all the way around the top of the box there

An Ideal Sand Box

will then be places for toys, less sand will be thrown out and there will also be less danger of the children falling out themselves. Such a shelf will also prove a convenient seat for older people who assemble to watch the children, as its height will be about that of an ordinary chair.

The Care of the Baby

James Frederick Rogers, M. D.

First and foremost for the unfolding of brawn and brain, the child must have food, the food must contain all the materials needed by all the different structures of the body, and these materials must be in approximately the proportions needed. It is astonishing how the body, even an immature body, will adjust itself to ill-proportioned foods; but though it can transmute compounds to a certain extent, it is not prepared to do miracles—it cannot create chemical elements nor make good ill-balanced proportions of elements.

Babies are by no means alike, but differ greatly as to their degree of perfectness of organs and balancing of functions; and while most of them arrive in condition for thriving on the nutriment which nature intended they should receive, none of them are prepared to select their diet from among the foodstuffs in the world about them. Unfortunately, mothers also are not usually ready to make a wise selection for their offspring; and as no other food is quite equal, for baby purposes, to mother's milk, it follows that most, and especially the delicate, are likely to show (by digestive disturbances or slow growth) some

disappointment under the process of artificial feeding.

That the baby "gets along" with the food given him may not signify that it is just what he most needs. On the whole, the average baby is a good sort of fellow, and doesn't complain much unless things are very bad. It would be better for him sometimes if he complained more. The bottle-fed baby is at the mercy of his parents, whose love may not be balanced by their intelligence. When it comes to food, the best is not too good for the baby, nor is it ever too expensive; for the child demands only substantials and wishes no luxuries in its diet.

Because of her ignorance, and because of the special importance of proper feeding, the mother should not accept the miscellaneous advice tendered by wellmeaning friends and relatives who have been "very successful" in rearing their one, two, or three children on this, that, and the other food preparations. She should ask a physician to oversee the feeding in the earliest months, or, at any rate, to see that she is not going wrong in her methods; for the money spent in expert consultation at this time may be more than saved in the general welfare of the child later. Even the physician may have to do some experimenting before finding the most suitable diet.

No physician can set down rules for food and feeding which will fit all infants; and in these pages we can only say that, while not always most suitable, fresh cow's milk, properly modified as to the proportions of protein, fat, and sugar which it contains, most nearly approaches the natural baby diet.

Not only is the quality of food, in these earliest days, of great importance, but the time of feeding and the amount given the child are to be considered. We presume that the well-developed, healthy baby, of well developed, healthy parents, could be trusted to indicate his hunger and his repletion; but there are such wide variations in these days, in both parents and babies, that this rule of nature cannot always be followed, even in breast-feeding. Besides, the adjustment of the child to society must begin early, and requires a more or less regular routine of mealtimes, and therefore of quantity at meals. Here, again, the physician may well be consulted.

Next in importance to the feeding of the child comes its clothing A baby should be kept from losing its heat too rapidly; in other words, should be kept warm. But of all faults in the care of the child, perhaps the most common is that of keeping him too warm. The clothing should not be tight anywhere, and the extremities should always be looked after carefully. Too much clothing is the source of much of the troublesome skin affections, the eczemas of infancy. Moisture from sweating or from wet diapers, adds to the effect of the heat in irritating the skin. The child when strong enough, usually makes an effort to rid itself of superfluous clothing, and, if parents were more mindful of this cause, they would often have less trouble in keeping their children, of all ages, covered when asleep. Of course, this may not be the only cause of restlessness.

A baby should have every opportunity for exercise. Many are so loaded with clothing and constricting bands that they are hampered in their movements. Formal gymnastic exercises, managed by the parent, have been advised for bodily development; but the spontaneous movements of the child are quite sufficient. The parent makes the best kind of "exercise," and in handling and carrying the young infant he serves to benefit its general bodily functions. But woe to the parent who becomes a slave to the infantile desire for passive movement.

A child should never be urged to walk or to exercise in other ways. Bodily movements come spontaneously with the development of the organs concerned. The child should never be unduly excited to play. Play is the result, the outward manifestation, of

superfluous nervous and muscular energy. If it does not play of its own accord, it is an indication of the need of rest or of better nourishment.

Rest is as important as exercise, or even more important, because adequate rest must precede exercise. Exercise has been carried too far if the child does not sleep profoundly afterward. Children are especially faulty nowadays in having ill-balanced or damaged nervous systems, and nothing else can prevent or help this condition, aside from plenty of good food, as much as abundant rest. If there is a quiet place about the house, that should be the baby's sleeping quarters, and he should not only have quiet, but freedom from strong light. The lack of poise and constant chatter of some mothers must have a more or less abnormal effect upon the nervous system of the infant in its waking hours.

As the baby grows, it becomes of importance that his bed and his carriage be so made that he can assume a reasonably good posture when lying or sitting. The spine of the young child is wonderfully elastic and recuperative after bad positions, else with our modern condensed vehicles, we should never have any straight backs. It is not merely the back which may suffer from bad posture, for the digestive, respiratory, and circulatory organs do not work so well in a doubled-up condition of the body as when it is straight.

The child should be kept clean inside and out, and the former cleanliness is of vastly more importance than the latter. Children may be healthy without bathing, but never if the bowels are not normally active. If the food is right in material and amount, the evacuations will be normal; and where laxatives may sometimes be needed, they are the last thing to be thought of, or to be used. Training to regularity in the movements of the bowels is of great importance, saves much work on the part of the mother, and can be begun as early as the third month.

Psychologically the child is thoroughly selfish, and this is necessary for its own survival; but it may be selfish for its own harm later, and for the undoing of its parents. Its cry is either the cry of need or the cry for unnecessary pleasure, and it may be difficult to distinguish which is which, though there is said to be a detectable difference in the tone. The origin of the cry can usually be determined by discovering what checks it. If the satistying of actual needs, the giving of its food, the riddance of gas from its stomach, the removal of a pricking pin, or the warming of its feet stops the flow of infantile language, well and good. If the mere taking up, or other superfluous attention, checks the vocal utterance, it may well be allowed to spend its force in a wail of disappointment.

The child is a bundle of possibilities, some of which are to be encouraged, some squelched if possible. The earlier and more accurately both processes are begun, the easier and surer will be the results in later life.

For a Week in January

GEORGE E. CORNFORTH

Baked Split Peas

Wash well one pint of green split peas and soak them overnight. In the morning put them into a baking pan. Add one large teaspoon salt, two to four tablespoons oil, and water enough to cover the peas. Put a cover over the pan and bake slowly for three or four hours, adding boiling water when necessary. When done they should be tender and dry. The cover may be removed during the last part of the baking, to brown the top. Serve with cream sauce.

If one likes the flavour, about half a clove of garlic cut fine may be added to the peas when they are put to bake.

Cream Rice Pudding

1 qt. milk
¼ cup rice
¼ cup sugar
1 egg
A few grains salt
Grated yellow rind of one lemon

Wash the rice thoroughly, and cook it in the milk in a double boiler till tender. Then add to it the sugar, salt and lemon rind. Beat the egg. Stir some of the hot milk into the egg, then stir the egg into the rice and milk, mixing well. Put into a pudding dish and bake just a few minutes—long enough to set the egg.

The pudding should be of a creamy consistency when cold.

Hot Cakes

1 cup zwieback-crumbs
¼ cup flour
¼ teaspoon salt
About 2 cups milk
2 eggs

Mix the zwieback-crumbs, flour, and salt. Heat the milk, not to boiling, but a little hotter than the finger can be held in, and pour enough of the hot milk over the zwieback-crumbs and flour to make a rather thick batter. Separate the whites from the yolks of the eggs. Add the yolks to the batter and beat well. Beat the white of the eggs stiff and dry and carefully fold them into the batter. Cook in spoonfuls on a slightly oiled griddle, allowing them to cook on one side till nicely browned, then turning them and browning the other side. Serve with sirup.

The split pea soup on the second day is made from what was left of the baked split peas the day before.

Macaroni au Gratin

¼ pkg. macaroni
1 cup sour cream
Yolk of 1 egg
½ teaspoon salt

Break the macaroni into inch-length pieces and put it into three quarts of boiling salted water, and boil continuously till the macaroni is tender, which will require from twenty minutes to one hour, according to the age and size of the macaroni. When tender, turn into a colander, then dash cold water through it Put it into a baking pan. Pour over it the cream, egg yolk, and salt, which have been beaten together. Bake till the liquid is set.

Cup Custard

1 pint milk
2 eggs
1 tablespoon sugar
½ teaspoon vanilla or the grated yellow rind of ½ lemon
A few grains salt

Heat the milk a little. Beat the eggs, then beat the sugar into the eggs. Mix a little of the hot milk into the eggs, then stir the eggs into the hot milk. Add the flavouring and salt. Pour into cups. Set the cups into a pan of hot water. Bake till set. Be sure not to bake too long or they will separate and the custard be spoiled. To tell when the custard is done, run a silver knife into the custard. If the knife comes out clean, the custard is done. If some of the custard sticks to the knife, it should be baked a little longer.

Irish Moss Blanc-Mange

The Irish moss is a sea-moss, plentiful in India the industry of collecting and curing which has been carried on for years. The moss contains a gelatinous substance which, when the moss is steeped in milk, dissolves, thickening the milk and giving to it an agreeable flavour.

1 qt. milk
⅓ oz. Irish moss
¼ cup sugar
⅙ teaspoon salt
½ teaspoon vanilla

Prepare the moss by soaking and washing in four changes of water, allowing it to soak about fifteen minutes the first time and five or ten minutes the succeeding times, picking it out of each water into the other with the fingers, carefully looking it over and removing any sand or dark parts.

Put the milk into a double boiler to heat. When boiling hot put the washed moss into the hot milk and cook thirty minutes. The milk will not seem much thickened, but it will be solid when cold. Strain through a fine sieve, stirring the moss to allow all the milk to drain out. Add the remaining ingredients to the milk. Stir well to dissolve the sugar. Pour into a mold wet with cold water or pour into individual molds. When cold, turn out of the molds, and serve with cream or with sliced bananas and cream.

Steamed Fruit Pudding

¾ quart peeled, quartered, and cored apples
¼ pound seeded raisins
¼ pound figs
1 cup seeded dates
1 tablespoonful molasses
¾ cup hot water
½ cup sugar
1 teaspoonful vanilla
½ teaspoonful salt
1½ cups zwieback-crumbs

Chop the fruit, then mix all the ingredients well together. Put into a pudding dish, cover, and steam three hours. Serve with—

Raspberry Sauce

Rub one tin of raspberries through a colander or strainer fine enough to remove the seeds. Sweeten if necessary, and thicken with corn-starch to the consistency of pudding sauce. Serve the pudding hot, with the hot sauce poured over it.

Ribbon Beans

These should be made the day before. Stew separately till tender and very dry one cup each of kidney-beans and white beans. Rub through a colander separately. Season each with ¾ teaspoon salt and a little thick cream or one or two tablespoons oil. Spread in alternate layers in an oiled bread tin. Put into the oven about one-half hour before serving time, to reheat. Success in having this taste good depends upon having the beans cooked down very dry. Serve with—

Mint Sauce

½ cup lemon-juice
¼ cup sugar
1 teaspoon powdered dry mint

Mix together, and set where it will warm slightly till the sugar is dissolved.

Pie Crust

2½ cups sifted pastry flour, measured lightly after sifting
½ cup cooking oil
¼ cup cold water
Few grains salt

Mix the salt with the flour. Add the oil, and mix with a spoon till the oil is partly mixed into the flour. (Remember that to make *tender* pie crust, the ingredients must be put together with as little mixing as possible.) Add the water, and mix till the dough is just stuck together. This will be softer than a crust made with lard, and a little harder to handle; more flour will have to be used on the board in rolling it out. But if you want a tender crust, use these proportions. Do not add sufficient flour to make the dough easy to handle.

Apple Pie

Line a pie tin with crust rolled as thin as possible. No one likes a pie with a thick crust and thin filling. Fill the crust with sliced tart apples. Sprinkle over the apples a few grains salt and one-third cup sugar. Add a tablespoon of water or a little more, according to the juiciness of the apples. Wet the edge of the crust. Make holes in the top crust and put it on. Pinch the edges of the crust well together. Bake in a slow oven one hour. The good flavour of apple pie is developed by long, slow cooking.

We omit the spice usually put into apple pie, because we think that spice covers up and spoils the good flavour that nature has put into apples. Apple pie may be flavour-

ed with lemon rind and juice, or a few finely chopped walnuts may be sprinkled over the apples before putting on the top crust.

Chili Sauce

1 qt. tomatoes, chopped
2 large onions, finely chopped
1 level tablespoon sugar
½ teaspoon celery salt
½ teaspoon salt
½ cup lemon-juice
Rind of ¼ lemon

Mix all the ingredients except the lemon-juice; cook slowly till reduced one half; cool; add the lemon-juice.

Bread Pudding

1 qt. milk
2½ cups stale bread, cut into dice
¼ cup sugar
3 eggs
⅛ teaspoon salt
¾ cup seeded dates cut into small pieces

Heat the milk. Add the bread cubes to the hot milk. Separate the whites from the yolks of two of the eggs. Beat the one whole egg and two yolks. Mix some of the hot milk with the beaten egg, then mix the egg with the hot milk and bread. Add the sugar, salt, and dates. Put into a pudding pan, set the pan into another pan of hot water and bake till the pudding is set. Then beat the two egg whites and fold into them one and one-half tablespoons sugar. Spread this on top of the pudding, and put into the oven to brown lightly.

Blueberry Toast With Whipped Cream

Dip slices of zwieback into hot cream or hot water. Put the blueberry sauce over the zwieback and put whipped cream over the blueberries.

Strawberry Toast With Nuts

Make strawberry toast according to the recipe for blueberry toast, and instead of using whipped cream, sprinkle chopped nuts over the strawberries.

Date Rolls

Use the dough for unfermented rolls. Roll it out one-eighth inch thick. Cut it into strips two inches wide. Place chopped dates along the centre of each strip. Wet one edge of each strip, then roll the strips over the dates. Cut into rolls two inches long. Bake in a moderately hot oven.

Diseases and Their Peculiarities

Intestinal Worms

By Charles Henry Hayton, B. A., M. D.

The Tape Worm.

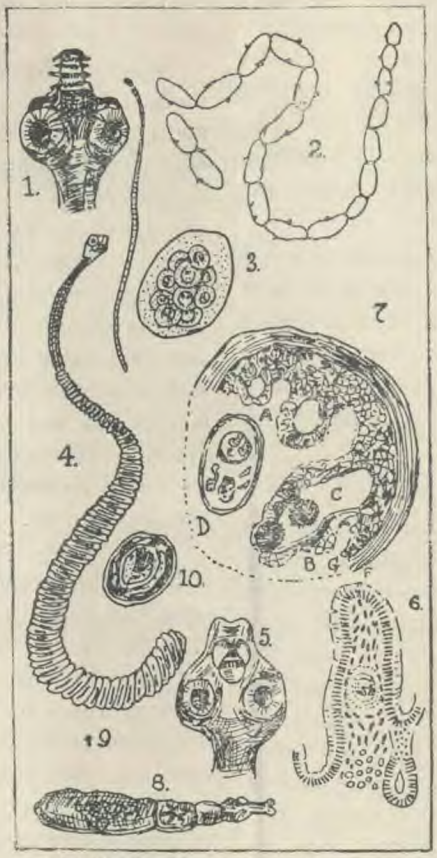
The human body during its short period of existence upon the earth is subjected to a lifelong attack of various kinds of bacteria and parasities. From infancy to old age life constitutes one continual struggle warding off the inroads of these invaders. They attack the body from every conceivable source—the food, the water, the atmosphere, even the clothes one wears are all contributory factors in this attack.

These bacteria and parasities find refuge upon the skin, especially in the hairy parts. The folds and crevices harbour multitudes. The alimentary tract, from the mouth to the anus, gives food and warmth to millions; they wander from it, through the various ducts and openings, to other organs; they gain entrance to the liver, the lungs, and even to the brain. No organ or tissue is entirely free from them. Among the more familiar parasites of the body are the intestinal worms, and of these the tape worm, the round worm, and the thread worm are the most common.

Tape Worm or Cestodes.

The cestodes are flat, yellowish ribbon-shaped worms. Each worm is divided into many segments, called proglottides. Each segment matures and produces a great

number of eggs called ova. Both the segments and ova are seen in the illustration accompanying this article. The tendency is for these segments to break off and with the eggs to be expelled with the fæces. It is the recognition of these segments in the stools that raises the suspicion of tape worms. It is well, therefore, in all suspected cases, to examine the stools for these segments. The head and neck together are known as the scolex. The head is generally provided with both suckers and hooklets, as is seen in the illustration. These suckers enable the worms to retain their hold upon the mucous membrane of the intestines. The importance of the head is recognized by the fact that unless it is removed by treatment, the segments will grow again and in a few months the worm becomes as large as ever. The head of a tape worm, which may become twenty to thirty feet long is no larger than a shot.



1, 2, 3, Head segment and ova of tape worm.
4. A fully formed tape worm.
7. Hydotid cyst due to dog tapeworm.
8. Larva of hydotid disease.

There are may varieties of the tape worm. Each animal has one peculiar to itself, and man may become the host of them all. The one prominent fact about the tape worm is that the encysted larva from which the different species grow is found in meat and fish. Lovers of raw beef, undercooked pork, smoked or salted fish, cannot escape the tape worm. Preventative measures which enable one to avoid these parasites include the rejection of all such articles of diet.

The largest tape worm known is that found in the fish, generally in the pike. It has a small oliveshaped head, as seen in the illustration, and reaches a length of thirty feet when fully developed. The segments are very numerous—3,000 or more. It is a common infection in all fish-eating countries. The inhabitants of Russia and Japan suffer considerably with it. The ordinary methods of salting and smoking fish to preserve them does not kill the worm.

The beef tape worm is very widely distributed, much more so then the fish tape worm, and is termed the "unarmed tape worm," because it lacks the hooklets of its fellows. It reaches a length of ten to twenty-five feet, and contains several hundred segments. The ox is the intermediate host, and when beef is ingested in a raw or underdone condition, the adult stage of the worm becomes established in the alimentary tract. It is most likely that the various raw meat cures in vogue of late years has made this worm more common. In Abyssinia the infection is so universal that a man without a tape worm is a freak.

The "measly pork" tape worm is slightly smaller than the beef tape worm, and is armed with a rostellum of twenty-eight hooklets. Its head is no larger than the head of an ordinary pin, and it attains a length of from six to twelve feet. It requires three months to mature. The segments and ova

are expelled in the fæces, and one can re-infect oneself by getting the ova on the hands, or commonly under the finger nails. This form is common in north Germany, but exceedingly rare in England.

The rat tape worm is generally known as the dwarf tape worm. It is the smallest of the human tape worms, reaching only from a quarter of an inch to half an inch in length. Like its fellows it requires an intermediate host, and this is the rat. Children are mostly infected with this variety, and as many as 1,000 worms have been found in one child. It has been estimated that in certain parts of Italy ten per cent of all the children are infected.

Then there is the cat tape worm, the dog tape worm, the geese and the duck tape worm, the moth tape worm, and a variety found in fleas—these have all been found in a fully developed form in a man's intestines, though much rarer than the other forms mentioned.

The Life History.

The development of the tape worm from the egg to the adult form is an interesting piece of history. Two hosts are necessary, or rather one host and an intermediate host. Taking the pork tape worm as an example, it lives in the human intestine, and is responsible for a large number of eggs which are being continually expelled with the stool. These eggs undergo no further development unless taken into the stomach of a pig. Under the influence of the gastric juice the egg shell is digested off and the young worms set free. By means of a puncturing apparatus they pass through the intestinal wall of the pig and find shelter in various parts of the body—the brain, the liver and especially the muscles. Having reached their destination they become encysted, and this constitutes what is known as the larval stage of the worm. These encysted larva remain in the muscles indefinitely. This condition of the animal, when quartered for human consumption, is known as "measly pork." If such meat is eaten by man without being cooked, these encysted larva pass into the human stomach, and in the intestines devolop into adult worms.

The life history of the other varieties are similar, the only difference being that the beef tape worm uses the ox as the intermediate host, likewise the fish tape worm the fish, and when beef and fish are eaten by man in a raw state the tape worm develops.

One worm for which man plays the intermediate host is the dog tape worm. The adult tape worm is found in the dog, and the eggs pass from him and find access to the intestines of man. The shells are digested off and the young worms bore their way into the different organs, and there form what is known as hydotid cysts. The hydotid disease is common in those parts where men associate quite closely with dogs. The disease is peculiarly prevalent in Iceland, Shetland Island, and in some parts of Australia. Hydotid disease is serious, and is found most frequently in the liver, the brain, the lungs, and the kidneys.

Symptoms

In a large proportion of cases there are none, the disease being discovered accidentally on examining the stools and finding segments of the worms. In some cases, however, there are traces of intestinal irritation, some reflex symptoms such as nausea, vomiting, abnormal appetite, and diarrhœa. In children night disturbances and even convulsions may appear. Headache and dizziness are felt at times. Itching at the nose and grinding of the teeth are believed to be signs of worms, but are not always necessarily so, as they are frequently symptoms of other troubles. In a few cases nervousness is seen, mental depression, and a general impairment of health as well.

Treatment

Preventive measures are very important. All meats used as food should be thoroughtly cooked. A better way is to use other and

(Concluded on Page 32)

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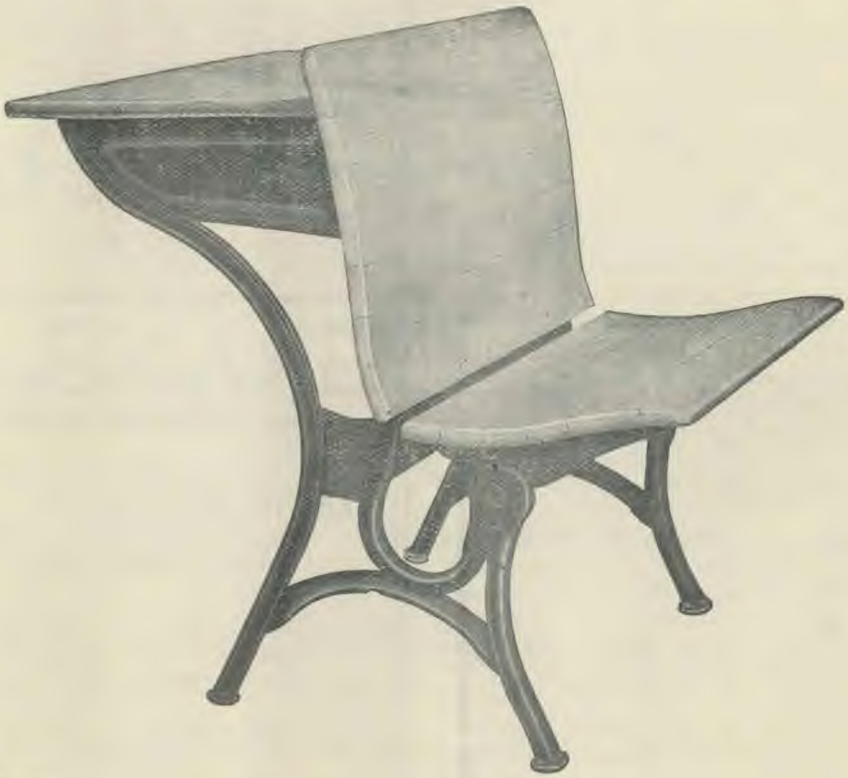

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Abstracts

WHOOPING-COUGH

D'Espine states that in 1913 there were 46 infants with whooping-cough in his service; most of them were bottle-babies and 9 were between 2 and 6 months old. Two succumbed to pneumonia already installed when the children were first brought to the clinic. Another died of tuberculosis and still another, enfeebled by chronic bowel trouble, died of general debility. The others all recovered; the mortality was thus 8.6 per cent. although, strictly speaking, whooping-cough can scarcely be held responsible for any of the deaths in this series. The mortality from whooping-cough throughout Switzerland is comparatively high. Statistics for the decade ending in 1910 show the proportion of the general mortality to be 1.10 per cent. from whooping cough; 1.05 from diptheria; 0.91 from measles; 0.3 from typhoid and 0.27 per cent. from scarlet fever. The whooping-cough mortality has not declined in Switzerland in recent years while in England it has dropped to one half the former figure, but it is still four times that of Switzerland. The statistics for other countries are compared with these. All testify that whooping-cough is a serious disease and that it runs a more serious course in institutions than in private homes. Children with whooping-cough should be kept at home and given outpatient care as needed. Another conclusion from the data presented is that open-air treatment should be the rule for whooping-cough, either in the home or hospital or in an open shelter. A third conclusion is that strict isolation is necessary: individual cubicles with special nurses until the diagnosis is certain, and then isolation in a special ward.—*A. M. A. Journal.*

BULLET WOUNDS IN WAR

From the cases quoted by Posnett it is seen that bullets may pass through the most vital tissues without doing any permanent injury. In the treatment of bullet wounds, Posnett says, it must be remembered that there often is great initial shock. The soldier frequently goes into battle in a hungry condition and is more or less tired by marching, and the receipt of a severe injury while in this state is accompanied by shock to the whole system. His mental state while engaged with the enemy also probably contributes its share. The impact of a bullet against the body is very severe. One

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patient who was struck through the right ilium told Postnet that he felt as if he "had been hit by a crowbar wielded by a giant," and that he had been thrown three or four yards out of the saddle.

An empty stomach is frequently the salvation of a wounded soldier who has been hit in the abdomen; a wound of the stomach or intestines seems to close rapidly without any trouble and so long as there has not been leakage of gastric or intestinal contents the patient will probably recover in a short time, but if leakage takes place symptoms of localized peritonitis may be expected which will require a laparotomy. Wounds o the bladder usually require a suprapubic cystotomy, as they do not heal readily and generally leak into the surrounding tissues. A clean wound of the kidney seldom requires any interference, but Posnett has had to remove a kidney for a wound which cut the ureter across about 2 inches below the renal pelvis. What may be called local shock is a condition sometimes encountered in wounds of the soft parts. The great velocity of the bullet seems to shake up the tissues for some little distance around the wound, with the result that there is a feeling of considerable stiffness in the part for several days, and nerves in the immedate neighbourhood, although not touched by the bullet, may be the seat of more or less neuralgic pain for a considerable time. Tissues in this condition are not favourable for operative proceeding, as there is a tendency to delayed healing. It is better, if possible, to wait a few days for this local shock to pass off before proceeding to operation.—*A. M. A. Jour.*

Herald of Health,

The Indian Health Magazine

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REGISTERED, - - - No. A. 457

CONVICTS ASK FOR PROHIBITION

A petition drafted by prisoners in the Eastern Penitentiary in Pennsylvania, asserting that fully seventy per cent of the crime in that State is directly attributable to the excessive use of intoxicating liquors and asking for the enactment of prohibition legislation, has been circulated among the convicts confined in that institution. It is reported that 1,500 signatures of inmates of the prison will be attached to the petition, which is to be presented to the legislature.

PHYSICAL CULTURE IN FRENCH ARMY

Impressed by the unsatisfactory gymnastic records of the candidates recently received at military school, M. Messimy, minister of war, has decided to raise the physical requirements in the examination for admission to these schools. He insists that the physical culture of future officers ought to be carried to the same point as their general culture. The minister is taking an interest, moreover, in developing physical culture in the army, especially among the officers.

MEDICAL EDUCATION AND THE PUBLIC

"Thirty (should be ten) years ago, any ambitious youngster who had the price could find some 'college' ready to fit him out with the magic letters, 'M.D.'—ofttimes after a 'course of study' so petty that a plumber's apprenticeship was a liberal education by comparison. To-day, most of these diploma mills have been closed—though a few continue to do business at the old stand and to send forth wretchedly unprepared men to undertake that most responsible task in the world, the care of the sick. The country needs, not more doctors, but better ones. It is getting them. The medical course of study in a first-class medical college of to-day is calculated to try the earnestness as well as the ability of a would-be physician."—*Chicago Daily Journal, U. S. A.*

GOVERNMENT NOTIFICATION

WE are printing herewith by request of the Government of the United Provinces the Government of India notification concerning European Foreigners either resident or transient. Special attention is called to these requirements.

No: 4327-VI-1109 of 1914.

NOTIFICATION

Judicial (Criminal) Department

Dated Naini Tal, the 22nd: September 1914.

Under Section 5 of the Foreigners' Ordinance, no: 111 of 1914, dated the 20th: August 1914, the Lieutenant Governor of the United Provinces of Agra and Oudh is pleased to direct that every householder in the United Provinces, in whose house any *European Foreigner* is residing, either temporarily or permanently, shall forthwith report to the District Magistrate:—

(1) the name of such foreigner,
(2) the place from which he has come,
(3) the date of this arrival,
(4) the purpose of his visit, &,
(5) the probable date of his departure.

By order of the Hon'ble the Lieutenant Governor, United Provinces.

INTESTINAL WORMS

(Concluded from Page 24)

better food than meat. There must be a careful disposition of the stools from tape worm patients by burning or disinfection. Stools such as these should not be thrown indiscriminately down a watercloset.

Curative measures should be undertaken only by a physician. Certain preparations are most essential, and the handling of poisonous drugs should not be undertaken by lay members. The principles upon which the treatment is based is to narcotize the worms by medicines such as male fern, pelletierin, pumpkin seed, kusso, and then to wash them out with a purge. Sometimes expulsion is easy, at other times difficult. If the head fails to come the first trial, the treatment should be tried in another month. The armed tape worm is especially difficult to expel. In the next article round worm and thread worm will be dealt with.

Printed by W. E. Perrin, at the International Tract Society, 17, Abbott Road, Lucknow