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A WALTAN VILLAGE

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FLYING FOXES

HERALD OF HEALTH

The Indian Health Magazine.

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

Vol. 4 Lucknow, U. P., February, 1913. No. 2

A Plea For Reform

The Patent Medicine Drunkard.

To learn that temperance workers, even ministers of the gospel, allow their systems to become poisoned with alcohol and suffer the effects of its enslaving influence would come as a shock to you. But let us assure you, dear reader, that such a thing is not unheard of. Yea in fact it is quite a common occurence. Do they get it from across the bar of the public house? No, No; they keep it in their houses and consume it privately? No. But what is worse than either of these they get it ignorantly and innocently. They get it after reading the smoothly worded advertisement, and the lying claims of the advertiser of a worthless, yet harmful nostrum. It is by becoming addicted to the use of somebody's "sarsaparilla", or So and So's "bitters", "tonic", etc.,

Mr. Jane was the father of a respectable family. He was a clergyman or minister by profession. He was thought well of by every one. His family noticed that he was acting differently than was his custom. He was having less regard for what was right. His disposition, instead of being kind and forbearing, was becoming irritable. Even the neighbours began to remark, "I wonder what is the matter with Rev. Jane, he acts so differently from what he used to." Things went on in this way for some time. The father kept getting worse until the family became very much alarmed. The physician was finally summoned. The family was questioned very closely concerning the past history or Rev. Jane. The odour, the pulse, the slow decreased respirations, the pupils of the eyes, the subnormal temperature, the flushed face, the slight coma with irrational talk, and the complete relaxation, told the physician what was the matter. Turning to the son he said, "Why your father is drunk." The son looked astonished, and said. "Father never drank a drop of liquor in his life". The physician said, "I can't help it your father is dead drunk just the same." The physician made closer inquiry into the history of Rev. Jane's life. Finally the son stated that his father had been using a great deal of———Co's. Tonic the past year and noticed that he had considerably increased the size of dose and the number of doses of late. The son and the physician walked to the back part of the compound where the door of a godown was opened, and there was revealed case after case of empty bottles. The mystery was made clear. Rev. Jane had become entangled and misled by the deceptive, fraudulent claims made by the quack. He began taking the nostrum in moderate doses. The stimulant, alcohol, played the accustomed game of making him feel better and at the same same time called for stronger and more frequent dose of the

stimulant. He was now getting enough alcohol from the nostrum to cause him to loose control of his senses.

Dear reader, this is not a lone example. There are hundreds more of like nature. Sometimes it is manifested in one way, sometimes in another. The ultimate result is the same; a condition totally unfit for health and happiness.

It is possible we have never considered the alcoholic contents of the so-called "bitters", "tonics", and "sarsaprillas" on the market. It may be our attention has never been directed to the plain, simple, yet appalling fact that they contain from 15% to 44% of alcohol, while beer the anti-temperance drink contains 3% to 7% according to the make; and that the best grades of gin, rum, and whiskey have no higher percentage of alcohol than the stronger brands of these patent medicines. It would not take much of a trick for one to become drunk on a patent medicine made up of 44% alocohol would it? And still temperance workers, teetotalers, W. C. T. U. women, and ministers of the gospel consume gallons of alcohol in this form every year. This may seem incredible, yet it is a fact, and if you care to make further investigation of this subject, you will discover much more than has been told you here.

Let us familiarize ourselves with some of the inner workings of the patent medicine business, and never tire of passing on our knowledge and enlightening those with whom we come in contact. The only way we can lift the veil of ignorance on this subject is by the education of the people.

Another illustration to show the intoxicating effects of the bitters, tonics, etc., is an incident connected with the American Indian. The use of spirituous liquors by the American Indian was working such disasterous results in causing poverty, disease, and shortness of life, that the government had to interdict the sale of alcohol, or "fire water" as the Indians called it; whereupon a well known quack shipped car load after car load of his 36% alcohol-loaded nostrum into the territory of the Indian, and there developed from this what they called the ———booze. It turned out to be quite as much of a nuisance as the alcohol had been and had to be controlled by the government.

To show the lack of innocence that underlies this kind of patent medicine, we append another illustration. The writer once knew a man who was noted for not always having the best control of his appetite for something that was stronger than water. The novelty of it was he didn't satiate his thirst for alcoholic products with beer, whiskey, gin, and rum, but called for his patent-medicine "bitters" across the bar in the public house. The fact of the matter is some public houses keep patent-medicines "tonics" to cater to such trade.

What is the difference between the constant dosing of Dr. So and So's Sarsaprilla and the moderate drinker; or becoming drunk on a nostrum, and drunkenness on alcohol without some quack's name being attached to it? We cannot draw the line. The one who uses the "tonic" may be innocent through ignorance of its direful effects, but the effects are there just as sure as they are in the whiskey bottle. We hope our readers will not try to draw a line between the two, but that they will consider both destructive to life and will banish them forever.

It is the alcohol in the patent medicine that frequently brings the testimony. It stimulates the functions of the body of the user for the time being, makes him feel better long enough to inspire his courage to pen a few words of praise which are used by the charlatan in his advertisements, for years afterwards. But alas the poor deluded soul has built his hopes upon a foundation of sand which stood for a while and gave way. If the patent medicine venders would include among their testimonials the history of the poor benighted creatures who were sunken in dismay and were at the point of ending all with a stronger poison than the patent medicine they were taking, or by the means of the bullet, we would read many a sorrowful and pathetic tale. But we never read these. They are kept out of print. They are only given expression to by the inward agonies of a life misspent. "Health is Wealth", but it does not come by swallowing a poison which increases the riches of its exploiter. *Health is regained and maintained by careful attention to the laws of hygiene.* We can predict with a large degree of safety that in the near future the consensus of medical opinion, not hampered or bound down by tradition, will be that stimulation is not necessary for the proper maintenance of the bodily functions, not even with the time honoured tea and coffee.

Athletes, Alcohol and Tobacco

THE American athletes who astonished the world by their wholesale victories in the Olympic games at Stockholm were trained under a rigid system which eliminated beer and tobacco as well as strong spirits. A poll of the men themselves is said to have shown that practically the entire team, including all of the point-winners of importance, were total abstainers not only while in training but at all other times. The sporting writer of a large Eastern daily tells of the first notable victories won by American athletes over those of England. An English team had come to New York for an international meet and expected to have an easy time in maintaining their old-time superiority over all other nations. The evening before the opening of the events a few of the Americans dropped into the British headquarters and were astonished to find several of them sipping ale. In reply to their expressions of surprise the Englishmen protested: "Oh, we always drink our ale, but not much of it." In the ensuing contests Great Britain was badly beaten. Sportsmen in the tight little isle are now speaking seriously of the United States' rise in the athletic world, and are beginning to admit that the American system of no intoxicants and no tobacco at all times must be adopted in England if the mother country can hope for the regaining of her lost laurels.—*The Beacon Light.*

LANDLADY.—"You believe in mustard plasters, doctor?"

M. D.—"Rather! I always order them for patients who call me out in the middle of the night when there's nothing the matter with 'em."—*The Scalpel.*

General Articles

Facts Concerning Consumption

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

THERE are three vital things that we know about consumption, and it is desirable, nay urgent, that everyone in the Kingdom should become familiar with these facts.

Consumption is catching.

Consumption is preventable.

Consumption is curable.

First, consumption is a germ disease. It is catching, it is distinctly infectious. Being infectious, consumption is directly transmissible from one person to another, or, more frequently, indirectly, but in both cases through the expectoration. We think of leprosy as a very infectious disease, and no one would like to be brought into intimate contact with a leper, but in this case our fears are largely groundless, for consumption is far more infectious than leprosy, and the danger to the community from one careless consumptive is decidedly greater than if there were a leper going about in the same way.

When the lungs are affected by consumption, germs are often found in the expectoration, and in certain stages of the disease they are exceedingly numerous. These germs, known as the bacilli of tuberculosis, are the direct exciting cause of consumption. Without their presence there can be no consumption. When anyone becomes infected with these germs there is great danger of developing tuberculosis in one form or another, unless the infected person is so healthy and strong and possesses such vigorous resistive forces that the germs are unable to gain a foothold.

Sneezing, coughing, or even forcible talking on the part of consumptive patients is a means of discharging numerous visible or invisible particles of mouth-juice into the air. These moist particles may, and often do, carry with them, especially in the advanced stages of the disease, the specific germs of tuberculosis. All persons in the room who are breathing the infected air are in danger of becoming directly infected with the disorder.

But consumption is more commonly spread indirectly through the breathing of tubercular bacilli which have gained admittance to the air by the drying of the expectoration. The germs of consumption are very persistent organisms, and they are known to possess great vitality. Drying by no means destroys them but simply serves to spread them about more widely everywhere. The dust of the road or street blown into the air by the wind often contains consumptive germs. But the dust of over-crowded and poorly-ventilated houses which have recently harboured consumptives is more likely to be contaminated with the deadly germs of the disease. Furthermore, the germs of consumption may be, and there is good reason to believe that they frequently are, transmitted through the milk, cream, and butter derived from tubercular cattle.

Second, consumption is happily one of those infectious diseases which is distinctly preventable. Knowing as we do the direct cause of consumption we can, by proper sanitary and hygienic measures, prevent its spread by controlling the germs. The problem is admittedly a very difficult and complex one, and its solution depends on the most earnest and wholehearted coop-

eration on the part of all. The public sanitary authorities with their splendid service of medical officers of health can do, and are to-day doing, a very important work in the attempt to prevent the spread of tuberculosis, but their efforts are well-nigh powerless unless they are accompanied by intelligent, efficient, and earnest cooperation on the part of all classes of society. While public sanitation is of vast importance, personal hygiene is vastly more important in the annihilation of tuberculosis.

Consumption is emphatically a house disease. It is associated with the home and home life. Public and private sanatoria, although excellent weapons in the campaign against tuberculosis, will not alone accomplish the eradication of the scourge. To do this, it is necessary to make every home in the kingdom, and particularly every consumptive home, as clean and wholesome and well ventilated as a sanatorium. In other words, each home must become a miniature sanatorium, and the greatest precaution possible should be taken to prevent the spread of the disease by the prompt and efficient destruction of the expectoration of all consumptives and all other discharges that are likely to contain germs of infection.

Strict, rigid, absolute cleanliness is the most effectual and surest means that we possess of preventing the spread of tuberculosis. With clean, fresh air, clean water, clean food, and particularly clean milk foods, with clean, well-ventilated homes, clean beds and bedding, clean clothing, and a clean skin, it is possible to prevent the spread of consumption, and we affirm it is the duty of everyone who knows these things to render such efficient obedience to the law of cleanliness as to bring about this proper state of affairs in his home life.

Third. Let it be known far and wide that consumption is one of the most curable of all serious disorders. There are multitudes of people of all ages that are cured yearly of tuberculosis in one form or another. We do not say that consumption is curable at all stages, for that would not be true. But in the earlier stages of the disease a cure may be confidently anticipated provided patients receive the right treatment.

What is the right treatment? It is interesting and important to note that it consists of the same measures that we have recommended so earnestly for the prevention of consumption. The only exception is that these measures must be carried out more vigorously and more persistently. An abundance of fresh air day and night, a liberal diet of wholesome, nourishing and easily digested food, a suitable amount of physical culture exercise in the fresh air, and particularly deep breathing exercises out-of-doors, and graduated walking exercise—these are pre-eminently the curative measures which invariably bring the greatest, speediest success.

Yes, except in the more advanced stages of consumption, where there has been considerable loss of lung substance, and where the patient has become seriously weakened and emaciated, there are hopes for a successful recovery.

We welcome every effort that has been and is being made to warn people about the dangers of tuberculosis, and to educate them concerning the best means of preventing the spread of the disease and of curing those who are already subject to it. Much splendid work is being done by numerous societies and other agencies throughout the kingdom, and we wish them all great success, but until every person in the kingdom joins in the crusade against the pestilence of consumption, the disease will not become eradicated.

Fresh air is the best life insurance agency.

"The Dawn of the Health Age"

THE aptness of the above expression, which was used as the title of a recent book, will be apparent to those who realize the significance of the fact that the Fifteenth International Congress of Hygiene and Demography, recently held in Washington, D. C., was the most cosmopolitan meeting ever convened in this country. No occasion, no gathering of any kind, has ever drawn such a representative company of distinguished men from all quarters of the globe as has this congress. The only congress that has ever approached it in this respect was the International Congress on Tuberculosis, held in Washington in 1909. Every country of any note was represented among the three thousand delegates and members of the recent congress.

That eminent scientists from every continent and every clime, and from every country of any importance, should make the trip to America, in some cases covering immense distances, to have part in the deliberations of this congress, is significant of the aroused interest in all parts of the world in the subject of hygiene, and in itself justifies the appropriateness of the expression, "The Dawn of the Health Age."

This does not mean that we have arrived at the time when everybody is to have good health, or even when everybody is to do all he might to avoid disease and promote vigorous health; but it does mean that there has been an awakening among the intelligent of all nations to the fact that disease is very largely preventable, and to the importance of systematic and united study into the causes of diseases and their means of prevention. Already great strides have been made in the conquest of disease. We no longer think of bad air, or even of bad water, as a cause of malaria, as was the case not so very long ago, because we now know definitely that malaria is always caused by a minute animal organism, and that this organism is transmitted to man through the bite of a certain species of mosquito. Thus we have also definite knowledge regarding the hookworm, and we are in a position absolutely to stamp it out just as fast as the people can be taught to cooperate. So we know definitely that plague, formerly supposed to be a visitation from God, is caused by a certain microorganism, and that ordinarily this organism is transmitted from the rat to man by means of the rat flea. Here, again, the problem of eradication is one of sanitation, or in other words of decent cleanliness, in cellar and storeroom and stable, as well as in the parlour. If these diseases come as a visitation, it is as a punishment for that kind of "housekeeping" which specializes on the rooms the guests are likely to see, and neglects the others. This much our study of modern hygiene has taught us. We have learned that the rat is an enemy the fly is an enemy, the flea is an enemy, and that the insects and vermin that mean careless housekeeping also mean disease. And so we might go on to enumerate; but there are still other and grave problems to be solved, such as the nature and cause of pellagra and some other diseases, and, possibly even more perplexing, how to get the mass of the people to put into practise the knowledge we already possess.

The opening address by President Taft has been characterized as one of the most vigorous of his career in the White House; and certainly no President has had such opportunity to study hygiene and sanitation at first hand as has Mr. Taft. With his personal experience in the Philippines, in Cuba, and in connection with the Panama Canal, he has been led to appreciate as few men, perhaps even

among physicians, the importance of an organized campaign for the prevention of unnecessary disease. Mr. Taft was enthusiastically cheered at intervals during his address, but at no time more appreciatively than when he spoke of this international congress of scientific hygienists as making for universal peace.

But though this international body, through the better understanding and cooperation it is bringing about between different nations, is making for universal peace, it is to war, according to President Taft—the Spanish war—that we owe our first impetus in America to establish a really efficient organized public health work. By this I suppose he refers to the governmental work, for the American Public Health Association has been in existence and doing good work forty years, and the International Hygiene Congress has been meeting at intervals for about the same length of time, heretofore always in Europe. "Out of war," said Mr. Taft, "of very short duration and of comparatively little importance in the number of men engaged, the cost, and the lives lost, had come to this country a series of problems, the most important of which included questions of sanitation, the transmission and cure of tropical diseases, the adoption and enforcement of a system of hygienic law, and the establishment in the tropics of governmental institutions of research by army, navy, and civilian physicians, which have brought to the attention of the whole country the necessity for widespread reform."

Doubtless this war has exerted a marked influence on the progress of hygiene in this country; but possibly the President, from his viewpoint, has taken rather an exaggerated view of it, as we may surmise from the fact that the immense progress of hygiene in this country is fully paralleled by that of other countries. It is indeed the dawn of the health age, not only for the United States, but for civilization; but as yet, it is only the dawn.

Mind Cure

MRS. E. G. WHITE.

The relation that exist between the mind and the body is very intimate. When one is effected, the other sympathizes. The condition of the mind affects the health to a far greater degree than many realize. Many of the diseases from which men suffer are the result of mental depression, grief, anxiety, discontent, remorse, guilt, distress, all tend to break down the life forces, and to invite decay and death.

Disease is sometimes produced, and is often greatly aggravated, by the imagination. Many are life long invalids who might be well if they only thought so. Many imagine that every slight exposure will cause illness, and the evil effect is produced because it is expected. Many die from disease, the cause of which is wholly imaginary.

Courage, hope, faith, sympathy, love, promote health and prolong life, a contented mind, a cheerful spirit, is health to the body and strength to the soul.

In the treatment of the sick, the effect of mental influence should not be overlooked. Rightly used, this influence affords one of the most effective agencies for combating disease.

Great wisdom is needed in dealing with diseases caused through the mind. A sore, sick heart, a discouraged mind, needs mild treatment. Many times some living home trouble is, like a canker, eating to the very soul, and weakening the life force. And some times it is the case that remorse for some wrong deed undermines constituion and unbalances the mind. It is through tender sympathy, that this class of invalids can be benefited. Sympathy and tact will often prove a greater benefit to the sick than will the most skilful treatment given in a cold, indifferent way.

When a physician comes to the sick bed with a listless, careless manner, looks to the affected one with little concern, by word or action giving the impression that the case is not requiring much attention and then leaves the patient to his own reflections, he has done that patient positive harm. The doubt and discouragement produced by his indifference will often counteract the good effect of the remedies he may prescribe.

The power of the will is not valued as it should be. Let the will be kept awake and rightly directed, and it will impart energy to the whole being, and will be a wounderful aid in the maintenance of health. It is a power also in dealing with disease. Exercised in the right direction it would control the imagination and be a patent means of resisting and overcoming disease of both mind and body. By the exercise of the will power in placing themselves in right relation to life, patients can do much to cooperate with the physician's efforts for their recovery. There are thousands who can recover health if they will. Often invalids can resist disease, simply by refusing to yield to ailments and refusing to settle down in a state of inactivity. Rising above their aches and pains, let them engage in useful employment suited to their strength. By such employment and the free use of air and sunlight, many an emaciated invalid might recover health and strength.

We are in a world of suffering. Difficulty, trial, and sorrow await us all along the way. But there are many who make life's burdens doubly heavy by continually anticipating trouble. If they meet with adversity or disappointment, they think that every thing is going to ruin, that theirs is the hardest lot of all, that they are surely coming to want. Thus they bring wretchedness upon themselves, and cast a spell upon all around them. Life itself becomes a burden to them. Their happiness both for this life and the life to come, depends upon their fixing their minds upon cheerful things. We are not to let the future, with its hard problems, its unsatifying prospects, make our heart faint, our knees tremble, and our heads hang down.

When some one asks us how we are feeling, we should not think of something wonderful to tell in order to gain sympathy. We should not talk our sorrows and sufferings.

One of the surest hindrances to the recovery of the sick is the centering of the attention upon themselves. Many invalids feel that every one should give them sympathy and help, when what they need is to have their attention turned away from themselves, to think and care for others. So let the invalids, instead of constantly requiring sympathy seek to impart it.

IF WE ONLY UNDERSTOOD

Could we but draw back the curtains
That surround each other's lives,
See the naked heart and spirit,
Know what spur the action gives,
Often we should find it better,
Purer then we judge we should;
We should love each other better
If we only understood.

If we knew the cares and trials,
Knew the efforts all in vain,
And the bitter disappointment,
Understood the loss and gain—
Would the grim, external roughness
Seem, I wonder, just the same?
Should we help where now we hinder,
Should we pity where we blame?

Ah, we judge each other harshly,
Knowing not life's hidden force;
Knowing not the fount of action
Is less turbid at its source.
Seeing not amid the evil
All the golden grains of good;
Ah! we'd love each other better
If we only understood.

Woman's Work.

Nerves; How to Preserve Nerve Tone

OF all functional disorders, where there is no structural change or organic disease, that condition known as nerves, or neurasthenia, to use a technical term, is one of the most tedious and difficult to deal with. In ordinary health a man scarcely knows that he has nerves and ought not to be more aware of them than he is of the presence of his pancreas. He is able to go about his daily task with comfort and with pleasure, and when he arises in the morning he feels rested and refreshed and quite ready for work.

VIBRATORY MASSAGE

Weariness and Fatigue.

One of the first symptoms of approaching nervous debility is a feeling of weariness and fatigue which the night's sleep, sound though it may be, is not able to remove. When one feels as tired or almost as tired on getting up in the morning as when going to bed at night there is something wrong in the citadel of health, and, as a rule, the nerves are affected. This feeling of tiredness, more or less constant, is soon followed by nervous irritability and excitement, with vague sensations of discomfort, although there may be no actual pain. The patient becomes restless and fidgety; he gradually loses courage and gets low-spirited, and soon comes to feel dissatified with everything and everybody, and particularly with himself. There is a keen sense of inefficiency and a feeling of utter worthlessness. Gradually mental depression approaches; all hope leaves and the condition soon becomes one bordering upon despair.

What to Do.

There is little use telling such a patient that he must shake off his fatigue and mental depression, brace up, take courage, and fight his morbid feelings. He would be glad to do so, but is quite unable to do so. He cannot throw off the nervous disorder any more than another man can throw off an attack of bronchitis by simply willing to do so. The patient suffering from nerves is ill and requires complete rest from all work and responsibilities as well as suitable treatment. It is alwaysdifficult if not impossible to deal successfully with a neurasthenic patient in his own home, and a more or less complete change of environment and association is required. In the vast majority of cases a nervous patient makes better progress and secures a more speedy recovery by going away from his relatives and friends.

But we cannot recommend the ordinary private or public boarding-house or hotel,

for at these places he cannot get the special attention that he requires. A patient suffering from neurasthenia requires good but at the same time wise feeding, and a course of natural tonic treatment such as baths, electricity, and massage.

The Weir Mitchell Rest Cure.

Where to take the patient is oftentimes a great problem, for there are comparatively few institutions that are really suitable for dealing with nervous disorders to the best advantage. What is wanted is a quiet, restful health home, where the diet receives the careful attention which it deserves, and where all necessary natural treatments can be obtained. A place situated in the country with a bracing air and ample opportunity to get out of doors, and where efficient nursing can be obtained is highly desirable. Massage is one of the best of treatments and should be given daily, as well as the neutral bath or other tonic baths. Oftentimes the electrical current in the form of static electricity or high-frequency produces almost marvellous results. The neurasthenic should be at an institution where there is a resident physician who can supervise both treatment and diet, and adapt both according to the requirements of the individual case. Pleasant and bright surroundings combined with kind, sympathetic attendants, soothing treatment to promote sleep—for neurasthenics very often suffer from insomnia—and an atmosphere of good cheer and optimism are all essential elements in the successful treatment of neurasthenia. The institutions which are best fitted to deal with these and similar cases are the sanitariums which are now to be found in almost every country of the earth. These institutions make a speciality of diet, baths, electricity, massage, medical gymnastics, and all forms of natural treatment. Patients suffering from nerves are rarely if ever benefited by medicine or drug treatment. Not infrequently the adminstration of drugs has been the means of aggravating the disease and retarding recovery.

Rest and quiet are needed to restore nerve tone.

It is a great mistake to postpone the treatment until the symptoms become aggravated and the patient suffers an actual breakdown. If the case is taken in the early stages when it is just beginning to develop, then, as a rule, a few weeks of complete change combined with tonic baths and massage, as well as a whole-

some and nourishing diet, will bring about a cure, and put the patient on his feet again fit for his duties. The longer the delay the slower the progress with the case when finally taken in hand. It is true that all cases do not benefit by the rest cure, although the majority find that the ideal treatment; but all, with scarce an exception, require a change of environment for at least a brief period, and if this change is combined with the various forms of natural tonic treatment which can be obtained at a sanitarium the progress is much more rapid and certain, and there is a speedy restoration to health.—*Good Health (London.)*

Walking As a Sport

IT may never have occurred to you to think of walking as a sport. If you observe the people on the street,—the girls and women particularly,—the reason for this will be plain ; nearly every one in taking steps puts her heel down first.

You have probably read the directions for correct walking, or have heard them in the gymnasium—" Carry the body erect, the chest well forward ; swing the legs from the hips ; bend the knees but slightly ; step squarely on the ball of the foot with the toes inclined outward ; relax the ankles as you put the foot down."

The most important part of these directions is, "Step squarely on the ball of the foot." The chances are that you have tried walking in that way for a few yards, and have in the end fallen back into your habitual gait. Make up your mind that walking is as much of a sport as golf or tennis, and try it again. Just as you must practise to get a straight drive or an accurate serve you must practise to make the correct walk seem natural and easy.

At first it seems too springy and uncertain. You tend to walk on tiptoe. That is, of course, because you are trying to break the old habit of stepping heel first. Keep at it ; after trying the correct walk for half a mile or so, you will find that it begins to seem natural. Your heels complete the step almost instantaneously, and motion becomes pleasurable.

There is no doubt that beneficial effects come from stepping on the ball of the foot. When the correct step is taken, the body is necessarily held erect and there is much less jarring of the spine, and much less misdirected energy. The correct position of the body brings freer, deeper breathing. If you cannot have an automobile or an aeroplane, adopt nature's own provision for an easy, buoyant, exhilarating means of locomotion.

Walking in the right way gives you a feeling of lightness that is a real pleasure. At first some of the muscles in the calf of the leg feel the strain. That is because they are unused muscles, but they ought not to remain idle. Before long the fatigue disappears, and you can walk a great distance without feeling weary.

To feel wholesome, refreshing muscular fatigue, is good for you. But do not regard the correct walk as a duty ; learn it and practise it because it is good sport. —*Selected.*

THE doing of housework can be made an art. The smallest thing well done is artistic, be it making a bed, sweeping a floor, or baking to beautiful golden brown a well formed loaf of bread.—*The Balance.*

"GIRLS make me tired," said the fresh young man. "They are always going to palmists to have their hands read."

"Indeed she said sweetly, " is that any worse than men going into public houses to get their noses red?"

The House We Live In

The Use of the Intestines

In a previous article we considered how the intestine was built or what we call its anatomical construction. We now naturally turn to its use, or function. We have carefully followed the course of and changes in the food in the alimentary tract through the stomach. The food when made in readiness to leave the stomach is a homegenious mass of liquid consistency. As it reaches this stage, a portion at a time, however, the pyloric valve of the stomach opens and allows the chyme, as it is now called, to pass through into the first part of the intestine or duodenum Here the food comes in contact with two very important juices, one is secreted or formed by the pancreas and is called the pancreatic juice; the other is secreted by the liver and is called the bile.

The pancreatic juice has various uses, thus making it play a very important part in the digestion of our food. The three different kinds of foods that are contained in a well balanced bill-of-fare are all influenced by this juice. For the digestion of the proteids, it has a proteid splitting ferment; for the fats, a fat splitting ferment and for the starches, a starch splitting ferment. These have technical names. The proteid splitting ferment, trypsin; the fat splitting ferment, steapsin; and the starch splitting ingredient, amylopsin. The trypsin changes a part of the proteids in our food as lean meat, beans, peas, lentils, dal, white of eggs, and the curd of milk a step toward the peptones. Steapsin changes a part of the fats in our foods as butter, cream, and the fats in grains to fatty acids, soap, and glyceral and the amylopsin changes the starches in rice, potatoes and grains to dextrins and sugars.

Brunners glands which are mentioned in a former article secrete a juice that also helps in the digestion of the proteids and carries them a step farther.

The bile which is poured into the duodenum aids in the emulsification of the fats, tends to keep the intestinal tract in an antiseptic condition, and stimulates the muscular activity of the intestinal wall. Outside of the work that the bile has to do with the digestion of the food, it plays a part in some of the colouring processes of the body, both pathological and normal, but we cannot enter into a consideration of these here.

While this work is being carried on, the inner muscular coat of the intestines by contracting causes the juices to mix with the food. and the outer longitudinal layer by contracting pushes the food along the intestinal canal.

Finally the food comes in contact with another juice lower down in the intestines. Nature has made a wonderful provision for the digestion of the food. Everything pertaining to the body is dependent upon the manufacture of the food that we eat. The food, after running the gauntlet of saliva, gastric juice, bile, secretion of Brunners glands, has to come in contact with the digestive influences of the "Succus Entericus," a juice which is the product of the glands of Lieberkuhn situated in the intestines. This juice completes the work of those which preceededit. It contains some eight enzmes which have the power of acting upon and changing all of the different kinds of food that we take into the alimentary tract. Any of the starches, sugars, fats and proteids not acted upon by the saliva, gastric juice, bile

and secretion of Brunners glands are acted upon by the Succus Entericus, or intestinal juice.

This finishes the process of digestion and naturally the next step is absorption and assimilation which we will leave for a future article.

We will now consider what becomes of the residue of the food and the organs that take part in its disposal.

THE COLON.

The colon or large intestine serves as a reservoir for the residue of the food. It also has some absorbative power as well. It begins in the lower right hand region of the abdomen in the form of a blind pouch from which the appendix sprouts and extends upward to the liver as the "ascending colon." The turn at the liver is known as the "hepatic flexure." It there extends across the abdomen to the left side to the region of the spleen being called the "transverse colon." It turns near the spleen and receives the appelation of the "splenic flexure." From here it goes directly downward on the left side as the "descending colon" making a turn to the median line as the sigmoid flexure and then straight downward as the rectum and anal canal.

The anatomical make up of the colon is similar to the small intestine. It has the same number and kinds of layers with the exception that the outer longitudinal muscular layer is collected into three bands running lengthwise of the organ. The peristalsis of the colon is of two varieties reversed and propulsive. Thus it throws the food back and forth thoroughly relieving it of that which is useful, and selecting any part of it that can be absorbed.

The food leaves the small intestine and enters the large intestine at a somewhat acute angle being controlled by a valve called the ileo-cecal valve. As the food reaches the lower part of the colon, the sigmoid flexure, it becomes semi-solid in nature and enters the rectum from where it is expelled as feces once or twice a day, according to the habits of the individual, by a nervous and muscular mechanism.

The feces consist of the food residue that cannot be absorbed, bacteria, epithelial cells, and bile pigment. The normal colour is a variation between the yellows and the browns. The ingestion of various drugs and abnormal conditions change the colour of the feces. Bleeding along the intestinal canal causes a black tarry stool, a stoppage of the bilary passages will result in a light or clay coloured stool. An irritation of the intestine may cause either too loose and frequent stools, or a constipated stool.

Intestinal indigestion may result from the organ *per se*, or it may come from a general systemic condition. It is generally accompanied by diarrhœa or constipation, the expulsion of offensive gas, undigested food noticeable in the feces either with the naked eye, or under the microscope, mucous, sometimes blood, distention of the abdomen, and tenderness on pressure. These are the local symptoms, and after the process goes on some time, autointoxication sets in which causes a long chain of general symptoms.

The appendix, to which we have alluded, is a very troublesome part of the digestive system. It is a small organ located as an offshoot of the cecum. It is about 2½ to 3 inches long and ⅜ of an inch thick, having a blunt rounded end. Its anatomical construction is similar to the intestine with the exception of it having a poor muscular layer. The lumen is very small, and no valve is located at its entrance to keep out foreign bodies. It is very prone to inflammation because of the narrowness of its lumen compared to its length, its lack of a muscular layer, its absence of function, its poor blood supply the fact that it becomes kinked by its mesentery, its having no valve or door between the large intestine, and its being a good place for the growth of organisms. Seeds or other foreign materials are forced from the intestine into the lumen of the appendix where they are retained because of a lack of muscular contraction and the kinking of the organ. Inflammation of the mucus membrane follows. The deficient blood supply does not check the inflammation so that good food is furnished for the growth of the germs. As a result appendicitis which has been considered in a previous article becomes well established.

Eggs

GEORGE E. CORNFORTH.

THE question why we use milk, which is an animal product, was considered in the preceding article. We are sometimes asked a similar question about eggs,—why we use eggs, but do not eat chicken. We believe that the only eggs fit to be used are strictly fresh ones, laid by hens that are fed upon wholesome food, and not allowed to feed upon filth and garbage. Eggs have not been alive, and do not contain the waste products of life; and if they have been produced under the conditions named, they contain neither disease germs nor the poisonous products of decomposition. But when we consider the difficulty of obtaining such eggs, we must regard ordinary eggs as a more questionable source of nourishment than fruits, nuts, grains, and vegetables.

Eggs are one of the most concentrated forms of nitrogenous food, containing considerable fat also. They rank next to meat in this respect. In fact, eggs closely resemble meat in nutritve value, being richer in fat and poorer in protein than medium fat meat. This places them among meat substitutes. But let us not forget that nuts are much higher in nutritive value than any other food except the oils and fats.

These figures also show that the white of eggs is almost pure albumen, one form of the protein, or nitrogenous, food element, containing very little fat; while the yolk is rich in fat. The white consists of a solution of albumen encased in minute sacks, or cells. When the white is beaten, the sacks are broken, and the albumen, being viscous, or sticky, catches air, and increases, to many times its bulk when unbeaten. The beating makes the egg white a little more digestible, because the sacks are a slight hindrance to the digestion of their contents.

The yolk of the egg contains less water than the white, considerable fat, and a little more nitrogenous and mineral matter. The fats are in the form of an emulsion hence very easily digested. Eggs are rich in some of the mineral elements which are most important to the body, namely, iron, phosphorus, and lime; and these minerals are in organic combination, and prepared for the use of the body, while iron, and phosphorus in the form of drugs are not so organized. Eggs, especially the yolk, are therefore a valuable food for anemic and nervous persons, also persons suffering from tuberculosis. But we do not think it advisable to give tuberculosis patients such large quantities of eggs that they take a great excess of the protein food element. White of egg contains sulphur also, which is the substance that discolours silverware. There is no foundation in fact for the belief that eggs with dark shells, are richer than eggs with light shells, for they do not differ in composition.

Eight or ten eggs are about equal in nutritive value to one pound of medium fat meat. Therefore when eggs are cheap they are a cheaper source of nourishment than meat; and when they are moderate in price, they are equal to meat in that respect.

The age of an egg may be determined

by placing it in a glass of water. If it is fresh, it will lie on its side in the bottom of the glass. If it is three weeks old, the large end will be slightly raised. If it is three months old, it will stand upright in the water, the small end resting on the bottom of the glass. If considerably older than this, the egg will float on the top of the water. If the egg has been preserved in some way, it will probably be older than this would indicate.

Eggs are caused to spoil by germs that make their way through the shell, which is porous. The water in the egg also slowly evaporates with age. To preserve eggs, then, they must be protected from germs and from evaporation. The usual method of keeping eggs on a large scale is by cold storage. For home use, the best way of preserving eggs is by the use of silicate of soda, or water glass. Use perfectly fresh, clean eggs, but do not wash them. Pack them in a crock, and cover them with a solution of one part silicate of soda to ten parts of water that has been boiled and cooled. Put a cover on the crock, and put away in a cool place. The silicate of soda can be obtained at a drug store. Eggs preserved in this way will keep six or eight months. The flavour of the egg is not affected. They will be found to be as good as store eggs. If it is desired to boil them, the shell should be pierced with a needle. When using a number of eggs, always break each separately into a small dish to avoid spoiling the whole by any stale egg that might be in the lot.

To separate the yolk from the white of an egg, break the shell gently in the middle either with a knife or by tapping the egg against the edge of the dish into which the white is to be put, open slightly and allow the white to run out. Turn the yolk from one half of the shell to the other till all the white has run out. Be sure that not a particle of the yolk gets into the white, because this will prevent it from beating very stiff. Also be sure that not a particle of oil or cream or milk or any thing greasy gets into the white, or is in the bowl or on the beater: for these will prevent the white from stiffening. Also have the white cold. Never beat the whites till you are ready to use them, because they gradually go back to the unbeaten state, and it is not possible to beat them stiff a second time. If you have whites or yolks left over, the whites may be kept, unbeaten, in a glass or bowl in the refrigerator or in a cold place; and left-over yolks may be kept nicely by covering them with water. The water should be poured off when the yolks are to be used.

It is sometimes convenient to know the weight and measurement of eggs. They are as follows:—

9 eggs weight about one pound
5 eggs equal one cup
9 egg whites equal one cup
12 egg yolks equal one cup

A little experimenting with the white of an egg will help us to understand better its composition, and will teach us how eggs should be cooked to make them most digestible. Slightly beat the white of an egg; or better, put it on a plate, and with two knives thoroughly cut it up by crossing the knives like scissors, with the cutting edges toward each other, resting the ends of the knives in the egg white on the plate, and then drawing the knives together and past each other. Stir a teaspoonful of this cut-up egg white into one-half glass of cold water, and let it stand. You will then see the little bluish-white sacks in which the albumen was contained. They are called albuminin. Strain the mixture through several thicknesses of cheese-cloth. This removes the albuminin, and you have a clear liquid left. You might think there is no albumen left in the water. If there is any, it

(Concluded on Page 48)

Mother and Child

Welfare Work for Children

BY WARFIELD WEBB

WHAT mother does not love her babe? If she did not, she would be less of a mother than the brutes, which will defend their young, sometimes with their own lives. With this mother instinct of love, most animals possess a more or less perfect what-to-do instinct, which enables them to protect their young, or a fair percentage of them, from the dangers and the enemies with which they are threatened.

But the life of human babies is too precious, too sacred, for them to be reared on this animal basis of "a fair percentage." It might do for the ignorance of barbarous and savage times, but it is utterly unworthy of a civilized commuuity; for we now have the knowledge by which a very large proportion of baby deaths might be prevented. But with this knowledge we need a public conscience that will cause us to feel that the community as a whole is responsible when certain of the women are allowed to assume the responsibilities of motherhood without the knowledge that is required to safeguard the lives of their children.

There is no fact more patent than that thousands, yes, millions of mothers suffer their infants to die of preventable disease, and then as a rule, with hopeless agony look upon the death as a dispensation of Providence or of fate. Notwithstanding the fact that practically all infant deaths can be charged to parental ignorance, there is a general impression that with maternity the woman in some way acquires an instinctive knowledge of what to do for her child, and that instruction in the art of motherhood is entirely superfluous; and often the mothers will resent any attempt to instruct them.

Frequently the parents are not fitted for the advent of the child. Poverty, ill health, and insanitary environment are factors calculated to mar its prospects as it enters the world. When to these are added parental ignorance, there is little prospect that the life will be more than a few months of suffering.

But the child, having been brought into the world, has a right to life, and health, and strength,—a right which brings a responsibility not only to the parents, but also to the community. In order that this responsibility on the part of the community may be discharged, there must be an efficient and unending crusade of education, whereby mothers shall be given that knowledge which every mother should possess.

It is with this end in view that numerous organizations have been established to improve the lives and the environment, first of the parents, and through them, of the offspring. And the task does not terminate with the first few months of the child's life. There is still need for the guidance of the mother, or for the doctor's or the nurse's assistance and training; and these the associations are trying to bring into the homes of the poor, to the end that nothing will be omitted that might be for the welfare of the child.

In Chicago the United Charities has been working along this line with remarkable results, which prove the wisdom of the labour and the heroism of the labourers.

While it may appear a little out of the regular routine for an organization of this kind to undertake such a work, there is every reason for its existence, and many reasons for gratitude on the part of hundreds of families for the good that has been accomplished. A part of the labour is the day-nursery, where the children are brought each day at an early hour by parents whose labours must keep them from home. Here the infant and the little child are given care and training that are even more beneficial than that which they could or would receive at home.

Physical examinations as to the conditions of the applicant are made, and its antecedents are recorded before it is admitted. If any lurking disease is noted, an effort is made to cure it before it has had an opportunity to gain headway. The child receives the proper kind and amount of food, and the regular bathing, exercise, sleep, and training that will be the means of increasing its physical and moral well-being. Many babies are brought to such institutions suffering from disease, and are taken away sound in body. In case of serious or contagious disease, the child is at once sent to some institution where it can have proper medical attention.

The mothers are shown just how to care for their infants,—how to bathe, clothe, feed, and otherwise minister to the children's welfare. This work has been followed by the most gratifying results. Practical training proves to the mother how much depends upon her care in the daily life of the baby to keep it well. Hearsay evidence and mere oral instruction are insufficient to insure this. A practical training by the nurse at the nursery and in the mother's home, gets results that would be manifest in no other way.

During the warm months, when the body demands plenty of fresh air and sunshine, there are summer camps, where mother and child can obtain rest and recuperation, and where the mother incidentally learns how to care for the child. As it is not convenient for all mothers and babies to go to the summer camps, summer tents have been pitched on the roof of the day-nursery and elsewhere, and here the same lessons in child welfare are conducted under favourable conditions.

The child receives proper care, and the mother learns the value of sunshine and air. She is taught that there is wisdom in ample but proper feeding.

The essentials for the betterment of her children are made plain to her by practical lessons. She sees the improvement under the nursery methods; then notes the effect of the daily bath, the pure and wholesome food, given with regularity and with care, and notices the comfort of the child when properly clothed and cared for. She sees the necessity for sufficient air in the home, both day and night, and comes to understand that there is an unlimited amount of good to be gained from proper care in rearing her offspring.

The practical training under the care of the doctor and the nurse opens her eyes. She now believes possible what she at first thought foolish and an intrusion. Her mother-love and her maternal wisdom have been broadened, and her gratitude has been increased for those who have made possible the well-being of those little ones who are the very mainspring of her life and the cause of her labours and her joys.

THE BABY'S BATH

The First One

For this, use olive-oil, or vaseline. Leave the oil over all folds of the flesh, the head, and any spots that seem to need it. If the baby is then rolled in his blanket, with an open space left for breathing, and a hot-water bag laid against him, he can be left several hours

if it is not convenient to give the water-bath.

The Water-Bath

Have the room warm, and everything ready before starting. Wash the eyes and mouth with a boracic solution (the doctor usually does this as soon as the baby is born, but do it again). Dip cotton applicator into the solution; hold it close to the eye; hold eyelids open; drip the solution into the eyes; pat the closed lids dry. Wind absorbent cotton around finger to wash the mouth. Dip it in the solution, and cleanse every corner of the mouth carefully. Be gentle, for the lining is very delicate. Keep the baby on the lap, having him well covered excepting the part being bathed. Use plenty of soap, rinse well, and *pat* dry with *soft* towel. Dust talcum powder or cornstarch lightly in folds of flesh and over the navel. Wrap the navel in absorbent cotton or a square of cloth. Wind the band over this firmly enough to hold dressing over the navel, but not tight. Fasten the band, and dress the baby. Then give him to the mother to nurse.

The Usual Morning Bath

Continue using the boracic solution for the eyes and mouth for several weeks. Begin at once to use it again if any redness (inflammation) of the lids or eyes appears, or a white spot comes in the mouth which seems like a curd of milk hard to remove. Usually wash the eyes with a clean cloth dipped in a cup of clean, warm water. A half-teaspooonful of salt added to a cup of warm water makes a good mouth wash. Cleanse the entire head before undressing baby, to prevent chilling. After the navel is healed, give baby tub baths. Use soap sparingly, excepting over the buttocks; rinse well. Powder lightly in creases of flesh. Olive-oil is best to cleanse the scalp of scales; leave the oil on a while, then wash, rinse, and dry. If a circular movement, in about inch circles, is used on the scalp, and the hair left to dry that way, it can be trained curly.

A delicate baby can be made fat with an oil-bath applied every day after the water-bath. For the oil-bath use a tablespoonful of warm olive or coconut-oil, rubbed in well with the flat of the fingers over the entire body. Take an upward direction on the limbs and back, and a circular one on the chest. On the abdomen, use the circular movement also, following the direction of the bowels, as follows: Begin on the left side, going across the lower part, up the right side, crossing above the navel, and going down the left side. This rubbing over the bowels is good for colic, as it will help expel gas.

NURSING IN CONTAGIOUS DISEASES

Author of "Herself, Talks With Women Concerning Themselves," etc.

THE nursing in contagious diseases presents some requirements that are not found in other diseases. Not only must the patient be considered but the remaining members of the family must be protected from the contagion. The nurse finds that she is much more confined and that she must take precautions to protect herself from the disease. For the trained nurse, there is one compensation ; a nurse usually receives about ten dollars (Rs 30) more a week when caring for a contagious case than when nursing any other case. This is only just, on account of the extra work and close hours required.

Isolation.

In any contagious disease, the patient should be isolated and no one allowed in the room except the nurse and the doctor. The room preferably is at the top of the house and separated as far as possible from the remainder of the rooms. A sheet moistened with some disinfectant solution, as chloride of lime should be hung in the doorway leading from the room. The room

should be well ventilated as fresh air is a great aid in recovery.

Disinfection During Illness.

All secretions, as that expelled when the patient coughs, should be burned. It is better to have the patient expectorate in small pieces of cloth which may be burned, than to use a sputum cup. The urine, the feces and even the water in which the patient is bathed should, be disinfected before disposal so as to prevent the germs of the disease being scattered about. Chloride of lime or a five per cent carbolic acid solution may be used for this purpose. No articles should be carried from the sick to other parts of the house. The patient should have separate dishes and these may be washed in the room. They never should be washed with the family dishes. The bed linen and night clothes should be allowed to soak several hours in a five per cent carbolic acid solution before being sent to the laundry. Then they should be boiled thorougly and dried out of doors.

Exposing Children to Disease.

There is a common superstition that all children must have all the so-called children's diseases and that the sooner they are over with the better, for then all worry is past. Some mothers have been known deliberately to expose their children to the contagion of measles or whooping cough. Such a proceeding should be condemned in no uncertain language. It is no more necessary for all children to have these diseases than it is for all adults to have small pox or typhoid fever. Indeed, the after effects of the latter diseases may not be nearly as serious as those from a seemingly mild attack of measles.

Measles.

This apparently mild disease so often is regarded in the light of a joke that it does not receive proper attention. In many of the smaller towns, no quarantine is enforced and children are allowed to return to school before they have fairly recovered from the disease. As a result, the other children in the room are exposed to the contagion. This should not be allowed, for the after effects of measles frequently are very serious.

Measles is an extremely contagious disease. The contagion may be present in any of the secretions from the patient. It may be carried in the clothes of a third person. One attack usually protects from subsequent attacks although recurrences have been known in the same person. However, the second attack usually is very mild.

The disease appears from seven to fourteen days after exposure. It is ushered in by a feverish cold ; the eyes are watery, reddened and very sensitive to light. The nose "runs," there is loss of appetite and general feeling of chilliness and disinclination. The fever gradually rises to about one hundred and two degrees F. and may go one or two degrees higher while the eruption is appearing.

The eruption (breaking out) makes its appearance on the fourth day, usually occuring first on the forehead, then spreading to the remainder of the face and other parts of the body. At first this resembles small red papules or pimples. Later the face becomes blotchy-looking and swollen. The papules appear to be raised slightly. At times there are hemorrhages into the skin producing what is known as "black measles." Desquamation or peeling usually commences at the end of the first week. It appears fine and branlike. About the time the eruption appears on the face small, bluish-white spots surrounded by a red area appear on the mucous membrane of the cheeks and lips. These are called "Koplik's sign" and are regarded as positive evidence of measles.

The complications of measles are more serious than the disease. Broncho pneumonia not unfrequently occurs. Otitis media or inflammation of the middle ear

is not uncommon. Following measles tuberculosis may make its appearance.

The child with measles should be kept in bed for about a week and quarantined for four weeks. Milk, broth, gruel and eggs should be the chief articles of diet. The body should be rubbed with oil every day to allay the itching and also to prevent the scattering of the desquamated skin. While the eyes are sensitive to light, the child should be kept in a darkened room or should wear dark glasses. The eyes should be cleansed frequently with a solution of boric acid. If the rash is delayed, hot drinks and hot baths may be given. A dry cough may be relieved by keeping a steaming teakettle in the room.

DR. EDITH B. LOWRY.

- - Abstracts - -

TROPICAL CLIMATES AND THE WHITE MAN

THE advocates of the theory that certain deleterious effects noted in the tropics are due to the chemical rays of the sunlight, point to sunburn as an evidence of injury produced by actinic rays and maintain that pigmented skin will absorb these harmful waves. The pigmentation following sunburn is considered a conservative effort on the part of the organism. The supporters of the actinic theory advocate the use of protective clothing, a red, orange-red, or black layer being recommended. Some advise a tinfoil lining for the headgear. Now it is a matter of general observation that the covered portions of the body do not become tanned orsunburned when ordinary clothing is worn. If sunburn and tanning are due to actinic rays and if the usual clothing is able to protect the skin from their effects, it seems to us reasonable to assume that the same clothing will protect the body as a whole from the effects of these rays. This argument of course does not take into consideration that that quantity of rays which may enter through the face and hands, but no one, as far as we areaware, has recommended covering these parts. Therefore it seems probable on theoretical grounds that ordinary clothing gives sufficient protection, and the result of an extensive practical experiment by the board supported this view by showing that no benefit resulted from the use of orange-red hatlinings and underwear.

The experiences of Gorgas in Panama, the reports of various other workers from many countries, and our own general observations in the Philippines, all lead us to the conclusion that the main cause of tropical deterioration, as seen in the past, was infection of the skin, blood, intestines, and other regions, with those parasites which are more common in the tropics than in the temperate zone. The vast improvement in the health conditions in Cuba, Panama, and the Philippines, which has followed action based on such a parasitic theory, is strong evidence in favour of our assumption. The enervating effects of continued heat and humidity doubtless play some part, especially in the direction of discouraging out-door exercise. Nostalgia, isolation, and monotony, and the excessive use of alcohol resulting therefrom, are factors of considerrable importance. To account for what is observed in the Philippines it does not seem to us necessary to call in the

hypothetical action of the actinic rays in the sunlight, nor do we think that there is any adequate evidence that such action is a factor in tropical morbidity and deterioration. It appears that the men who spend much time actively engaged out of doors in the Philippines are the ones who remain in the best health. Those who suffer most from nervous affections are the women, and they pass practically all their time in the shade. The situation is well described by Castellani and Chalmers who state that "the basis of the largest proportion of illness and death in the tropics is bad sanitation and not climate influences."

THE NOBEL PRIZE

THE Nobel Prize was this year awarded to Dr. Alexis Carrel of New York City for the scientific and yet hopefully practical work on Surgery of the vascular system. He has laid the foundation and made the application of principles that are sure to revolutionize the practice of vascular surgery in its relation to the human subject. Dr. Carrel's work has demonstrated that blood vessles may be sutured end to end with a perfect functionating result. What this opens up to the skilful surgeon is impossible to picture. It is true that most of this work has been done upon animals yet, still some of it has been done upon the human being. One of the great things his work will allow is the transplanting of normal organs of the body for those of diseased organs. Think of one's being able to exchange his old diseased kidney for a new one! The untiring, self sacrificing efforts of the investigator is bound to influence the world. We append a clipping from the Lancet on Dr. Carrel's work written by Arbuthnot Lane, a famous surgeon of England.

TO THE EDITOR OF THE LANCET,

SIR,—Perhaps one of the most gratifying things that could have happened to the medical profession is the recognition of Alexis Carrel's magnificent work by the bestowal on him of the Nobel Prize. To me Carrel's, career is typical of the intense desire to progress which pervades America, Frenchman though he may be by birth. The American man of science devotes himself heart and soul to his work, feeling that in that country merit is the only road to success, and that if he does succeed he commands the love, esteem, and admiration of his fellows in a manner that may not exist in the more complicated conditions of the old world.

To those who know Carrel's charming personality, his wonderful manipulative dexterity, his extraordinary originality, his calm determination, and last, but not least, his extreme modesty, this honour did not, come as a surprise, but has afforded them the highest satisfaction. As a great man should, but as, alas, all great men do not, Carrel has ignored the many scurrilous attacks which have been made upon him personally and on his methods by the ignorant and timid. But if Carrel has detracting critics he has also enjoyed the most enlightened sympathy which American science can afford. In recognising Carrel's genius one must not forget, among others Simon Flexner, the Director of Laboratories of the Rockefeller Institute for Medical Research, who by his great learning and most keen intelligence has counted largely in affording to Carrel an opportunity to arrive at the summit of his ambitions. The more one sees of America the more is one struck by the determination of the members of its medical profession to occupy the van of progress by rendering themselves familiar with any advance in science and by combining among themselves to ensure a very high and progressive standard of knowledge.

America has every reason to be proud of its capacity to present to the moving spirits of the world a soil in which they can grow with uninterrupted—nay, stimulated—vigour, and where merit and genius receive a recognition unequalled, I believe, elsewhere. Carrel is a typical product of these conditions. I am, Sir, yours faithfully,

W. ARBUTHNOT LANE.

Cavendish-square, W., Oct. 13th, 1912.

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HEALTHIEST COUNTRIES.

NEW Zealand and Australia are the healthiest countries in the world, if we may judge by the low death-rates,—9.75 per thousand in New Zealand, and 10.5 in Australia. In 1884 the death-rate in Australia was about one half more than its present rate, and this 1884 rate compared favourably with our present rates.

INTERNATIONAL PROHIBITION CONFERENCE.

THE third International Prohibition Conference will be held in Milan, Italy, Sept. 21-28, 1913, in connection with the meetings of the fourteenth International Congress against Alcoholism, for which the Italian government is issuing official invitations to all the governments of the world to appoint accredited delegates to attend.

NEW YORK PREPARED FOR CHOLERA

IT is stated by Dr. Joseph O'Connell, health officer of the port, that quarantine regulations and examinations of vessels which come from the Mediterranean, Hellenic, or Levantine ports are to be much more rigorous in consequence of the reported outbreak of cholera in the Turkish army. Improvements have been in progress for the past eight months with just such a contingency in view, and equipment and accommodations have been so increased that passengers that may have to be removed from incoming vessels may be cared for without difficulty and without the danger which attended the last visitation of cholera to this port. Dr. O'Connell expresses the belief that it is typhus fever rather than cholera that we should fear, as typhus is more likely to be brought in by carriers and because less is known about this disease than about cholera.

MILLIONS NEEDED FOR HEALTH WORK.

DR. Joseph J. O'Connell, health officer for the Port of New York, announces that he will apply for an appropriation of $2,000,000, from the legislature to improve the port quarantine facilities, for the enlargement of Swinburne Island and the erection of additional buildings which will be rendered necessary by the opening of the Panama Canal.

LESS ALCOHOL CONSUMED IN GERMANY.

THE Social Democratic party has been conducting a temperance propaganda in which all working men are urged to avoid the use of liquor. As a result, we are told, in Germany there is a decrease of more than 11,000,000, gallons a day in the consumption of liquor. This is stupendous, if one considers the population of Germany. It would look almost like prohibition. One wonders how much the Germans drank before the decrease.

EGGS

(Concluded from Page 51)

must be in a state of solution. Heat this water over hot water. The whitening and thickening shows that albumen is present.

Put a little of the cut-up egg white into hot water, then bring the water to a boil. The albumen turns white and becomes hard, and the hotter the water and the longer the boiling, the tougher it becomes. The tougher the white, the less easily it is dissolved by the digestive juices. This teaches us that to cook an egg so as to have the white most digestible, it should be cooked at a temperature that is high enough to coagulate it, but not high enough to toughen it.

Albumen begins to coagulate at 145° F. It sets into a jelly at 165° F., and becomes hard and tough at the boiling-point of water, 212° F. therefore, to be most digestible, eggs should not be boiled nor fried. They should be cooked at a temperature below the boiling-point of water.

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