Herald of Health

IN MAIDEN MEDITATION

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CONTENTS

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A Prescription

"My pallid friend, is your pulse beating low
Does the red wine of life too sluggishly flow?
Set it spinning through every tingling vein
By out-door work, till you feel once again
Like giving a cheery school-boy shout;
Get out!

"Are you morbid, and, like the owl in the tree,
Do you gloomily hoot at what you can't see?
Perhaps now, instead of being so wise,
You are only looking through jaundiced eyes;
Perhaps you are billious, or getting too stout;
Get out!

"Out in an air where fresh breezes blow
Away all the cobwebs that sometimes grow
In the brains of those who turn from the light
To all gloomy thoughts instead of the bright.
Contend with such foes and put them to rout;
Get out!"

—Selected.

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Vol. 3 Lucknow, April, 1912 No. 4

Prevention or Cure, Which

THE old adage, "An ounce of prevention is worth a pound of cure," is excellent from a health standpoint. Our bodies are not commodities with which we do as we like in anticipation of replacing the old with new when it becomes worn out. We must remember that our endowment in the beginning must last us a lifetime, and the amount of work that we do as well as the length of time in which we must do it depends entirely upon how we care for ourselves. Prevention of disease is health, and health is an blessing which can neither be bought nor sold and for which many men to-day would give fortunes were it a salable article. It is a pearl of great price, which when once lost is hard to regain.

After some diseases should they not conquer the system and the body succumb to death, we apparently get well, that is we do not suffer further symptoms. Yet in the vast majority of cases we are not in as good bodily condition as we were before. The disease has left its mark upon us somewhere unbeknown to us, only to break out later in life in a form which we least expect. To prevent disease we must study thoroughly and with unbiased mind the causes of disease. We must recognize that certain classes of disease are due to wrong habits of living; that others are of an infectious nature. The individual who uses tea, coffee, tobacco, and alcohol must be taught the harmful effects of these articles, and that if he desires to enjoy health and make life worth living, he must drop them. The dyspeptic whose stomach becomes a seathing, boiling caldron, must be encouraged to look into his habits of eating and drinking. The neurasthenic who is closely confined to his work over a desk for a greater share of the day must go out more into the open air. Exercise must be made a daily routine with him, and putting aside his violations against nature, he should live in harmony with her laws until he rises above his morbid fears and doubtings. The underfed, hollow, sunken-chested individual who is accustomed to sleeping in compartments with all the windows and doors closed, should be taught that his only salvation is more air, more food, and more chest development. He who is suffering with an infectious, or contagious disease, like tuberculosis, must have it impressed upon his mind that the violation of the laws for preventing disease means not only death, to the public at large, but also to his own immediate family.

All of the drugs in existence or all of the methods in the treatment of disease will not cure a patient if the cause of his trouble is not looked into and overcome. The sooner this fact becomes recognized by both physician and patient the better the result accomplished. To-day, in some countries physicians are paid for keeping the family well and when the family falls sick the pay of the physician stops. Just how extensive this plan is carried out the writer does not know, but it is a very good principle upon which to work.

Much of disease can be prevented by looking into the habits and environment of a family or cummunity. The inspection

or the milk supply as to the way in which the cows are cared for and the precautions used in keeping the stables clean are a great factor in the prevention of disease. Because of the conditions under which we obtain our milk in India, the milk should never be used without it has been boiled or held at a temperature of 165° for a half hour.

Adulterational of foods, and food preservatives play their part in the cause of disease. Various nations have pure food laws which have not been executed in the past. They are now recognizing that the laws must be enforced in order to preserve the health of their people? Butter and milk in tins are preserved by the use of boric acid. Canned fruits are made to withstand decay for months by the addition of sodium benzoate. If one is unfortunate enough to have to live on food put up in cans he must soon expect to suffer with stomach trouble. Then again our common and necessary articles of diet such as flour and sugar are many times heavily adulterated.

Water as a carrier of typhoid (enteric) fever, cholera and dysentary has caused the death of thousands. So for this reason water made ready for human consumption has been a great field for preventive medicine.

Ways and means are being adopted to kill such insects as are a menace to humanity by being implicated in the spread of disease. Examples of these are the rat flee in plague; the mosquito in typhoid (enteric) and mallarial fever, and the fly in typhoid fever, cholera and trypanosomiasis (sleeping sickness). It is marvelous the lives that have been saved by the destruction of these insects.

Another phase of preventative medicine is the preparation of serums and vaccines by the best clinicians and scientific men of the day. Notable examples of these are vaccines for small pox and typhoid fever. The British government has advised all who come to India to be vaccinated against typhoid or enteric fever. I speak of this disease rather than small pox because it is only recently that we have vaccinated against this disease. This is supposed to keep the individual free from the typhoid (enteric) for a period of two years, at the end of which time, he should be revaccinated. The serums made for plague, cholera, diphtheria and cerebro spinal meningitis; especially the last two, have saved the lives of many little ones.

These are lines along which the best minds of to-day are working and statistics show us that their work is not in vain.

Walking Tours for School-Children

PARTIES of children from 12 to 14 years old, from the crowded parts of the cities, were taken for a six-day walking tour, the girls covering an average of 8¼ miles a day, boys 12⅝ miles. The principal meal was taken at the close of the day. Examination of the children before and for three months afterward showed that they had gained as much in weight and health generally as is usually gained by a sojourn of several works at an ordinary health resort. The children profit by the considerable physical demands made on them by this exercise and the varied features of the tour, the whole stimulating the metabolism in a way unattainable by ordinary measures. Roeder says that anything less than the six-day period and the above day's march falls short of the desired effect, and more is too much of a strain. The integrity of the internal organs must be ascertained beforehand, and provision made for good food and good quarters. Under these conditions, such walking tours, he adds may find a definite place in the treatment of certain conditions of under-nourishment, neurasthenia, anemia and chlorosis in children, but he warns that in a hilly country the length of the march must be shortened to conform to the extra exertion of climbing hills.—*Selected.*

General Articles

Appendicitis

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

AT the beginning of the large bowel and just below its connection with the small bowel is a small slender body about three inches in length which, on account of its resemblance to a worm, is called the *vermiform appendix*. Appendicitis is inflammation of this appendix. There are several varieties: first, catarrhal, which is perhaps often a very mild form of inflammation but may be also very severe at times; second, ulcerative, when ulcers occur; and third, where there is a marked breaking down of tissue and not infrequently gangrene.

The Causes of Appendicitis.

For reasons that are not very well understood males suffer more frequently with appendicitis than females, and, although it may occur any time in life, the favourable age in either case is from fifteen to thirty years. Catarrh of the bowel is generally regarded as one of the important predisposing causes; and undoubtedly constipation, which so frequently accompanies catarrh, is an important contributing factor. Exposure which might lead to chill of the bowels, and injuries of various kinds must also be regarded as causal factors in the production of appendicitis.

But perhaps the most important causes have to do with certain errors regarding both diet and drink, which are exceedingly common in the land. There can be but little doubt that appendicitis is a germ infection of some sort, and pus microbes, that is, germs which produce pus or matter, are probably the exciting cause in most attacks. Even under favourable circumstances a certain amount of fermentation, decay, or putrefaction, takes place in the contents of the bowels, and gives rise to the formation of foul gases and poisonous matter. Such putrefaction is more pronounced and also of a more dangerous type when it is associated with certain articles of diet, and particularly those which come from the animal kingdom. Persons who wish to control this decomposition process, should as far as possible avoid flesh foods and partake largely of fruits, the mild acids of which discourage the activities of the germs, and the consequent putrefaction of the food. It is a notable fact that those who follow a plain, but wholesome and nourishing fruitarian diet have far less offensive bowel discharges than meat eaters.

While it would not be correct to say that vegetarians are immune from appendicitis, still we have good reason to believe that they are far less liable to an attack than the average flesh eater.

Symptoms.

Although the symptoms of appendicitis sometimes resemble those of typhoid fever or even gall-stone or renal colic, still, as a rule, they are characteristic and not easily confused with other disorders. The attack is sudden, and there is a pain which seems to come from that part of the abdomen which lies about midway between the naval and the uppermost point of the right pelvic bone. This same area is also tender and sore, and often rigid as well. There is a mild fever with a temperature of from 100° to 103° Fahr. A swelling may be noticeable at the seat of the pain and tenderness, or it may be developed later.

When the pain is great the patient lies with the right knee drawn up. There is also a loss of appetite with a feeling of nausea or sickness, oftentimes vomiting, and the bowels are usually constipated.

The Treatment.

At the first sign of appendicitis the wisest course is to send at once for the family physician and submit the case for his examination. Appendicitis, which has an average death-rate of about fourteen or fifteen per cent, is not a disease to be trifled with, and the sooner it is handled in a skilful fashion the better the chances are for recovery. Of course the patient should be promptly put to bed and absolute rest enjoined. Enemata for the purpose of clearing the bowels are in order, and should be repeated as often as necessary. It is safe to apply hot fomentations or hot packs to relieve the pain. Cold compresses and cold packs are also useful for the same purpose, and may alternate with the fomentations. All hot applications are in order. It is a wise plan to give the patient plenty of water to drink, and especially hot water.

The diet will necessarily be of a fluid nature. Pure milk, which should be sterilized if necessary, and thin milk drinks and gruels, barley water, rice water, albumen water and similar preparations are all in order. We would also recommend fruit juices and unfermented grape wines. The latter are exceedingly wholesome and nourishing, and rarely fail to benefit patients. Fruit juices possess additional advantage in that they exert a mild laxative influence, and thus assist materially in regulating the bowels. Milk and milk preparations, on the other hand, are constipating as a rule. Metchnikoff soured milk, however, is an exception and is believed to be a mild laxative like the fruit juices. When properly prepared in a scientific way it must be regarded as a wholesome food for patients suffering from appendicitis.

Surgical Interference.

It is impossible to lay down any fixed rules with regard to calling in the surgeon and submitting to an operation. Each case must be decided upon its own merits. If the attack is very sharp it is usually wisest to submit to an operation at once. This is emphatically true when the treatment carried out does not promptly bring relief to the patient and give evidence of improvement. In mild cases, however, it is rarely necessary to resort to the knife, but should the patient suffer from repeated attacks at varying intervals it sometimes becomes desirable to have an operation so as to put an end to these attacks. Naturally the most favourable time to operate is between attacks when the patient is in good condition, and the inflammation in the region of the appendix has subsided. Under these conditions the danger from the operation is very light indeed, and the vast majority make a prompt and successful recovery, and are no longer subject to appendicitis.

Preventive Measures.

It is rather difficult to give explicit directions with regard to the prevention of appendicitis seeing that we know so little about the direct exciting causes. As we have already intimated the diet appears to be a most important matter. If people would learn to chew their food well, avoid taking too large a variety at the same meal, and also avoid the more complicated dishes as well as all preserved meats, fish, and similar preparations we believe there would be far less appendicitis. Shellfish of various kinds are scarcely fit for human consumption, and not infrequently bring trouble of one kind or another. Potted meats, veal, and pork pies and similar concoctions as well as tinned fish usually contain some form of preservative. There are authorities who believe that these preservatives have a distinct tendency to provoke appendicitis, but even though this

be not the case, they are unwholesome, and should be avoided.

The sharp chippings from cheap, enamelled kitchen ware are believed to cause mischief, and should be carefully avoided. We welcome the new aluminium utensils which appear to be superior to enamelled ware, and we hope the prices will soon be reduced sufficiently to put them within the reach of every home.

The old-fashioned idea that grape seeds and similar articles cause appendicitis has been exploded. We believe there are but very few cases which have been proved definitely to have been caused in such a way.

Another rather important consideration is the condition of the bowels. Those who are subject to constipation would do well to give careful attention to diet for the purpose of regulating the bowels and securing a daily movement. The gathering of waste matter in the bowels is of itself a very harmful thing, for some of these wastes, which are more or less poisonous, get absorbed into the system, and thus cause a certain amount of autointoxication or self-poisoning. We believe that a great deal can be done in the way of preventing appendicitis by keeping the bowels in an active, healthy state.

Personal Inspection of Food and Water

LIEUT-COL. G.M. GILES, M. B. F. R. C. S. IN "CLIMATE AND HEALTH IN HOT COUNTRIES"

THE importance of attention to personal hygiene in the matter of what to eat, drink and avoid, may be judged by the fact that three of the greatest scourges of tropical life cholera, dysentary, and typhoid fever are conveyed exclusively by the agency of germs that find their way into the body along with ordinary articles of diet; and even putting aside diseases of so dramatically striking a character, bad food, careless cooking, and impure water may set up such minor troubles as dyspepsia with all its prolonged attendant miseries of body and mind. These who do not die from an attack of cholera or typhoid fever usually recover fairly completely, but he who has suffered with a bad attack of dysentary is as truely lamed for life as if he had suffered with mutilation of a limb.

Accidents will, of course, occur, whereby the most careful precautions are frustrated. Putting aside such contingences, it is quite possible to guard one's self against either of the above diseases by proper care and attention: and those who know how to take care of themselves may carry on their duty, with but little apprehension, while encamped in the midst of a cholera epidemic, which makes it no uncommon occurance to find in the morning several pilgrims dead of the disease within a few yards of one's tent. On one occasion, my camp arriving after dusk, I found in the morning that my tent had actually been pitched over a new made grave: but cholera cannot be caught by proximity to either the dead or dying, but only by the fouling of what enters the mouth, so that I was more disgusted than alarmed at the gruesome discovery: whereas I should have been decidedly uneasy for the next day or two, had I discovered that I had unwittingly swallowed either water or food that had not been rendered harmless by cooking. There is one point, moreover, about the necessary precautions, and that is that they must be carried out, or at least superintended, personally, for servants cannot be trusted to carry them out: because, not understanding the reason of them, they are liable to scrimp the business; and as a matter of fact, neglect that would discredit a native dairyman has more than once, to the writer's knowledge, occured in regimental dairies where every operation was supposed to be either con-

ducted or superintended by European soldiers.

One of these little incidents, due to sheer laziness and direct neglect of duty, cost nearly fifty lives, for it more than decimated the wing of the corps in which it occured. The method in which this terrible catastrophe was brought about is worthy of record, as an instance of the way in which lives are sacrificed by a lack of attention to such details.

The water supply of the station was excellent and all water used in the dairy was supposed to be drawn from a standpost. Unfortunately, there was a well on the dairy premises, and the soldiers in charge were too lazy to pervent its being used. One of the native dairyman lived in a village which was attacked with cholera, and like all Hindus, had a special vessel for drinking water. This vessel he used, of course, at home, and also during the day, to get himself a drink from the well in the dairy. He remained himself free from the disease, but the germs of cholera were carried, adhering to his lotah, or drinking cup, from the infected village well, to the dairy well, and this, in its turn, infected the milk stored in the vessels which had been washed in the well water, with the terrible results already described.

The remote fault, of course, in this case lay with the authorities, who should have seen that no alternative, and more easily obtained, water supply was available; for no one who knew much about either the native, or a Tommy Atkins would have any doubt of the less labourious source of water supply being used the moment the eye of authority was off them. As a matter of fact, the quality of the well water was usually excellent, and its only fault, that it was not guarded against contamination so that not understanding the subtle mechanism of infection, both soldiers and natives naturally regarded the journey to the more distant standpost as a mere unreasonable infliction.

The piped water supply ought, of course, to have been brought into every room of the dairy, but "spoiling the ship for a peniworth of paint" is a very common cause of failure in attempts at sanitary reform in India.

I have given this incident at some length, because it affords a good example of the way in which lives are sacrificed by a want of attention to the details of sanitary management.

Let us now proceed to the consideration of the various articles of supply, commencing with water.

As a rule, in our dependencies and settlements, the water supply is of a private character, as only a few of the larger towns enjoy the advantages of public water-works. Even where this is the case too, it is not always safe to trust entirely to its purity as in many places the arrangements are not such as to ensure safety, and it is only in towns where the water works are large modern instalments, with proper filter beds, under the constant supervision of an adequate European staff, that it is safe to forego the systematic sterilizing of the water. In India, for instance, while the supply of Allahabad, Cawnpore, Lucknow, and most of the other large towns is probably a great deal above the European average, the mere fact of the supply being laid on in pipes is by no means a guarantee of purity. In Naini Tal, a considerable hill station, for example, the supply is pumped directly from a lake without filtering, close to the spot at which the drainage of a filthy native bazaar is allowed to flow into it. When living, then in a place where there is a piped water supply it is well to ascertain if filteration is properly carried out, and if not, to treat the water with the same suspicion as that derived from any other doubtful source.

What Imagination Will Do

DR. CHARLES K. MILLS, of Philadelphia, told at a dinner an amusing story of the influence of the imagination on the health.

"A young bank clerk," he said, "feeling fagged from the excessive heat of a trying summer, consulted a physician. The physician questioned him, sounded his lungs, and then gravely said:—

" 'I will write you to-morrow.'

"The next day the bank clerk received a letter from the medical man telling him that his right lung was gone, and his heart seriously deranged, and advising him to lose no time in putting his affairs in order.

" 'Of course,' the doctor said, 'you may live for weeks; but you would do well to leave nothing important unsettled.'

"Naturally the young bank clerk was very much depressed by this sad letter, nothing less than a death warrant. He did not, of course, go to work that morning, and before noon he was having trouble with his respiration, while severe pains shot rapidly through his heart. He did not get up all day, and on towards midnight he had a sinking spell that caused his people to send post-haste for the doctor.

"The doctor on his arrival was astounded.

" 'Why,' he cried, 'there were no symptoms of this sort yesterday! What on earth have you been doing to yourself?

"The patient's face screwed up with pain, he pressed his hand to his breast, and said feebly:—

" 'It's the heart? I suppose, doctor.'

" 'The heart?' said the doctor; 'there was nothing the matter with it yesterday.'

" 'My lungs, then,' the patient groaned.

" 'What ails you?' the doctor cried. 'You don't seem to have been drinking.'

" 'Your letter, doctor—you told me I had only a few weeks to live.'

" 'Nonsense! Are you crazy? I told you to take a month's vacation at the seaside, and you'd be as good as new again.'

"The patient drew the fateful letter from a drawer beside his bed.

" 'Well,' said the doctor, glancing at it, 'this is a pretty mess. This letter was intended for another man. My secretary must have mixed up the envelopes.'

"The patient laughed. He sat up in bed. His recovery was rapid. That night, in fact, he was well again.

" 'And what,' ended Mr. Mills—'what of the dying consumptive who had got this young man's letter? The consumptive, delighted with the prediction that a month at the seaside would make a sound man of him, packed his trunk and took the first train for New England. That was ten years ago, and to-day he is in fair health.' "—*Selected.*

Our Civilization Menaced

GEORGE H. HEALD, M. D.

DR. C. W. SALEEBY, in an address before the World's Prohibition Confederation, The Hague, September 13, 1911, spoke substantially as follows:—

"Though England does not now prohibit the sale of liquors, it will probably do so within this generation."

Knowledge is the most important factor in this crusade against evil. The former verdict has already been reversed. What was once known as "water of life" is now known to be the water of death.

But even with this change in verdict, our civilization is not yet secure. Old, well-established civilizations have vanished in the past. No civilization has thus far

been able to perpetuate itself. Within each one there have been destructive forces at work which have eventually made for the downfall of the civilization.

There are two menaces to our present civilization:—

1. Social instability. The integrity of society depends upon the self-inhibition of its members, that is, self-control and curbing of appetites for the benefit of the community. When loose rein is given to appetites and impulses, chaos succeeds. Recently in England the loss of self-control was caused by alcohol. The disgraceful riots in Wales were shown to be due to the free use of alcohol. Whenever the problem of maintaining civilization is difficult, when peace is threatened, the most important measure is to get alcohol out of the way.

With the coming of democracy and the decadence of militarism this instability of the populace will be more manifest, and there will be additional reasons why alcohol should be kept away from the people.

2. Lowered vitality of the people. Old doctrines have been completely subverted. Physicians once relied on alcohol in the treatment of nearly everything. Now physicians very rarely prescribe alcohol.

Where they do it is because they get immediate "results," or for the more sinister reason that alcohol is a drug that demands a repetition of self, and "once a patient, always a patient." We now know that alcohol, so far from increasing health and efficiency, does the exact opposite.

Degenerative diseases are caused by germs. There is a constant warfare between the cells of the body and these germ cells. We now consider disease in terms of resistance. Consumption is the chief disease of our Western civilization, and we have learned that in this disease alcohol definitely favours the germs rather than the tissues.

In the hospitals the alcohol bill has been steadily going down to almost nothing, the milk bill has been making a corresponding increase, and there has been at the same time a marked diminution in the death-rate.

The test of success with doctors is far more rigorous than formerly, when a man's success was gauged by the feelings of his patients. By modern methods of precision and by carefully compiled statistics we know that physicians have the most success who give no alcohol.

Sir Thomas Frazer, who is not an abstainer, for thirty years treated pneumonia with alcohol, but recently he has treated the disease without alcohol, the consequences being a lowering of his mortality rate.

The birth-rate in Western civilizations is falling. That in Japan is rising. Medical men are not able to overcome the tendency to small families. The most they can do is to save the babies that are born. Aside from maternal ignorance, alcohol is the greatest single cause of infant death. Here we have another way in which alcohol is undermining our Western civilization.

Dangers of Hustling Digestion

YOU may hustle in business, or in pleasure, if you like. You may overwork your clerks, or harry your maid by your ceaseless change of attire; you may travel at eighty miles an hour. You may do all these things, and perchance escape evil results; but you cannot hustle your digestive organs without incurring the effects of their revenge, which very often shows itself in one form or another of ill-temper.

The modern eagerness for haste in everything has invaded our mealtimes. The quick lunch, a twentieth century in-

novation, is an engine capable of working much mischief.

It is said to be one of the causes of appendicitis, which we now know to be one of the matured fruits of indigestion. It will certainly also prove a temper-destroyer, for good temper and bad digestion are like youth and crabbed age—"they will not dwell together."

It is no saving of time to hurry and hustle over meals, as if they were things to be got over in the briefest possible space of time. An attack of appendicitis will take a great deal more time than many meals leisurely eaten.—*Australian Farm & Home.*

Lord Lister

WE notice the obituary of Lord Lister whose work laid the foundation for the practise of modern surgery. It is lamentable that men who have done so much for the world should pass from the stage of action. Even though they are not always able to give personally of their talent, their names and their work, like the brook, run on and on forever.

When he advanced the idea that germs were a factor in the causation of disease and that germ growth could be checked or destroyed by certain chemicals, he met with severe criticism from many of his colleagues. But like all true and honest investigators, he persevered until his work was demonstrated to the whole world as a grand success.

It is true, modern surgery has modified, somewhat, the work of Lister. His original plan was to stop the growth of pus after it had gained entrance to a wound by the use of carbolic acid or other antiseptics which act upon the germs producing pus, and kills them. This is called the anti-septic method of surgery. Our idea today is not to allow pus germs to obtain entrance into wounds by keeping every thing perfectly sterile which comes in contact with the abraded surface. This we call the aseptic method of surgery.

We have only to step into a modern operating room and compare it with one of a hundred years ago. It brings to mind a picture that hangs on the walls of the writer's Alma Mater. The scene represented a pre-Lister operating amphitheater where the students were gathered to watch the proposer of surgery perform some surgical feat. The surgeon, his assistants and nurses had on their everyday working clothes. The instruments were taken from an old, no doubt dirty, bag. The field of operation prepared with only ordinary soap and water. The floor of the operating room was composed of boards made rough by usage. These are a few of the conditions under which operations were performed in the early days.

In modern surgery the surgeon, assistants, and nurses sterlize their hands, gloves, instruments, everything that comes in contact with the patient and the field of operation is sterlized. All of the furniture of the room is also made aseptic. The floor of the room is covered with tile so that it may be kept thoroughly clean. How many lives the evolution of the germ theory has saved only statistics alone can tell.

Lister, the man was quite an exception. There were many of his characteristics to be admired. In his work as teacher and professor he was loved by his students. His work brought him in contact with a mulitude of humanity, from whom he gained a great many friends. We would that many more were in existence today who were as loyal to the cause of humanity as this great heart of sympathy which has been cut off from contact with the needs of a suffering world.

Tight Neck-Bands

IN all first-aid instruction, the first thing one is told to do in cases of fainting or convulsions is to loosen the clothing; but it seems not to have occurred to anyone to suggest that some of these cases might have been prevented had the clothing never been tight. Reference is not here made to the corset particularly, for tight-lacing has been so often denounced that its evils are well known. The present criticism is directed against tight neckwear.

In this regard men are as often at fault as women—in summer, indeed, more often. Actual compression of the windpipe is not the only way in which death by strangulation may be caused. The immediate cause may be congestion of the brain and perhaps apoplexy, the result of cutting off the return circulation of the blood in the veins of the neck. But a man need not die in order to experience the evil effect of tight collars; the bad effects come much sooner and much more readily than death. Many persons suffer from more or less frequent headaches, disturbances of vision, attacks of dizziness, and other disagreeable ailments due entirely to the constriction of the neck by collars that are too small or stocks that bind.

The veins of the neck are near the surface, and it takes little force to compress them enough to interfere with the current of blood.

In men, the trouble occurs more often in those with short necks, for it is the pressure of the lower edge of the collar that interferes most with the blood stream. Obviously, therefore, the man with the "giraffe" neck will suffer least. However, any tightness is bad. Not infrequently the tight neck-band of the pyjamas or the nightshirt may do almost as much harm as the stiff collar. Some cases of persistent insomnia have been due to congestion of the brain from this cause, and have been promptly relieved by leaving the top button of the nightdress unfastened.

The high, close-fitting stocks of women often cause severe headache, vertigo, and nausea, for which the wearers blame the climate, their diet, or anything except their foolishness in choking themselves.

Sometimes persons with all the symptoms commonly caused by eye-strain, who have no relief from glasses, or have been told by the oculist that they do not need glasses, get well with no treatment at all. They have not noticed that the welcome relief followed a change of dress in which the usual tight band that constricted the neck was replaced by one that was loose. —*Selected*.

Health

MRS. O. O. TORNBLAD, M. D.

HEALTH is one of those great blessings which is not fully appreciated by many until it is lost, but when lost, all would be sacrificed to obtain it again. So many have found themselves negligent in this respect that the question to us is, How may I enable myself to retain this inestimable gift. Few are willing to give the necessary study to this question till pain and lassitude compel them to give it serious attention. Then the universal practice is to fly off to some druggist for an advertized remedy which will allay the immediate pain, only to continue the old habits of living when it is relieved. But at such time we should remember that pain, headache, loss of appetite, and sleeplessness are nature's signals telling

us that some enemy has entered the system and that unless it is eradicated it will continue destroying within until nature, tired and worn with the struggle gives up, and death follows.

How many of our readers when such signals come, do not go into the nearest chemist shop for a headache powder or its equivilent and then go on with the daily routine. Guaranteed to relieve pain in ten minutes, the danger signal is silenced, but at the expense of the health of a lifetime. They go on for a time, but in an unexpected moment, when they can ill afford it, perhaps when it is impossible to give themselves the proper care or it is too late, they fall prey to some acute disease and have a struggle for life which ends either in an injured or emaciated body, or in the grave. India and its climate are blamed; the reckless, thoughtless living, the lack of study of the laws governing their bodies, which might have saved them the needless breakdown, might have helped afflicted nature back to health, are let off unscathed. If in the struggle which is daily taking place in the lives of the people, care and study were given to the body's needs, how many fathers and mothers would be saved to their children and children to their parents, and how much in needless doctor's bills.

A certain man had just finished the furnishing of a beautiful home when one night after the wearying labours of the day, he laid himself down upon his comfortable bed for the night's repose. He was suddenly wakened by the voice of his servant crying out that his home was on fire and he must escape at once. But he was so sleepy, he did not wish to be disturbed, and ignoring the warning he turned over for another quiet sleep. He next awoke to the sounds of crackling flames and falling timbers, and surrounded by the fiery furnace soon succumbed.

We say such a man was foolish. But with the records of our lives behind us, with the destruction we have wrought in our own bodies by neglect, by wrong habits, by patent nostrums, guaranteed to silence the warning voice of pain, staring us in the face, can we very strongly condemn the course of the sleeper. Have we not been equally guilty?

The human system in one of the greatest and most intricate studies in this world of ours. Even among educated people little is known of its workings or its proper care. For instance, take a case of insomnia. One cannot sleep, but a kind friend who has had a similar experience recommends some mixture or sleeping potion, and the nerves being deadened, the individual falls into a dead, drugged slumber, but not the sweet, refreshing slumber of natural sleep. The body is not relaxed, and rest does not come. The result,—complete nervous breakdown, mental disorders, physical wrecks, drug fiends, all because one otherwise well educated, refined, and cultured has neglected that science of first importance, the science of right living, which is only learned by diligent study.

There will doubtless be some who read these lines who have only just begun this downward course toward a final breakdown. Before you go farther stop and ponder; can you afford to go on? Would it not be worth your time and effort to learn something of your own being, and how to care for yourself. Would it not be better to suffer a little now until you can rebuild exhausted nature than to come face to face with a deplorable climax in your experience later in life. Why not start right, now, just now, to know yourself. In future numbers of Herald of Health articles telling of the body, its make-up, its care, its fortification against disease in childhood, youth, manhood and old age will be found. Is it not worthy of your time and attention?

Anatomy and Physiology

The Osseous or Bony System

[IN order that our readers may the more thoroughly understand the workings of the different parts of the body, a series of articles will be run throughout a number of issues of this Journal on the subject of Anatomy and Physiology. This will also aid our readers in getting more out of other articles that will frequently appear in the Journal. The basis of all knowledge regarding the care of the body rests upon a good, thorough knowledge of the internal workings of the body. I hope our readers will avail themselves of the opportunity of becoming better acquainted with the wonderful piece of machinery that is entrusted to their care.]

The human organism is made up of different systems, as follows:— Osseous, or bony, muscular, circulatory, respiratory, gastro-intestinal, genito-urinary and nervous system, the skin with its appendages and the special senses. It is when these different systems are working harmoniously with each other that we have perfect health. But as soon as one of these systems becomes abnormal or gets out of order it throws all of the rest in confusion and disorder. Then we suffer various symptoms as a consequence. The first of these systems that we will take up is the Osseous system.

Bone is composed of two kinds of tissues, one dense and compact like ivory, the other made up of slender fibers (lamellae) arranged in the form of lattice work, and called cancellated tissue. The former is always external, and the latter internal. These combinations vary in different parts of the body. In portions of bone subject to great force the tissues are more compact, while the parts that are not exposed to severe strain are provided with cancellous tissus. Bone tissue contains longitudinal canals that communicate with one another, and are called Haversian Canals. They convey blood vessels for the nutrition of the bone.

All bones are covered with a dense fibrous vascular membrane, the periosteum. The medullary and cancellous cavities of bone are lined with a delicate membrane, the Endosteum containing bone forming cells. In their normal state bones have but little sensibility; but when in a state of inflammation they are extremely sensitive and painful.

Chemial analysis shows that bone consists of organic and inorganic matter; the organic is called animal, the inorganic earthy material; These are intimately combined; the animal matter furnishes elasticity and toughness, the earthy, hardness and solidity.

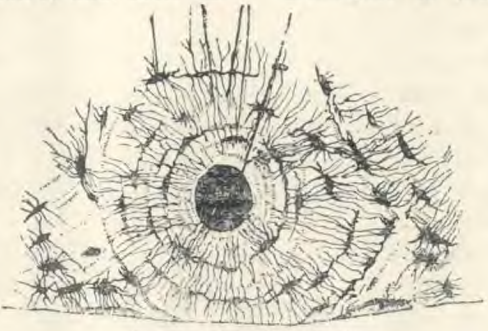
How can we separate the two kinds of tissues to prove that this is the case? This it done by steeping a portion of bone in dilute nitric or hydrocloric acid: in this way the earthy material is taken up, leaving the animal or organic material behind, so that the bone can be twisted into any shape, thus demonstrating its elasticity and toughness. The presence of earthy material may be demonstrated by subjecting the bone to strong heat in an open fire where the air can have free access, until all the organic material is consumed, when the earthy parts will be found to be brittle, preserving the original shape of the bone.

The organic constituents of the bone make up one third, or 33. 3 per cent., of the whole; the inorganic matter, two-thirds

or 66. 7 per cent. We append the following table of analysis by Berzelius (from Gray's Anatomy):

Organic matter:	
Gelatin and blood vessels	33. 30
Inorganic or earthy matter.	
Phosphate of lime.	51. 04
Carbonate of lime.	11. 30
Fluoride of calcium.	2. 00
Phosphate of magnesia	1. 16
Soda and chlorid of sodium.	100 20

Some difference exists in the proportion of the two constituents of bone at different periods of life. Thus in a child the animal matter predominates, whereas in the aged the bones contain a large proportion of earthy matter being deficient in quantity and of impaired quality. Hence in children it is not uncommon to find, after an injury, that the bones become bent or partially broken—a condition known as greenstick fracture—whereas in old persons the bones are more brittle and fracture thus takes place more readily. Many of the diseases, also, to which bones are liable are due to a disproportion between the two constituents of bone. Thus in the disease known as rickets, so common among children of the poor, the bones become bent or curved, either from the superincumbent weight of the body or under the action of certain muscles. This is due to some defect of nutrition by which bones are deprived of their normal proportion of earthy matter, whereas the animal matter is of unhealthy quality.



CROSS SECTION OF BONE

Classification of Bones

The bones of the body are divided into four groups: long, short, flat, and irregular. These go to make up the frame that protects the internal organs, and provides attachment for the several soft parts.

The long bones are those that make up the extremities; the short bones are those of the hands and feet; the flat bones are those of the shoulder-blades, pelvis, skull, etc; the irregular bones are those of the spine, as well as the ethmoid, the temporal, etc.

What do we have to say about the surfaces of bones? If you examine a bone, you will notice that it has certain eminences and depressions; these have technical names, and it should be the aim to become acquainted with each, so as to be able to describe a part concerned in any injury in a practical manner. These bony eminences and depressions are of two kinds: articular and non-articular.

Examples of articular eminences are found in the head of the arm bone (humerus) and thigh bone (femar). As examples of articular depression may be mentioned the glensoid cavity of the capula (shoulder joint) and the acetabulum, the cavity with which the thigh bone articulates with the pelvis.

Non-articular eminences are distinguished by their form; for example, a broad, rough, uneven part of a bone is called a tuberosity; a small, rough prominence, a spine; a narrow, rough elevation, a ridge or a line. The non-articular eminences and depressions serve to form a large field for muscular attachments, and are greater in persons who are well developed from exercise.

Non-articular depressions vary in form, and are known as fossae, grooves, furrows, fissures, notches, etc.

The entire skeleton of the adult is made up of 200 distinct bones. These are divided, according to Gray as follows:

Cranium.	8
Spine or vertebral column (including sacrum and coxyx)	26
Face.	14
Sternum, ribs or hyoides.	26
Upper extremities.	64
Lower extremities.	62
	200

This classification does not include the teeth, the patella, or the sesamoid bones; these last are found in the substance of the tendons, especially of the great toe. Wormian bones are found in the cranial structures of childhood; they are irregular fragments, developed from supplementary centers, ultimately closing the fontanal.

A Fruit Diet

A FRUIT diet is of the highest value in cases of chronic disease, especially when the stomach is infected with germs. Germs will not grow in fruit juices. Even cholera and typhoid fever germs succumb in a short time to the influence of the juices of such fruits as the orange, the lemon, the apple, and the strawberry. A fruit diet is the best means of disinfecting the stomach and the alimentary canal in general. An exclusive fruit dietary for three or four days is sometimes advantageous. In other cases a fruit breakfast, a fruit supper, and a mixed diet for dinner is a practical plan. Fresh ripe fruits are somewhat more effective than stewed fruits for the destruction of germs.

In a fruit diet, the use of the skins and seeds of fruits should be carefully avoided. Fruits with hard flesh must be carefully masticated, and, for most persons, should be cooked either by baking or stewing. The majority of dyspeptics must avoid the use of fruits and vegetables at the same meal. Strong acid fruits interfere with the digestion of starch in the stomach, and hence should be eaten at the close of the meal. In the use of melons, the pulp should be rejected; the juice only should be swallowed. Fruits, with the exception of the plantian and the olive, contain but very little nutrient material, consisting chiefly of water; they tax the digestive organs but very little, hence may be taken when other foods can not be eaten. Fruit juices are especially valuable as restoratives, being quickly assimilated, and not taxing the digestive organs.

Pineapples have been known as a luscious and most refreshing form of nourishment; but only recently has it been discovered that they contain a digestive principle similar to pepsin, and so powerful that, according to the *Lancet*, it will digest one thousand times its own weight within a few hours. If a slice of fresh pineapple is laid upon a raw beefsteak, the surface of the steak soon becomes gelatinous owing to the solvent powers of this enzyme, which is said to be destroyed by cooking.

Entirely apart from its digestive properties, the pineapple is a very wholesome and appetising food. If the stomach is rather sensitive, it will be best to reject the somewhat tough fibre, after extracting the juice by chewing. This fruit is especially pleasing in the spring before the arrival of summer fruits and vegetables.

"WHEN the average man has lived long enough to know how to live, he takes his departure; but it is not right. The world needs the service of developed minds. Stay young if you can be a power for good."

WHEN your cat "meouws" and seems restless, it is water she wants in most cases, not food. Like babies, the cat is usually overfed and left to suffer for drink. Even in ailments water is the best panacea. Science declares that not one human being in ten drinks enough water. Water for pet animals should always be within their reach.

Gluten Bread

GEORGE E. CORNFORTH

HERE are directions by which any one can make gluten bread, for this method does not require gluten flour, which is expensive and can not be obtained everywhere.

Preparation of Gluten

Make a dough of one quart of cold water and three quarts of sifted, good bread flour. Knead the dough well, then allow it to stand in cold water from one-half to one hour. Then work the dough with the hands in the water. As the water becomes milky, pour it off, and add fresh cold water. Continue to work the dough and pour off the water, pouring on fresh water till it remains clear. You should then have one and one-fourth pounds of pure gluten, a tough, rubbery substance. Drain this gluten well. It is sufficient for one loaf of bread.

Gluten Bread

1¼ pounds gluten prepared as above
2 cakes yeast, dissolved in one tablespoonful warm water
½ teaspoonful salt
¼ cup oil
8 oz. bread flour

Work it well till you have a perfectly smooth dough. Set it in a warm place to rise. When risen, work it down. Allow it to rise again, then mold it into a loaf. Set the loaf in a warm place to rise till it is one and one-half times its original size. Then bake it one hour.

This bread, if made from flour which is 10% gluten, will be about 20% gluten bread; if made from flour which is 12% gluten, it will be about 24% gluten. (Bread flour is usually from 10% to 12% gluten.) Ordinary bread is from 8% to 10% gluten. A loaf of bread made according to this recipe would contain about six ounces of starch, five and one-half ounces of gluten, two ounces of fat, and the rest water.

In using the term "pure gluten," it should be with the understanding that it is only approximately pure.

The starch which was washed from the flour might be saved. To do this, turn the milky water obtained by washing the dough into a large dish, and allow it to settle. The water may then be poured off from the top. The starch may be used for thickening or in making puddings, but would have to be used soon, or it would sour. To get the starch in dry form so that it may be kept, allow it to stand till it sours, then turn off the water; add fresh water, stir well; allow it to sour again, turn off the water, then add more water, stir it up well, and allow it to sour again. Continue thus till it does not sour. Turn off all the water that can be turned off, spread the starch out in a thin layer, and allow it to dry. It may then be used as dry corn-starch. The philosophy of this process is that raw starch will not ferment. The other substances which are contained in the milky water will ferment and be dissolved and poured off with the water. Thus the raw starch, which will not ferment, will be freed from the other substances, which will ferment.

Pure Gluten Biscuit

Take the pure gluten after it has been obtained by washing the starch from the dough, cut it into pieces, and form them into balls about the size of small walnuts. Place these pieces on a baking-pan, and bake them in a slow oven till lightly brown-

ed. They will puff up and become very light.

Nut Gluten Biscuit

One fourth as much chopped almonds as you have gluten may be mixed with the gluten before it is formed into balls

Laxative Gluten Biscuit

Mix with the gluten one eighth as much wheat bran as you have gluten.

- - Abstracts - -

Reeducation in Nervous Trouble

REEDUCATION implies the possession of an education which is unsatisfactory. The more closely we study nervous people, the more surely are we impelled to the conclusion that their acute suffering and chronic misery, which go by the name of nervousness, are largely traceable to faulty education, taking education in its broadest sense. Every bit of experience, even that seemingly most insignificant, educates for good or ill, depending upon our reaction to it. This is why the boy is father to the man.

Our beliefs and our conduct are growths, and it is in redirecting this growth that psychotherapy finds its highest usefulness. If bad education, whose outward manifestation is sometimes called nervous disease, has led to abnormalities of thought, conduct, and feeling, right education may at least help to restore some measure of harmony. To remove the present conflict and, more important, to prevent future conflicts is the work of psychotherapy. Prevention should be the watchword.

The vast majority of people are striving to bring their lives to some sort of successful issue. These will welcome psychotherapy, or reeducation, because they wish to escape from the entanglement resulting from their ignorance or fault or misfortune. Only such as really desire relief can be permanently benefited. Cooperation on the part of the patient is the first essential to a successful cure. Patients come to us for cure, and are surprised when we reply that the cure lies within themselves. All cases are not amenable to the methods of reeducation.

The physician has to deal with two distinct classes of phenomena; the patient's symptoms, and the interpretation the paltients place upon them. And doubtless the actual discomforts, great as they are, cause less suffering than the meanings which they think these pains convey.

Fear and introspection are the evil-geniuses of nervous people. It is not the loss of memory itself, but the approaching insanity which they believe it to announce, that they dread; not the pain in the back, but the supposed Bright's disease; not the numbness in the legs, but the supposed locomotor ataxia; not the indigestion, but the supposed cancer. It is in the case of such fears and a thousand similar that reeducation accomplishes best results. A curious fact is that the average patient will not willingly disclose these fears. Sometimes it is only obtained by the physician after persistent effort.

When these fears have been discovered and removed, we cross the threshold into the patient's personality, and unearth many surprising things. Especially we discover that the patient is not nervous for the fun of the thing. We see that the headaches, insomnia, and whatnot are but the smoke pointing to a flame, still blazing, or smouldering among its ashes. Something has gone amiss: poverty, evil habits with their results, disappointed ambitions, shattered ideals, or disasters from sex relation,—the

result in any case is depression and weariness of spirit.

To say, "Don't worry," "Cheer up," and the like, does little or no good. The patient knows he should not worry. What he needs is a new philosophy of life, a new outlook, a new way of looking upon his failures and disappointments with composure. This is the work of the physician who attempts to relieve by reeducation.—*John E. Donley, M. D., Journal of Abnormal Psychology.*

Coffee and Its Effects

IT has been urged that the harmful effects of coffee are due not only to its alkaloid caffein but to other substances, such as the glucosids, acids, oils, fats, etc. It has been found that coffee seems to have a special effect on the red blood-corpuscles, causing them to shrink in size and to lose their natural color and even surface.

The changed appearance of the skin from excessive use of coffee is in some way due to a change in the red blood-corpuscles which affects the mucous membranes. Its frequent diuretic action and its special effects in diminishing the capacity of the bladder and urinary passages have been the subject of many theories, also its special action in diminishing the peristaltic action of the intestines and in producing subsequent chronic constipation.

Whether this is due to cell changes, to nerve palsies, or to the presence of some toxins is not yet clear. There is some probability for the supposition that the alteration of the cells and the particular stimulation from caffein produces some toxic property, which is not eliminated, but continues to increase in its activity on the system.

Clinically, coffee-drinkers show a peculiar change of vigour and strength marked by insomnia and excessive nervousness, pointing to a toxin introduced from without or formed within, and this is the best explanation up to the present time.—*Editorial, the Journal of Inebriety.*

Pure Alcoholic Drinks

EVERY now and then it is claimed that far less harm would be done by alcoholic drinks if only pure drinks were sold.

Under the present pure food laws, if any community is really solicitous about this matter, it should not be difficult to prevent the sale of drinks not free from adulteration, since adulterated drinks are as liable to penalties as adulterated foods.

There is much evidence, however, that the harmfulness of "impure liquors" due to adulteration, is greatly overestimated.

More than ten years ago, Dr. J. J. Able, of John Hopkins University, in his report on the pharmacological action of alcohol prepared for the Committee of Fifty, reviewed investigations of the subject in this country and in Canada, and came to the conclusion that "even the most harmful alcoholic beverages contain only a small percentage of dangerous and intoxicating substances other than ethyl alcohol. . . . Ethyl alcohol alone is poisonous enough to account for all the evils of intemperance. . . .

"When all the facts at hand are summed up, we must concur in the opinion expressed as long ago as 1859 by Magnus Huss, that the impurities and by-products of alcoholic beverages may be neglected altogether as a cause of the drink evil."

Even more recently, Dr. Alex Lambert, of Bellevue Hospital, has had his word to the effect that "to the action of ethyl alcohol alone are due the symptoms of alcoholism as seen in man."

This being the case, it is a mere waste of energy to spend much time chasing the specter of impurities in drink. "Legislation directed toward the drink evil," said Dr. Abel, "will always have to take account of the fact that the 'best' alcoholic drinks are as capable of producing this evil as are the poorest. Purification of these beverages alone can not hope to eradicate it."—*Scientific Temperance Journal.*

Mother and Child

How Can I Keep My Baby from Crying?

(Concluded from March)

What Some Nurses Do to Get Children To Sleep

MONTHLY nurses of the old-fashioned, wise-woman type are often responsible, directly or indirectly, for the use of patent remedies containing opium with infants. Not long ago a case was reported by a physician, who said that a patient whom he attended at the birth of her third child remarked to him a few days afterward that she dreaded the departure of the monthly nurse, who had been with her twice before, because the babies were so very restless and fretful after she left them. This remark excited the doctor's suspicion and he made some quiet observations of his own, which disclosed the fact that the nurse was in the habit of systematically quieting the baby with a soothing syrup containing, of course, opium. This is an instance of a method very common with this type of nurse, and it affords a good illustration of the way in which the drug habit originates.

The nurse may give the infant some form of opium by itself, or she may give a "patent medicine" which she knows contains it. In either case, after she leaves the baby is sleepless and fretful for want of the drug to which he is accustomed, a condition of things which the mother attributes to her own less skilful management. In her difficulty she resorts to some patent remedy, usually recommended by a friend, and, finding it works like a charm, she continues to use it, quite unconscious that she is doing her best to keep up the pernicious habit begun by the nurse. Young and inexperienced nurses of the ordinary kind, who take charge of the baby when the monthly nurse leaves may act in the same way and be quite ignorant of what they are doing as the mothers are. But the more experienced nurses, to whom fashionable women confide their children, are generally fully aware of the nature of "patent medicine", if they use them, and at any rate they know that all doctors forbid their use. But they know, also, that such remedies give immediate relief to the baby, and that through their use they secure a night's rest for themselves.

So they prefer to smother their consciences and to trust to the recommendations of Mrs. A. B. C. Smith, of somewhere in Texas or Dakota—who testifies that her baby, took two dozen bottles of the remedy in question and never lost an hour's sleep in doing so—than to follow the opinions of doctors and other well-informed persons whom they secretly look upon as old-fashioned and prejudiced. One nurse of this description confessed that she always took a bottle of paregoric to bed with her, with which to quiet the baby if he were restless or fretful.

The Actual Story of Many a Death

Let no one suppose that I have drawn a too highly coloured picture of the state of things arising from the use of this class of "patent medicine." It is not too much to say that thousands of children "of two years old and under" meet their death every year, either directly or indirectly, from opium contained in soothing syrups and other like remedies for infants; or else

become slaves to the opium habit from the same cause.

Many a child who dies suddenly and unaccountably is the victim of opium poisoning brought about in this way. Many another, whose death appears on the certificate as pneumonia, nephritis or some other acute disease, might have survived the disease if his powers of resistance had not been weakened by his dependence upon opium. Many another, still, has entered into life crippled in body and mind by reason of the opium habit contracted in babyhood.

What is the cure for this state of, things? First, a widespread knowledge of the existence and the extent of the evil. Second, a conscientious use of the means of protection now provided against it. Doctors, editors, teachers and social workers are doing all they can to bring about the first essential, but the accomplishment of the second belongs to the public. The Food and Drugs Act now requires that every "patent medicine" shall have its ingredients plainly printed on the outside and this regulation has effected one great good, namely, extinction of the secret remedy. Up to the passage of this act it was not within the power of either parent or nurses to ascertain the contents of the medicine they administered. Now they have only to read what is set before them. But this useful reform will be of no service unless the public does its part.

It is the duty of every one who contemplates giving a patent remedy to an infant or young child to read attentively the statement of contents printed on the outside before buying it. If it contains any one of the following ingredients it is unsafe to give it to the child: Opium, Morphine, Codeine, Heroin or Paregoric, Morphine, Codeine, and Heroin being alkaloids of opium.

To give a remedy of this kind simply to pacify a restless, fretful baby is not only wrong but unnecessary as well. A healthy infant, if he is properly cared for does not cry in any distressing manner. He will shout and squeal from animal life, and if he grows older and the "Old Adam" develops he may cry from temper, but cries of this nature are soon over and may be disregarded. Constant, peevish crying, with restlessness and fretfulness, in a child with good health shows that something is wrong in the child's surroundings; in other words he is not properly cared for.

A baby's surrounding are limited to his clothing, his bed, the surrounding temperature and his food. Each of these ought to be investigated carefully, and when this is done the reason for his crying, in most cases, will be manifest. Remember that a baby is perfectly helpless, that a trifling discomfort will suffice to make him miserable, and that crying is his only means of remonstrance.

I once knew an infant brought to the office of a wise old doctor, with the statement that he cried all day without any cause that his mother, a labouring woman, could discover. The doctor had all the child's clothes taken off, and examined him without discovering any cause that accounted for the crying, when his eyes fell upon the child's feet, which were covered with little knitted socks. and he desired his mother to take these off also. When this was done it was seen that the strings of the socks had been tied so tightly around the fat little ankles that they had made angry red lines, from which the skin was rubbed off in spots. No wonder the poor little thing had made the only protest in its power.

If all the surroundings are investigated without revealing anything that can reasonably account for the crying the doctor should be consulted, even though the baby seems quite well.—*Caroline Wormerly Latimer, M.D., in Ladie's Home Journal.*

- Physical Culture -

The Need for Physical Exercise

TWENTY years ago the term Physical Culture was scarcely known. Nowadays, every one understands its meaning. In one form or another it forms part of the curriculum in a majority of educational establishments; its necessity has been recognized by the Military, Naval, and Police Authorities, and most important of all, the Medical Profession, as a whole, have been so converted as to not only publicly advocate its study and practise, but even to frequently include physical exercise in their prescriptions.

Certainly no single movement in the world's history has been accorded such wide-spread or such striking advertisements, no single subject which I can call to mind has ever developed into a burning question of the movement with such ease and rapidity.

In claiming this as being a truly remarkable achievement, it must not be forgotten that, despite the tremendous interest which has been aroused, all this advertisement and publicity has produced so far but a comparatively poor practical results.

Yes, poor practical results. For despite the sermons, the lectures, the newspaper reclams, the intense public interest in latter-day physical contests, the attendant literature, and the multiplicity of training-establishments, how many real Physical Culturists are there to be found?

Here is a simple natural means of gaining and of preserving Health, Strength, Activity, Beauty, and Grace, both of Body and of Mind, offered to humanity. It is open to all. It is easy for everybody. It is quite inexpensive. It will enable the practitioner to despense with the innumerable and incalculable expenditures inseparable from illness and medicine generally. It will endow him with perfect working health.

By this term I do not mean to convey solely, immunity from such common diseases as Indigestion, Dyspepsia, etc, which intermittently assail every man and woman who is engaged in sedentary occupation, but also fortification against the various ailments caused by poverty of blood, such as Anaemia, Chlorosis, Piles, etc., practical security from the attacks of consumption and other Pulmonary troubles, and a healthy organic development, such as will enable them to successfully defy each and every disease which may assail them.

In addition to these benefits, Physical Culture, scientifically and sensibly applied, will so regulate the accurate and even working of all the human machinery as to endow the man who exercises properly and regularly, with sufficient stamina and powers of endurance as to enable himself to ward off the attacks of Nervous Debility, Neurasthenia, or other nerve troubles which so commonly assail the average brain worker.

Moreover, since the first essential to a graceful and pleasing appearance is the possession of good physical health, it needs no argument of mine to prove that physical exercise will enable every man or woman who follows it out conscientiously to dispense with the expensive services of the Beauty Specialist, and of most other costly artificial aids to Form and Figure.

All these are plain facts which have been preached, demonstrated, widely advertised, proved, and indeed almost universally recognized—and yet, as I have said, only about one person in every five hundred have sought to take advantage of them.

A. WALLACE JONES.

Questions and Answers

INTRODUCTION TO QUESTIONS AND ANSWERS

BEGINNING with the April number of HERALD OF HEALTH, there will be a portion of the journal devoted to Questions and Answers. This department will appear but six times during each year. This year it will appear in the April, June, August, October, and December issues.

A few words relative to this part of our magazine will enable our readers to use it to a better advantage. There are questions readers ofttimes ask in a department of this nature that bring about answers unjust to both inquirer and adviser. We must keep in mind in order to correctly diagnose, as well as to apply treatment, that it is not only necessary for a physician to get a better history of the case than can be obtained by letter, but also a thorough physical examination of the patient as well as an examination of the various secretions and excretions of the body. Therefore those suffering with some particular disease cannot receive specific directions by mail. The advice given can only be of a general character.

There is a field in which this department may serve a very useful purpose. Questions of general interest pertaining to the general health by the way of preventative medicine, or hygiene, will draw out an abundant store of information relative to the keeping of our health. You can help us to make this department interesting as well as of real practical benefit.

The editor requests that any questions to be answered by mail should be accompanied by return postage, also that they should be written legibly on a separate sheet. Only those who are regular subscribers to the journal have access to this department, therefore become a subscriber before sending in your questions.

MILK VS. BUTTERMILK

Can buttermilk be used instead of milk as an article of diet?

BUTTER milk in some conditions is a more wholesome article of diet than sweet milk. Those who have a tendency to constipation or auto-intoxication will find that butter milk will agree with them better. The lactic acid bacillus or germs found in buttermilk inhabits bacterial growth in the intestine. Sweet milk although a perfect food as far as food constituents are concerned still it is apt to make some people billious and also will constipate some individuals. Kumiss may be used in place of milk or butter milk. It may be made with "Lactone Tablets" sold by Parke Davis & Co., 70 Hornby Road, Bombay. Directions are sent with each package of tablets.

HEADACHE POWDERS.

Would you advise Kaputine for headache?

KAPUTINE is a patent medicine sold for the cure of headache. Headache powders always contain a most deadly drug which does much harm to the system. When one suffers with headache, he had best see a physician and find what is the cause of the headache. If we wish to keep our health we must leave patent medicines alone. They fill the makers pockets with money, while you are taking a compound of which you do not know the composition. All patent medicines contain very harmful drugs in spite of the supposedly innocent statements of the manufacturers. Many people have fallen dead from the use of patent headache powders sold on the market.

MEAT

Is not meat a necessary article of diet?

THIS is a question that calls for more room than can be used here. In all tests of strength and endurance meat has failed when compared to vegetable proteins. When we consider the diseased condition of meat, that other articles of food will perfectly replace it, its tendency to putrify after the death of the animal, its tendency to increase the uric acid in the system and that the vegetable proteins surpass it for strength and endurance, we can see no reason why we should use it as an article of diet.

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SOME new name should be invented for the so-called "cold," which will indicate its relation to overheating, bad air, germs, and the like. An inappropriate name merely perpetuates a superstition.

INFANT PROTECTION CONGRESS

IN September the Third International Congress for Protection of Infants was held in Berlin. There were representatives from all civilized countries.

PROHIBITION IN ABYSSINIA

THE king of Abyssinia has made his country "dry," as far as the natives are concerned, by a very simple but effectual expedient. He has announced that any one who furnishes liquor to the natives of Abyssinia shall be shot.

A NEW DISEASE

IN the vicinity of Boston there has been an epidemic of "septic sore throat," a disease common in England, but new in America. It has been traced to the use of milk from one of the large dairies. The experts have urged as a safeguard the Pasteurization of the milk supply.

SO-CALLED "SCIENTIFIC" TEMPERANCE

THE brewers have issued what purports to be a scientific demonstration of the value of beer as a temperance drink, and have placed this in libraries all over the country, and in the hands of teachers. The result is that when school-children preparing to compete for the prize offered for the best temperance essay go to the library they find these brewery-inspired books. The want is felt by the temperance workers for a truly up-to-date scientific work showing the real position of beer in its relation to the temperance cause.

BACTERIOLOGY OF COCKROACH

MORRELL believes that the common cockroach is able by contamination with its feces (1) to bring about the souring of milk, (2) to infect food and milk with intestinal bacilli, (3) to transmit the tubercle bacillus, (4) to disseminate pathogenic staphylococci, (5) to transmit from place to place destructive molds. These facts, taken in conjunction with the life-habits of the insect, lead to the conclusion that the cockroach is able to, and may possibly, play a small part in the dissemination of tuberculosis and in the transmission of pyogenic organisms; that the insect is in all probability an active agent in the souring of milk kept in kitchens and larders; and that it is undoubtedly a very important factor in the distribution of molds to food and to numerous other articles, especially when they are kept in dark cupboards and cellars where cockroaches abound.

ENGLAND'S PROBATION SYSTEM

FOR two years England has had a probation law which provides that convicted children shall be under a probation officer for twelve months, and that during this time they *must be* abstinent. By means of the advice of the probation officers, homes of the laboring classes are being transformed.

SPECIAL ANNOUNCEMENT

WITH this number we have changed the size of the *Herald of Health* to twenty-four pages, and have issued it with covers on art paper, illustrated with half-tone engravings. A number of new departments have been added which will give additional help to its many readers. These improvements have necessarily added to the cost of production. Yet for the present year no change will be made in the subscription price.

Commencing, however, with the January issue for 1913 the price will be raised to Rs. 2-8 per annum. All subscriptions received before that date will be accepted at the old rate. Subscriptions may be entered for one, two, or three years at the old rate if placed in our hands before January 1st, 1913. With the additional eight pages, art covers, and better illustrations, *Herald of Health* will be worth double its former price and yet you can obtain it at Rs. 1-8 during the next eight months if you are prompt and for as long a period as three years. Why not give a long term subscription now?

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