

Herald of Health



"WHERE CEYLON'S SPICY BREEZES BLOW."

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No. 6

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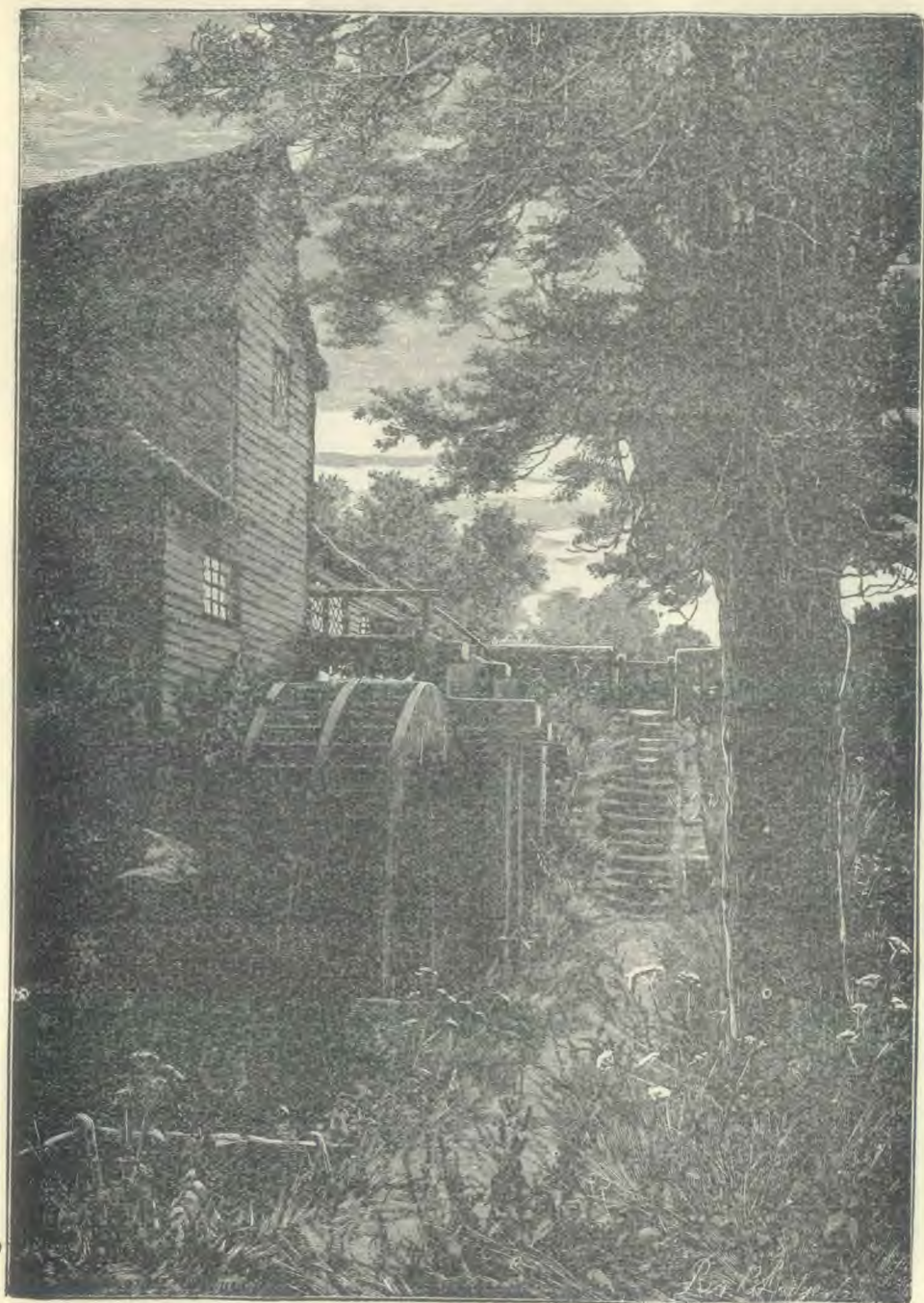
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"THE OLD MILL"



Herald of Health

The Indian Health Magazine.

V. L. Mann, M. D., Editor

S. A. Wellman, Asso. Editor.

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No. 6.

Fads

ONE of the things with which we have most to contend to-day is disease. It is true that we have new diseases brought to light from time to time which are a menace to the public health but still we must look farther for a reason for the great prevalence of disease as now found. The conditions have become such that we find it hard to find an individual who is in perfect physical condition, or as we call it normal. There are people who enjoy perfect health but they are the exception rather than the rule. There are many who are not incapacitated for following their ordinary duties but still they do not know what it is to possess the rigour of the full strength of manhood and womanhood. Are we to attribute these circumstances to the fact that we have a few new diseases to combat in our study of medicine. We must consider the present status of the physical make up of mankind in order that we may account for the vast amount of sickness that exists. In other words the physical degeneracy of man is the cardinal reason why disease is claiming its multitudes.

People are beginning to realize these conditions and as a result a cry is going up everywhere for a return to the normal conditions of living. To reach their goal some take one road and some another. Those who take the road that leads to ultimate success are fortunate. Others there are who are wandering in the desert of suspense and will be for the rest of

their lives unless they come to realize their condition and weave a little common sense into their human economy.

This seeking for a return to health has developed a number of what we might call fads. There are different avenues by which men have aimed to reach the ultimate goal, perfect health. These individuals have become enthusiasts along that particular line; so much so in fact that they have heralded it before the public with both voice and pen as the only sure way. We do not doubt the truth that is in their statements but these principles will not apply to all cases. Take those who sick, are suffering from some nervous affection, and let them read of one who has obtained health in a certain way, applying himself diligently in following the same routine, and in many cases he would bring upon himself incalculable damage. Ill people will follow any avenue which holds out hopes of ultimate relief.

But in the treatment of disease we must give consideration to the individual characteristics of the patient and his disease. A hard and fast rule cannot be established for all persons suffering with the same malady. The same methods will not be invariably successful in both cases. It is for this reason that the study of medicine is not an exact science. We have as many different ways of treating the same disease as there are characteristic differences in the patients. Therefore any one plan or principle placed before the public

as a restorative to health will fall short of accomplishing its purpose as well as work great harm in many cases.

Although there are many fads existent in the world we will deal here with only such as we have had personal experience. The first one we will mention is Tylerism. This is a system in which what is called the Cascade makes the most important part of the treatment. The cascade is the first thing to be employed in the cure of various diseases. This consists of the injection of enormous quantities of water into the bowels. To show what teaching of this kind will do we will give as an illustration a case of a patient who entered the hospital giving as a part of his history that he had used the cascade for twenty years. From a gallon to two gallons had been used at each injection. No doubt this patient is still using this abominable treatment and always will be, for he has so misused his intestinal tract that it can never regain its tone and vigour. This is but one illustration from many where this treatment has worked harm to humanity.

Another fad which has attracted considerable attention the world over is Fletcherism, which has caused numberless neurasthenics. We meet any number of people to-day who are in a perfect nightmare between one meal and the next for fear they have lost track of their count before they chewed a mouthful of food eighty times.

Next we might mention Mc Faddenism. This is a system which aims to cure disease by exercise. An institute was erected in which people were treated by individuals who were not educated as physicians. Not only this but sets of printed questions were sent out to people soliciting treatments by mail based on physical exercise. The fact that one principle was used in the treatment of disease, that a knowledge of medicine and surgery was absent, and that treatments were given by mail without ever having personally examined the pa-

tient is sufficient for its condemnation.

Sinclairism, next in order, is the treatment of disease by starvation, and this has been urged upon the public through the popular magazines. From this also much damage has resulted. We have come into personal contact with many who had persisted in this line of treatment and yet their cases made it apparent that they were already undernourished and needed more food rather than less.

It is practically safe to say that it is only nervous people who fall victims to such fads. While this is not always true, yet we must remember that we are living with and among a neurotic generation. We admit that it is from the intestinal tract that we absorb many poisons; that the stomach does not have a set of teeth and that we must thoroughly chew our food; that the best way to obtain a tonic from Quassia Chips is to chop the tree down; that people are in the habit of eating too much and would not suffer from an occasional fast, but in these various methods we must select our cases and treatment must be given accordingly. Health is restored upon the broad principles of the cause, pathology, bacteriology and symptomology of disease. This system of medicine has no hobbies to ride and therefore no fads to exploit. It is well for everyone to steer clear of the "Fad."

Evils of Specialization

THE middle-aged workman incapable of work outside a limited specialty, and even unable to think or talk of anything else, is as pitiful a sight as a broken-down actor; and modern industrialism is producing an increasing number for charity, so it is charged. Scientific management may thus save at the spigot and waste at the bung, if society is to be burdened with paupers worn out at fortyfive, or even forty.—*Interstate Medical Journal.*



General Articles



The Tabooed Subject

G. H. HEALD.

WHAT would you think of parents, who, knowing their children were in a hay-loft with matches, would say nothing, hoping the children would not learn the use of matches? But if that is an unfair parallel, what would you think of parents who, knowing the dangers of tobacco and alcohol, failed to instruct their children on these points, lest it be giving the children a "knowledge of good and evil"?

But such a strange conspiracy of silence has been maintained regarding what is perhaps the worst possible menace to the young. It is such a potent evil that we have hardly dared to discuss it among ourselves, far less instruct our children. We have, in fact, maintained a condition similar to the one when men believed in a malicious devil with full power to carry out his malevolent designs, who would appear on the scene whenever his name was mentioned; and of course his name was taboo. If we were out from the influence of our environment, if we had come on a visit, say, from Mars, this hush about the sex question, this treatment of it as of an evil genius ready to come and devour us if we spoke of it, would astound us. But we have been in this atmosphere all our lives, and it seems natural to us, just as a fusty, unventilated room does to one who has slept in it all night.

But while we have been keeping silence regarding sex matters, we have not been keeping the children in innocence; for from one to another the knowledge has passed, not as of a function that should be considered sacred, but as of a subject for loose joke and smutty story. The conspi-

racy of silence has never been able to guarantee the innocence of the children.

They may not have drunk at the fountain of the knowledge of the sacredness of sex, but they, or many of them, have quaffed of the polluted sewer of sex perversion; for the child who has a knowledge of wrong sex life never keeps it, but passes it on to every one with whom he or she comes in contact. And the knowledge in its effect upon innocent minds is as infectious as smallpox. There is no natural immunity to this mental infection.

Why have we not sensed this, and realized that a vaccine of sex instruction was needed, with which, possibly at a loss of the innocence of the child (as far as ignorance constitutes innocence), the system might be made immune, or partly immune, to the virus of youthful impurity? As we are awaking from this nightmare, we rub our eyes and wonder, but we are not all awake. The tradition of centuries does not break in a moment or a week or a decade. While there are prophets of a better time pressing the standards forward, there are those, and they are many, who are wholly out of touch with the movement. Even now there are those who would blush if one in a mixed company spoke of the legs of a table. When the *Ladies' Home Journal* began its campaign, urging parents not to allow their children to grow up in ignorance of these matters, there were bitter protests from people of this class.

But now we see a mighty wave in favour of proper sex instruction, partly on the basis of disease prevention, partly in be-

half of a higher moral ideal. All over there are being held conferences, in which some of our most able and most respected citizens take part, where the sex question, the social evil, the venereal peril, the white-slave trade, and kindred topics are openly and fearlessly discussed. We have recently given notes from a meeting held by the Monday Evening Club of Washington, D. C.

Magazines are beginning to handle the subject fearlessly. The latest notable example is a series in *McClure's* by Jane Addams, who compares the campaign against immorality with the old abolitionist campaign against slavery, which, beginning with a few earnest souls fighting almost alone against entrenched privilege and the tradition of generations, finally, after a bitter struggle, resulted in a complete victory. Books on the subject of sex—from simple instruction on sex hygiene for children and youth to warnings against vice, and exposures of the capitalized system—are multiplying rapidly.

Vice commissions have been appointed in different cities. The Chicago vice commission issued a report which so exposed the iniquity of the organized and capitalized system of vice-slavery carried on in that and other cities that some "influence" caused it to be temporarily thrown out of the mails!

A report prepared by the Minneapolis vice commission, while not so lurid, is as full of information showing the need of united and determined action to rid our cities of this great entrenched evil.

Medical societies are sounding the warning, especially as regards the danger of infection with loathsome diseases from impure associations. And persons like Dr. Helen Putnam are working strenuously for the introduction into the institutions of higher education of courses in biology and kindred studies calculated to prepare the future teacher to teach prop-

ly the important subject of sex hygiene and sex purity.

The more forcibly a spring is stretched, the more vigorously will it rebound if freed. Is it possible that those just freed from the repressive trammels of old tradition will fly to an uncautious extreme in the matter of sex instruction?

The New York *Medical Times* thinks this is a real danger. It suggests that if all this teaching proves to have a harmful effect, "the plan can not be readily stopped. The information given will be handed down, in more or less distorted form, by young boys and girls to younger ones, and it will be a decade, at least, before the effects of the movement can be brought to a standstill."

Regarding the natural functions of the girl, we are told in the same article that "the normal girl requires only the instruction and discipline which any mother or older sister of common sense possesses, and the abnormal girl, like any other sick person, needs careful, individual medical attention, not public lectures." Instead of giving definite instruction regarding the intimate relations of the sexes, the *Times* believes "that the young girl should be taught to hold the marriage relation in the highest esteem, and to consider any lover's caress as an act of infidelity to her future husband and to her own character. Here is the proper place to draw the line. The girl who, under proper guidance, is not willing to draw it here, can not be trusted to draw it anywhere else."

Another objection raised by this journal is concerning who shall be chosen to instruct. One at least who volunteered for this purpose is said to have herself had a most shady experience in the past.

Could the influence of teaching by such a one, even though repentant of the past, be wholly good?

The question has been warmly discussed whether sex hygiene should be taught in

the Washington, D. C., schools. A series of lectures has been prepared on First Aid, Contagious Diseases, Hygiene of Childhood, and Sex Hygiene. The matter finally came to Superintendent Davidson for decision. He accepted the help for the other topics, but "regarding the

series of six" lectures on sex hygiene he said: "In handling a subject so fraught with danger, we must be extremely careful. Men who can present the subject are hard to find. I want to assure myself that the lecturers on these topics are capable before I approve the series."

Getting Old, and Lactic-Acid Germs

EVERYONE with moderate health wishes to live to a ripe, old age. There have been many efforts to learn the cause of senility and to discover such remedies as could prevent this condition. In the beginning of this century Metchnikoff called attention to the auto-intoxication of the body through the taking into the circulation poisonous material engendered by the putrefactive processes in the intestines. These processes are not only favoured by some of the germ contents of the intestines, but also by an imperfect "stewing" of these contents (imperialis). Maly also sees in the intestines the cause of the aging symptoms, such as emaciation, stooping posture, etc. For the one condition the eating of meat, for the other the sedentary habit would be the promoter of auto-intoxication.

Therefore, to counteract these putrefactive processes, it is best to have regular stools as well as a diminution of those bacteria which initiate this decomposition. It is now believed that in lactic acid we have found a powerful disinfectant for the intestines, knowing that people who live mostly on milk-foods attain as a rule a very old age.

It is on account of these observations that Metchnikoff recommends to those who commence to show early the symptoms of old age to use milk soured with the Bulgarian bacillus. The use of these organisms seems, at all events, to be harmless and therefore I want to say more about it.

Travelers who have visited the Orient tell us that in Constantinople, for instance,

they encounter in the midst of the multitude of merchants persons who offer for sale a white jelly-like mass, on plates, which in Bulgaria is considered the national dish of the land and is named "maja-yoghurt." The Oriental people eat this jelly-like milk as it is sold in the streets. Many times they mix it with bread and sugar or pour a fruit sauce over it.

This yoghurt is prepared, in the Orient, from fresh sheep's milk, which, after having been boiled and cooled, is mixed with a kind of yeast called "maja." Letting this stand for twelve hours in an even temperature, the milk coagulates, when the yoghurt is ready. The maja, which is added to the milk, is an organized ferment, which from times immemorial has been prepared by the Bulgarians from the chyle of sheep. Through the action of this ferment, which principally consists of the so-called maja bacilli, lactic acid is formed from the milk-sugar of the milk; the same as alcohol is formed in the presence of yeast, or common sour milk from unboiled milk by lactic-acid ferment. If the milk is boiled curdling does not take place, since the lactic-acid bacilli present in all milk are killed.

One of the advantages of this lactic acid milk is that by first boiling the milk all harmful bacteria are destroyed, while through the addition of the ferment to the sterilized milk the lactic-acid developed is purer and the process more perfect. Besides this, the maja-bacilli have greater lactic-acid producing power: they can form 25 percent of lactic acid, while the com-

mon lactic acid bacilli form only 0.5 to 0.8 percent of lactic acid.

If the soured milk is rightly prepared (the fermentation period should be neither too long nor too short) and is brought into the stomach, the increase of maja-bacilli, and thereby the development of lactic acid, for a while goes on in the intestines, since the bodily temperature is just right for these bacteria; and by the struggle for existence (which exists even among the most minute creatures) the less numerous and less resistant putrefactive bacilli are gradually destroyed, which healthful condition is of eminent interest for our welfare. Thus the intestines are freed from the harmful bacteria and their metabolic products, and the direct cause of autointoxication measurably diminished.

This is the explanation by Prof. Metchnikoff of the remarkable fact that the inhabitants of Bulgaria, who regularly eat this soured milk, generally are much healthier and attain a higher age than the more civilized people, notwithstanding the hygienic habits of those people leave much to be desired. Statistics have proved that in Bulgaria, with a population of 4,000,000, 4,000 persons are over one hundred years old, while in Germany, with a population of 62,000,000, only 70 persons reach the age of one hundred years.

The usefulness of the lactic-acid treatment in certain intestinal troubles, and especially in conditions of autointoxication, has been scientifically proved and corroborated in many cases in practice.

I have in my care various patients who by the regular use of this kind of soured milk, which they prepare themselves, receive much relief from nervous disturbances. Do not forget, by the way, that this Bulgarian sour milk has at the same time a high food-value, inasmuch as it is composed of concentrated milk and can be used with success in cases of emaciation, loss of vitality, and so forth.

The weakest point in such a regimen is the preparing of the milk. In many newspapers and periodicals methods are advocated and various tablets recommended for preparing the milk. However, most of these turn out flat failures and a great disappointment.

The maja-bacilli, in the form of dried tablets, very soon lose their fermenting power, and in such a case all the expensive and neatly constructed apparatus are of no use for preparing yoghurt.

The one and only correct way is to get the cultured bacilli fresh from the laboratories which produce them.

As a dietetic treatment for a few weeks or months the treatment is also applicable for the less fortunate people. But for daily use in the household it is still too expensive. [The expense is now slight.—ED.] However, it is important to know that, as a result of experiments, one should hold in much higher esteem the common sour milk. Although not in so high a degree as the Bulgarian soured milk, ordinary sour milk can be recommended, as a dietetic food of high value, both for disinfection of the intestines, in people who eat too much meat, and for undesirable fermentation and putrefactive processes in the intestinal tract, which give rise to all kinds of ill symptoms, of which, before, we did not know the cause.

In this regard, the instinct of country people, who value highly the use of sour milk, especially in summer time, is entirely in line with the latest scientific discoveries.

And delving in the annals of ages gone by we find that in remote antiquity one ascribed to sour milk not only high nutritive power, but also life-prolonging qualities.

The Egyptians knew a kind of sour milk which they called "li-ve"; in their literature we many times find this mentioned. The Greeks and Romans used as a dessert at their banquets a sour milk named "oxygala," and of this high praises were sung.

Pliny tells us of wonderful cures with "schiston," a coagulated goat's milk. By the ancient Germans the "lac concretum" was a much relished dish, both by rich and poor, old and young.

We, too, perhaps shall not fare badly by paying to "sour milk," as a dietetic remedy, somewhat more and better attention than is usually the case.—*D. Zwigman, in Clinical Medicine.*

Research in India

TIME and again the question of carrying out systematic investigation of the scourges in India has been brought on the *tapis* and as often dismissed without any sustained effort being made to solve the problems. India has had in the past more than her share of epidemics. Her old enemies cholera, small-pox, malaria have always had their fill. In recent times Plague and Beri Beri have added to a list which was already long enough. Typhoid in various forms and phases and in various degrees has also done its share of havoc and dysentery has become quite respectable in its attitude towards the people. The question arises is it not possible to curb the acerbities of these diseases? Why have we slumbered so long in the matter? India has been the seat of learning from immemorial times but it is a peculiarity of Indian civilisation that little or no attention was paid to the scientific investigation in the ætiology of disease in India. Perhaps this statement in its wide application is not strictly accurate for in early times when the Ayurvedic Science was in a flourishing condition a certain amount of investigation was conducted into the incidence of disease. Pharmacy had become well defined, laws of diet had also been well formulated, and the general laws of hygiene were laid down. But it is curious to find that whilst laws of sanitation in relation to personal matters were minutely laid down and followed with absurd punctiliousness the wider laws of sanitation relating to the environment of the people and the general preventive factors of disease such as contagion and infection were neglected. We think we

rightly state the case when we say that the personal laws of health in India are observed with absurd punctiliousness; for instance bathing and washing and a dip in the holy Ganges is a sure way to Heaven but the votaries forget that the holy Ganges may become so changed in its character say at Kalighat, that the ablution whatever may be its purifying effect on the soul, has a distinctly poisoning effect on the body especially as often happens if the water is swallowed. Take another instance. We all know that saliva of one person may be the medium of disease to another and this wholesome law is well understood by the Indians, but the absurdity comes in when the Indian in drinking water scrupulously avoids putting the brim of the drinking vessel to his lips, or in eating with his fingers takes care to drop the article he is eating in the cavity of his mouth lest by touching the lips he should contaminate with his saliva the food he is touching and thus allow his own saliva to infect his system. We are therefore the more surprised that such a people should not have paid more attention to general hygiene. Perhaps the cause is to be found elsewhere *i. e.* in the system of Government which had prevailed. A long series of internecine conflict, of Mahomedan invasion, of Maharatta warfare, of European contests had militated largely against the systematic investigation into disease and the propagation and enforcement of those laws of hygiene which could alone prove of any permanent value. In the vastness of the country, more a continent than a peninsula and its sectional forms of government in ancient

time of the most diverse character, is also to be found a contributory cause in the failure of a general plan of successful sanitation.

Tempora mutantur, nos ab illis mutantur. Times have changed and we have changed with the times. We have now a settled and peaceful form of government over the entire length and breadth of the land. We have a progressive race at the helm of affairs. The times are also full of new discoveries and inventions and the spirit of research is abroad. Now there is no reason why we should be laggards in these affairs which more than anything else vitally affect the true interest of the people. The government of India has made a large grant for general sanitary purposes, and a research fund has also been earmarked. We understand that attention in a large measure is being paid to malaria in particular. Sometime ago we published the formation of a Malaria Committee to which was entrusted the general direction of the investigation of the disease. The grant now amounts to 5 lakhs of rupees. We cannot say that considering the importance of issues involved and the diversity of the subjects to be investigated that this sum of £35,000 is very much. However like the worthy Scotch dame "We wadna grumble", hoping that this sum will be added to in the fulness of time. We would suggest that merely laboratory work is not sufficient. Local investigations with regard to the soil and surroundings, and any peculiarities with regard to the recent formation of railway embankments, or the diversion of river beds, the growth of vegetations or shrubs; should be a part of the investigation. The cooperation of various district boards should be enlisted in the removal of obstruction to the natural flow of outlet leading to stagnation as well. Municipal authorities should also be educated to recognise the extreme value of providing the ordinary necessities of life

such as pure air and water and the supreme value of a tank or reservoir for domestic culinary and other purposes as against one reserved simply and solely for the purposes of drinking water. We say that there should be special sanitary officers as a part of the Advisory Board who will specially see that these elementary principles of hygiene are given effect to by the local authorities. We are afraid we have been very academic in our efforts. We have in the past formulated certain rules and regulations, no doubt of great scientific value but we have not taken care to see that they have been enforced. We would therefore go a step further and say that another branch of this Advisory Board should be the suggestion of points of material value and to legislators to be codified in a permanent manner in the laws of the land. We would venture to add that not the least of its efforts should be in the direction of the direct education of the mass of the people in adapting in their daily lives the rules to be framed in a popular form by this Board. Peripatetic lectures have been of immense value in all lands and their lantern shows have been of real assistance to demonstrate in a practical manner the abstruse theories which must of necessity be a part of the lecture. In India these would be of special value considering the illiteracy of the people. As regards the more scientific aspect of the research we would suggest that more attention should be paid to the teaching of public health in our institutions. Every district board should have a health officer qualified sufficiently to detect any local peculiarity in the ætiology of disease which would be sent to the central committee for further investigation. The central committee may be composed of most excellent persons but unless they get sufficient materials before them they will be powerless to carry out their duties. Therefore these local

sanitary officers would be in the nature of out posts. We have little doubt that if the authorities would only add a fair proportion of nonofficial medical men in

these research investigations and carry on the propaganda suggested above we shall be doing a great deal for our pest ridden population. *The M. S. Journal.*

Bathing a Bed-Ridden Patient

HAVE everything in readiness before disturbing the patient. It is a great mistake to start the operation and then find that the flannel is missing, or that the clean clothes are not aired and ready for use. Next close the windows if the weather is cool, and if there is a fire in the room place the clean clothes before it. Then procure the water, which should be between 105 and 108°, as it cools quickly.

Place the mackintosh on the blanket, and roll it up to the half with the blanket on the inside. Turn the patient on his side, and place the roll behind his back.

Now turn the patient on to his opposite side, and he will pass over the rolled blanket and mackintosh, which can now be unrolled to cover the remaining half of the bed. The edges of the blanket should overlap down the middle of the patient, while the mackintosh or brown paper should protect the under bed-clothes. Next turn back the upper bedclothes, and remove the patient's night clothes, taking care to keep him covered as much as possible. If there is an injured limb, the sound one should be uncovered first, as this will give more room in the garment for moving the painful injured one.

In putting garments on, the injured side should be attended to first. Now proceed with the washing. The face is washed

first with the water in the small basin, which should be soapy; it should be then thoroughly rinsed with the water in the larger basin; next the arms and neck. Place one towel beneath the limb, and follow the same direction with regard to the soap and rinsing water. Each part should be thoroughly dried. The trunk of the body is next washed, and after that the limbs, each one separately. The back should be washed last. If the patient is very weak, he can be turned on his side and while the nurse is supporting him with one hand and arm she can with the other wash the back. If it is necessary to wash the head, the water should now be changed and the basin containing the clean, soapy water should be brought close to the bed, and as much on a level with the patient as possible. Place a towel on the pillow beneath the head. Rub the hair with soapy water, taking care to prevent the soap from going into the eyes and afterwards thoroughly rinse in clean water in a large basin. Now turn the remainder of the towel over the head, and dry thoroughly.

When the bathing is finished, replace the clean clothes, which should be aired and warmed. Give the patient a hot bottle to his feet, and if necessary something warm to drink.—*Good Health.*

“Is It Right to Do That?”

THIS question is constantly put to every doctor, often about matters concerning which he cannot make a definite reply. People ask, “Do you think it is right to bathe in hot water?” “Do you think it is right to bathe in cold water?” “Do you

think it is right to drink coffee?” “Do you think it is right to wear cotton next the skin?” as if all these things were “right” or “wrong,” irrespective of the individual case.

If we dared to attempt an epigram we

should say that suicide is the only thing a man must never commit. If this is found too general, the answer is that hygienic rules must be general in their statement, but individual in their application.

"Is it right to bathe in cold water?" Right for whom, when, where, how? A strong young man looks on the cold morning plunge as a life-giver, and could not be persuaded to miss it at any season. This view of it is perfectly correct for that person. It is a life-giver, and the fact is proved by the exquisite sensations of increased vitality that follow it. Yes, it is "right to bathe in cold water."

Then some anæmic person with a poor blood circulation goes and does likewise—with what result? An imperfect reaction, shown by chattering teeth, fatigue, chilliness, and all the signs of depressed vitality—no, it is wrong to bathe in cold water. In matters of health, each person possesses a personal equilibrium, the

maintenance of which means health for him; general maxims must be tested, modified, and applied to his particular case.

Perhaps the most pernicious of all foes to health is the "fad." The spirits of the expert in hygiene sink to zero when he reads that open-work silk stockings are to be worn by young women through the winter season, or that while skirts remain so narrow, it will be out of the question to wear petticoats under them. He is perfectly aware that thousands of young women will follow the dangerous fashions and remain unscathed; for he knows that there are thousands of young women who cannot be killed except with a club.

But already he is, metaphorically speaking, in tears for the thousands of other young women who will follow suit rather than look queer—the helpless candidates for grippe, bronchitis, and pneumonia.—*Youth's Companion*.

"The Painted Lady"

TIME was, not so long ago, say the editor of the *Ladies' Home Journal*, when the "painted lady" was the woman marked by society, and the bar sinister. There was then but one interpretation for rouge. But recently women have done a curious thing: the little distinctions that once clearly marked the demi-monde grow fainter; the woman with the painted face is tolerated by women to-day where once she was shunned. Can any woman tell a man why the use of rouge, that was never in good taste, has by women been absolved from the stigma that once was attached to it? I say "by women" because the stigma has never been removed by men, and is not, in their minds, to-day. Of course some women will answer, that every woman wants to look as well as she can: that if nature has not been kind to her she resorts to artifice: she wants to look her best. But to a man's mind a strange

obsession rests in the minds of some women as to what their "best" is. His mind may be pathetically simple and untrained, but he has never yet been able to make out how a decent woman can make a "painted lady" of herself and thereby lower her standing of sex, and yet think that she has improved herself in appearance or bettered the impression she has made. If the woman thinks that the man is deceived she flatters herself. For dense as man may be about the mazes of woman's toilet he is never deceived by the painted face. Rosy cheeks cannot be imitated, and he always knows the difference between the real and the false. A man is not as easily fooled about some feminine things as intelligent women believe. And, for one thing, the "painted lady" has not a very pleasant position in the mind of a man.

The Advantage of System

THE chief thing that governs man's work to-day is system. Without it no large business could go as at present. System has been the very corner-stone of every large business enterprise. To-day this is self evident; yet it has taken years of study and mistakes to develop successful business systems.

The chief reason that men can work a shorter number of hours than women is system. Even the life of a man who does no work is, as a rule, governed by some system from the moment he gets out of bed to the moment he goes back to it. Time is money, and system saves time. A slow worker, working under the system, will do more work in the long run than a faster worker who has no system.

Women, on the other hand, seldom have

any systematic methods of work. The average housewife does things when she happens to think of them, or when it occurs to her that they are most needed. Very often this is not at all the most convenient or best time to do them.

Few housewives have a place for everything and always keep it in its place when not in use, as men must do in business. Much time is lost in the long run if a woman has to hunt even a few seconds for everything she wants to use. Many needless steps and more work are added in the same way. Without system every woman does things that could as well, or better, be put off till to-morrow, and puts off till to-morrow many things that should be done to-day, simply because she has no time to do them.—*Ernest F. Robinson, M. D., in the Healthy Home.*

Anatomy and Physiology

The Muscular System

THE muscles constitute the fleshy parts of the body and are the main organs of motion. They are fibrous structures and consist of a series of bundle of fibres invested in sheaths of cellular membrane.

The fasciculi, or bundles of fibres, are in themselves very minute, but arranged in compound bundles of successively larger size, we have ultimately only a single bundle in a muscle. The essential characteristic of a muscle is its contractibility—it contracts in length, dilates in breadth, its body becoming firm and rigid.

The muscular fibre is endowed with a peculiar property called irritability, and it is upon this that its power of contraction depends; or in other words, the impressi-

bility of the muscle is dependent upon nerve stimulus.

Muscles are said to originate at the point where they have the most fixed attachment. By insertion is understood the opposite end or termination of the attachment that is more movable, that is the end of muscle that most moves the bone, or portion to which it is attached. The muscles are abundantly supplied with blood vessels and nerves. They are frequently the seat of rheumatic disorders, as well as of inflammation.

The number of muscles in the human body is commonly estimated at 405; with the exception of 9 they all appear in pairs.

The muscles widely vary in size and

form. In the limbs they are of considerable length: this is true especially of the more superficial muscles, the deep ones generally being broad. They surround the bones, and form an important protection to the various joints. In the trunk the muscles are broad, flattened and expanded, forming the parietis of the cavities which they enclose. For the purpose of description therefore, muscles are termed long, broad, short, etc.

Each muscle is invested externally with a thin cellular layer, forming what is called its sheath; this not only covers its outer surface, but penetrates its interior, in the spaces between the fasciculi, surrounding these and serving as a band of connection between them.

The muscles are connected with the bones, cartilages, ligament and skin either directly or through the medium of fibrous structures called tendons.

When the muscle is attached to the bone or cartilage, the fibrous terminate in broad, blunt extremities upon the periosteum or perichondrium, and do not come into direct relation with the osseous or cartilaginous tissue. When muscles are connected with the skin, they either lay as a flattened layer beneath it or are connected with its areolar tissue by larger or

smaller bundles of fibres, as in the muscles of the face.

The muscles of the body are of two kinds—the voluntary (striped muscles) which are capable of being moved or controlled by the will, and the involuntary, (non-striped) those that are not under the control of the will. The former make up the larger bulk of the muscular system.

For descriptive purposes the muscles of the body are arranged in divisions according to their location as, the head, face, and neck muscles; the trunk muscles; the muscles of the upper and lower extremities.

As has been previously stated in this connection, only those points with which we should become most familiar will be described, for instance the important relation that each organ and muscle bears to life, its action, and in the case of the muscles of the head and face, the role they play in lending expression to the countenance.

To facilitate description muscles are divided into divisions which take their names from the region in which they are situated. Thus we have in the head and face the following regions: the epicranial, auricular, palperbral, orbital, superior-maxillary, inferior maxillary, tempora maxillary, pterygomaxillary, and the like.





The Use of the Paper Bag in Hygienic Cookery

GEORGE E. CORNFORTH

THE "Paper-Bag Cookery" referred to in the October Number of LIFE AND HEALTH will be found to be an excellent substitute for frying. The tasty cooking of foods which are commonly fried has been a difficult problem for the hygienic cook to solve,—the cooking of croquettes, cutlets, patties, which are healthful and palatable substitutes for fried eggplant, fried potatoes, fried tomatoes, and such dishes. We have had to bake these, but that dries them so much that they are often far from satisfactory. But such dishes can all be cooked to perfection in paper bags. The mixtures which we call roasts are sometimes spoiled in the baking because they are dried too much; but if the roast after being packed in a baking-pan as usual, is enclosed in a paper bag, it will be properly cooked without drying. The bag is first oiled. This renders it more nearly air- and water-proof. Then the food is put into the bag, the open end of the bag is folded over two or three times and fastened with paper clips, so as to make the bags as nearly air-tight as possible. The bag with its contents, is then put into the oven on a wire rack, and left for the required length of time. The oven should be moderately heated—not hot enough to burn the bag. The food will cook properly with little evaporation. Croquettes, after being formed, may be placed in a bag, and put into the oven for fifteen or twenty minutes, when they will be nicely heated, but not dried. Eggplant, after being prepared as for frying, may be enclosed in a bag, a little cream poured

over it, and put into the oven for thirty or forty minutes.

Most of the recipes for the cooking of vegetables which are given in the "Paper-Bag Cookery Book," sold with the bags, are useful. But I fail to see the advantage of cooking apples, prunes, and puddings in a bag. The bags are not entirely water-proof, and foods which contain much water, or which are liquid, must be put into a dish, and the dish put into the bag, and nothing is gained by enclosing such things in a bag. The difficulty which will be encountered in cooking beans and the other legumes in a bag is the keeping of the oven at the proper temperature for a sufficient length of time. The temperature must be sufficient to keep the food cooking, but not hot enough to destroy the bag before the food is cooked. The recipe book tells us that the temperature should be 275° F. With an oven thermometer the temperature can easily be regulated; but a little experience will enable one to regulate the temperature without a thermometer.

Beans cooked in a bag are mealy and delicious. After washing one cup of beans, soak them overnight. In the morning drain off the water, and put the beans into a small basin. Add one small teaspoonful of salt, one tablespoonful of oil, and one one-fourth cups of water. Enclose in an oiled bag. Place on a rack in a moderate oven for two hours. This is a shorter time than would be required to cook the beans well in the ordinary way. Other

legumes may be cooked in the same way.

A substitute for fried eggs may be made by breaking the eggs into a lightly oiled pie tin, enclosing the tin in an oiled bag, and placing in the oven, where it should remain from one to four minutes, according as it is desired to have the eggs lightly cooked or well done.

The bag may also be used as a substitute for a double boiler in cooking cereals. To cook cereals in this way, a small basin with a tightly fitting cover

is needed. Measure the water and heat it to boiling in the basin directly over the fire. Add salt, and sprinkle in the proportion of cereal which would be used if the cereal were to be cooked overnight in a double boiler. Cook, stirring, till the cereal takes up the water and does not settle. Cover, enclose in an oiled bag, and place in a moderate oven for from one-half to three-fourths the time required to cook the cereal in a double boiler.

Good Substitutes for Meat--Especially in Warm Weather

WHERE the main dish at dinner contains a little less nitrogen than is required make up the amount in the dessert. Lentils, peas and beans are richer in nitrogen than the cereals are, and contain an equal amount of starch and mineral matter and a little more fat. For this reason they may be substituted once or twice a week for meat. They are more easily digested if they are pressed through a colander after they have been well boiled. Then they may be seasoned and baked in a casserole or ordinary baking-dish, or made into croquettes, or made into a roll, nicely seasoned, and baked. In summer serve them with tomato or brown sauce. During the hot months substitute for meat some light vegetable, for we do not need so much meat—tomatoes stuffed with bread-crumbs, cucumbers, squash or eggplant. You may use for the stuffing rice, bread-crumbs or rolled crackers, and chopped nuts. Bake these slowly and serve with a sauce.

A bean stew is palatable and, if well made, slightly. Soak a quart of Mexican beans over night, then boil them in fresh water for a few moments, then throw this water away. Add two quarts of boiling water and cook slowly for two hours, or you may put them over night in a fireless

cooker. Near the serving time put a tablespoonful of butter, with two chopped onions, in a saucepan, shake over the fire until the onion is soft, not brown, drain the beans, saving the water, and turn them into the saucepan with the onion.

Add half a pint of strained tomatoes seasoned nicely with salt and pepper, cover and stew for twenty minutes until each bean is thickly covered with the tomato. Serve these on a platter in a border of rice or potato, pass with them a tomato or lettuce salad, and you have an excellent meal. Black and white beans may be substituted for the red. They all make a cheap, luxurious and highly nutritious meal. Add to the water in which these beans were stewed milk and thickening, season it nicely with salt and pepper, and serve it with a large plate of brown-bread croutons for the family's luncheon.

Left-over beans make croquettes, or they may be served cold for luncheon or supper in peeled tomatoes with either a well-made mayonnaise or a cooked dressing.

Rice is cheaper than potatoes, more easily digested, more easily cooked and kept, and the water in which it is boiled may be utilized for soups, sauces, or for starching your finest lingerie.—*Selected.*

: Mother and Child :

The Experiences of Two Mothers

LAURETTA KRESS, M. D.

A SHARP shrill whistle informed Mrs. Lake one bright morning in early October that the postman was at the door. She hastened to open and to examine her mail. One letter was so full of good cheer that she read it aloud.

"C—, New York, Oct. 10, 1910.

"MY DEAR MRS. LAKE: I am writing you these few lines to tell you how thankful I am to you, and how happy I have been for the last six weeks. I came to this place to visit my parents four weeks ago. I had no time to run over to see you before leaving, there were so many little things to do before my departure. Since reaching my mother's home, I have thought of you often and intended writing you long before this. I expressed to you my thankfulness, but words fail to tell you all I feel. My own health is better than for many years, and baby is a changed child. He sleeps for hours at a time, and seems so contented. I could not have believed it possible that such a change could be made in a few short weeks. My mother thinks me quite strange with these new ideas. I am hoping that she may be influenced to adopt these reforms, for she certainly is in need of them. I shall return home next week to try the experiment still further in my own home, and to see how it works. I shall be pleased to have you visit me again when I come home. With kindest regards to you and yours, I am,

"Yours gratefully,"

"ANNIE FRANKLIN."

Mrs. Lake folded the letter and returned it to the envelope with a smile of satisfaction and an expression of hope that Mrs. Franklin might continue to keep in health and be a blessing to her home. To her husband, who sat near reading his mail, she said; "I shall be very interested in seeing Mrs. Franklin demonstrate these principles in her own home. She has had

much to make her way hard and difficult since her marriage. She was married, as so many young women are, with no education along domestic lines, and knowing very little about home economy or the care of children; so all along she had many difficulties to contend with. It does seem a great pity that young women, before their marriage, do not receive more instruction from their mothers. How much happier the union would be! And how many more children would grow up strong and healthy if these beginnings were what they ought to be!" As Mrs. Lake glanced up at her husband, he seemed to appreciate all she was saying.

"How old is Mrs. Franklin, do you know, wife?" asked Mr. Lake.

"She is only twenty-five, I think," answered Mrs. Lake.

"She is young enough, then, to be taught all these things. You must help her all you can, dear. A young woman under those circumstances needs help, and I think Mr. Franklin, also, would be very grateful to you," added Mr. Lake, with a look that told his little wife that he appreciated her education on these subjects; for he remembered, evidently, her excellent management of their home from the beginning of their married life, and the good care and regular treatment of their son.

"As soon as Mrs. Franklin returns home, I shall accept her invitation to call, and do all I can to help her," said Mrs. Lake.

"Well, wife," remarked Mr. Lake one morning after breakfast in early winter.

"I met Mr. Franklin yesterday with his wife and baby, and they are looking fine. Mr. Franklin says they are all well and in good spirits after months of careful living according to your directions. Mrs. Franklin looks a new woman. She has gained much in weight, and looks so neat and pretty in a real 'health' dress. Baby is a fine, rosy boy. She says he sleeps all night long. She allows him to play in the sunshine nearly all the day, and old Sol has painted his fat cheeks with beautiful roses. She had his little legs well covered, and his arms also. It did my soul good to see this; for only a day or two ago a young woman came into the office with a weak, sickly looking child, who had bare legs and was coughing all the time. I could not help noticing the contrast between these two children. I wish you could meet this young mother and tell her how to clothe her little one."

"My dear husband, you forget that it is very hard to mention these things to people who have been reared so differently all their lives. They have thought it toughened the children to keep their knees and legs exposed to the cold air; that to cover them with one or more thicknesses of wool was 'coddling' them, and they would surely die of croup or influenza. Many mothers have never heard of dressing young children with long drawers coming down to the ankles, and drawing up over these, long, woolen stockings to cover the knees. If mothers could only see the good effect this has on the health of their children, they would be persuaded that much of the ill health in childhood is due to improperly clothing the legs, and their doctors' bills would be reduced to the minimum."

"Why don't you, dear, have a little meeting with some of the women in our vicinity, and tell them all about this?" said Mr. Lake with his usual enthusiasm; for he had seen these principles demon-

strated in his own home; and his bonny, rosy Harold, at one and one half years, had never known what a cold was, nor had ever been disturbed one night with pain since his birth. Mrs. Lake laughed aloud and said: "One would think, my dear, that I was a lecturer. How funny I should feel giving such a lecture! I will do all I can, in a quiet way, in my visiting to help every woman who needs help."

"There is a large field of usefulness in store for you, then; for, as I have observed in the past few years, there are not very many children clothed properly. Look at the enormous death-rate among infants all over the world. Their eating and drinking and clothing has much to do with this, together with their sleeping in illy ventilated rooms," answered Mr. Lake.

"True, there is an alarming increase in the death-rate, and much depends upon these things you have mentioned. We ought to feel so thankful for the good we have received through knowing how to live, and the real benefit it has been to others with whom we have come in contact. I am sure Mr. and Mrs. Franklin have received lasting benefit from the things they have learned," said Mrs. Lake.

REST is the mind at leisure from itself. It is the perfect poise of the soul; the absolute adjustment of the inward man to the stress of outward things; the preparedness against every emergency; the stability of assured convictions; the eternal calm of an invulnerable faith; the repose of a heart set deep in God.—*Professor Drummond.*

THERE are ways in which even silent people can belong to God and be a blessing in the world. A star doesn't talk, but its calm, steady beam shines down continually out of the sky, and is a benediction to many. Be like a star in your peaceful shining, and many will thank God for your life.—*J. R. Miller.*

: Current Comment :

The Enigma of Incompatibilities

THERE are two points that especially appeal to us in an article under this title, by Jadunath Ganguli in the *Medical Record*, (India), "A Still Better Plan Would Be To Order Single Remedies Where Possible." There is not anything that demoralizes or brings into disrepute the practise of medicine any more than the "gunshot prescription." The list of drugs at the command of the physician to-day is burdensome. A few tools well used are better than many poorly used. Osler speaks of "the six or seven *real* drugs."

"The time has arrived when the Indian physician should devote more time and attention to those physical forces, especially heat and electricity, which are daily making their power of curing diseases felt by all."

Why use or impose upon the system poisons when we have the curative agencies of heat, light, electricity, water, and massage at our command? Physicians and the laity are coming to recognize this fact. Woods Hutchinson, M. D., says "Food, rest, sunshine, exercise, bathing, massage—these are the sheet anchors of our new *Materia medica*."

Sanitation in Sind

THE *Sind Gazette* says:—The Government of India made a special non-recurring grant of 4¼ lakhs last year for urban sanitary works in the Bombay Presidency and the Government of Bombay made a special provision in the current year's budget of 9½ lakhs on the account of grant-in-aid to local bodies for sanitary projects, in which a sum of 2 lakhs out of the 4¼ lakhs grant made by the Government of

India was included. From the special non-recurring grant made by the Government of India several small sanitary projects in the presidency proper have been aided. The only such scheme aided in Sind is the Kafila Serai tank filling project in Larkhana: Sind having been generally backward in preparing sanitary projects for Government aid. A sum of Rs. 2,38,600 is still available in the hands of the Bombay Government to aid sanitary measures which do not involve any large recurrent expenditure. Of this a sum of Rs. 50,000 has been specially placed at the disposal of the Commission in Sind. The Hyderabad Municipality has applied for a grant of Rs. 32,000 out of this for filling up its town tanks, which become insanitary in the low flood season and for one of which it has a well designed project of reclamation in hand. Sind should receive at least a lakh out of this available balance of Rs. 2,38,600 of the non-recurring imperial grant, seeing that it has received so little up to now and that the total imperial grant was 4¼ lakhs. The other municipalities in Sind which contemplate undertaking sanitary projects should therefore begin to stir and to see that they receive a generous dole out of the Imperial bounty. Unfortunately the Hyderabad Municipality, which had a properly designed sewerage scheme which has obtained the approval of every sanitary and engineering expert it had consulted, has recently taken a retrograde step by throwing out the proposition for its introduction and has gone backwards on the path of progressive sanitation. It has also thereby let the opportunity for putting in a claim to Government for aid for its drainage improvements slip through its fingers.

Anti-Dust Campaign

DUST, says *The Pioneer* is not by any means or in the main a mere nuisance and source of public discomfort, but perforce a menace and indirect public danger of deadly potentiality. Further still, as a habitually inhaled irritant alone, dust predisposes the upper air passages to bacterial implantation because of the production of a catarrhal soil of ready receptivity and decreased local vital resistance; the germs are not only invited, but embraced and encouraged to stay, and they penetrate to the innermost parts of a body which is at the same time somewhat generally debilitated and vulnerable. Here again comes forth a vicious circle. The more dusty the air of our cities, and the more consequent catarrhal irritation, the more sputum, and the more spitting promiscuously in public; and the more people expectorate the more infectious and dangerous the dust becomes. The street-cleaning problem cannot be dissociated from the problem of the enforcement of anti-spitting laws. As the anti-dust campaign got its first impetus from the point of view of the prevention of tuberculosis, a special reference to the relation of dust to this widespread disease may be interesting. First the constant inhalation of all kinds of irritating dust makes the invasion of the tubercle bacillus very easy. This is well-known, not only as regards occupational mineral and organic dust, but particularly in respect to municipal street-dust and house dust of ordinary constant prevalence. The streets are the ventilating flues of cities, and as a result house ventilation depends much on the purity and quality of street air: dirty, dusty streets become air-sewers instead of pure air channels.

Hygiene and Race Stamina

THE larger effect of hygienic measures is a question which presents many moot

points. From a humanitarian standpoint no one questions the duty of safeguarding by every means within the power of science the lives of the population and especially the infant population. From the stand point of physical race betterment, however, many regard hygiene and sanitation as of doubtful or negative value, since these measures allow the weak to live and perpetuate their kind. Assuming that in a considerable proportion children who succumb to bad hygiene and defective food are inherently weak—a theory by no means universally admitted—it would be conceded that if they were aided in reaching a maturity which must be more or less defective they would transmit their weaknesses to their descendants and thus contribute measurably to the deterioration of the race as a whole. An attempt to show how this works out under actual existing conditions as between the Chinese and the western white population has been made by Prof. E. A. Ross.

Ross says that, on account of lack of good hygienic conditions in China, out of ten children born, the three weakest will die in infancy and five others will probably fail to grow up, while in our own country, out of the same number of children born, only three will fail to reach maturity. This would seem to favour better hygienic conditions for the betterment of the race, yet Ross feels that there may be some doubt on this point. For, of the seven surviving, the five corresponding to the five additional Chinese who die, will, according to hypothesis, be weaker in constitution and will transmit their weaker qualities to the offspring; while the two surviving Chinese are the hardiest of the lot and will transmit their hardy qualities to their offspring, thus in the end increasing the general stamina of the race.

In order to test this idea, Ross closely questioned thirty-three physicians practicing in various parts of China, chiefly in

missionary hospitals. Twenty-nine were positive that the Chinese physique evinces superiority in some respects over that of the white people of the western world. It has been found that surgical shock is rare among the Chinese, that they endure surgical operations well and recover from them, from most serious injuries and from septic conditions in an astonishing manner. They also stand higher degrees of fever, are more resistant to pus-producing germs and are very tolerant of pain, while fewer Chinese women die from puerperal fever. This applies particularly to the lower classes, who live among the most unhygienic surroundings. The percentage of recoveries in the poorly equipped hospitals from the gravest injuries and operations equals or exceeds that under the ideal conditions of the best-equipped hospitals of Berlin or Vienna. This indicates a strong and abiding race vitality and it may reasonably be assumed that it is a direct result of the survival of the strongest, or at least most enduring, members of the race. In other words, the selective process imposed by unfavourable surroundings, has established in the Chinese a higher degree of immunity to condition inimical to survival.

The deduction would seem to be that the way to produce a strong race well endowed with vital qualities would be for that race to multiply to excess, and then to undergo murderous reduction by exposure to disease and unhygienic conditions. A second consideration shows that this process has its drawbacks. While under poor or bad conditions the Chinese will outdo the white man, under good conditions the latter rises to a higher level of efficiency. The Chinese, who can underlive, cannot outwork the white man under the white man's conditions. In short, the low-caste Chinese seems to illustrate very well an often misapprehended fact, namely, that the survival of the fittest

is not necessarily the survival of the best, the most efficient, or even the strongest; it is simply the survival of those best fitted to survive in that particular environment—and not necessarily well fitted for any other environment. Those who are fittest for a white man's environment are less fit for that of the Chinese, and vice versa. The fitness of the low-caste Chinese is fitness to endure existence on the lowest terms. On the evidence so far presented, we may dismiss the case against hygiene as an agency in the deterioration of the race with a Scotch verdict—not proven.

American Medical Journal

Malaria in Madras

EGMORE, a suburb about ten miles from Madras, was once the resort of those in search of holiday and health. It has now become an infecting centre of malaria for the whole tract of country extending from Madras northwards. Government was compelled to take action and Major T. S. Ross, I. M. S., submitted a report from which the following paragraph is taken:—"In dealing with malaria at Egmore, I would point out that the whole subject has now become sufficiently serious. It is no longer Egmore alone that is affected. The disease has spread northwards from Egmore for, I understand, a distance of nearly one hundred miles along the coast and hitherto healthy places which have indeed been regarded as sanatoria are now rendered pestilential and industry of all kinds, including the casuarina industry itself, is considerably hampered. Southwards the disease has spread into the city of Madras. George Town and part of the city lying north of it are severely infected and there have been at Royapettah hospital within the last two months indigenous cases of both benign and malignant tertian malaria contracted in Triplicane, Mylapore, Adyar,

(Concluded on Page 119.)

- Physical Culture -

Why Systematic Exercise Should be Performed Daily

WHEN the ordinary man who takes an interest in the welfare of his race bewails its modern physical degeneration he is almost invariably opposed by the undeniable fact that nearly all the recorded feats of old time athletes have been easily surpassed by those of to-day. Another contention which is put forward by those who are quite satisfied that they are living in the best possible of all worlds, is that we can turn out for inspection specimens of physical manhood quite as magnificent as any of those produced by Greece in the days of her glory. Suppose that both of these contentions are admitted to be facts. What do they prove? That despite the general degeneracy of the race, the early, improvident marriages which are so common, the confined, close atmosphere which most of us breathe, the absurd, irrational manner in which we live, eat, dose and clothe ourselves, it is still possible by means of regular physical exercise, scientifically applied, to over-come all these handicaps, and convert our stunted, unhealthy bodies into very fair samples which have been produced to controvert, forsooth, the very argument which has been propounded.

A point worth considering, I think when it is remembered that the Argyraspids, the pick of Alexander the Great's army, were every one of them over sixty.

Does any one imagine that the human frame has altered so much as to make it impossible for a man of to-day to preserve his youth and vigour as these old men did, were we to follow their simple rule of regular daily exercise?

It is all very well to contend that the conditions of life are altered, that we live

in an atmosphere of ceaseless worry and anxiety, of wear and tear, which consumes our vitality at a vastly greater rate. Alexander's veterans were men who had not known peace for forty years or more.

Beside what does this modern wear and tear amount to after all? Just the weakening of muscles here and there which need to be taughtened up again to be as well as ever; the consumption of a certain amount of tissue, which can just as readily be replaced by an adequate supply of its suitable raw material, due care being taken in the selection of both the quality and the quantity of our diet, and of the necessary exercise which will keep the digestive organs in proper working order.

You have, let us suppose, undergone violent muscular exertion, and thereby consumed certain sections of muscular tissue. You are discerning enough to select for your next few meals such foods as will contain a high percent of albuminous (muscle forming) elements. These pass into the blood in due course, to be deposited here and there indiscriminately throughout your muscular system. But you do not want the distribution to be indiscriminate, the major portion of your fresh supply of albumen should be deposited in the muscles which you have been exercising and therefore consuming. How is it to be attracted there?

Only by fresh exercise of those very muscles, which exercise will immediately attract necessary flow of blood. The exercise should, of course, not be so violent or so prolonged as the one which occasioned waste. Remember that your body is a piece of intricate machinery which is always at work and since there is a daily waste there must be a daily repair.

A. WALLACE JONES.

Questions and Answers

What is the value of Sanatogen as a nerve tonic and brain food?—J. S. D.

The medical profession does not recognize any such thing as a nerve and brain food.

The nervous system, which includes the brain, is one of the main systems of the human body and is nourished in the same manner as the rest of the body. The blood carries the necessary nutriment prepared by the digestive organs to each individual nerve cell which is a unit of the nervous system. Some clinicians are very enthusiastic in the use of phosphorus in some form as a regenerator of nerve tissue, but others just as well known doubt very much if any benefit is derived from this method of treatment. Experience has taught us that the best nerve food is obtained by a pure, wholesome diet, fresh air, exercise, and other rational methods.

If one is of the opinion that he cannot get along without drugs in the treatment of his nervous condition he had best get them from some reputable physician rather than choose some patent medicine of which he knows nothing. Hence, we cannot recommend Sanatogen as a brain or nerve food.

Do you recommend electricity in the treatment of diseases?—J. W. S.

Yes, in well selected cases. It should be prescribed by a physician.

Do vegetables when eaten cause flatulence?—F. M. B.

If one's digestive organs are not strong the coarser vegetables are liable to cause wind on the stomach or in the bowels.

Are the various infant foods on the market to be recommended for use in feeding babies?—H. M. C.

No, not as a rule. They do not contain the food elements in proper proportion for the normal baby. This predisposes the child to rickets. In some cases where the fat and proteid digestion of the infant are below par the best makes might be permissible.

Give a wash for Chronic Catarrh.—J. C. S.

Sodii Salicylatis,	2 drams
Sodii Boratis,	3 "
Glycerine,	4 "
Aquae,	4 "

M. et Sig.—Teaspoonful in a pint of water. Use freely as a wash for the nose with medicine dropper or atomizer. This merely cleanses the nasal passages. Better see a physician for further treatment as he can watch the further progress of the case.

Malaria in Madras

(Concluded from Page 117.)

Egmore and Chetput, so that practically the whole of the city is now infected, though some parts much more severely than others. Madras has usually been regarded as a comparatively healthy tropical town for Europeans, largely by reason of the absence of malarial fever and its complications, but in the last six months four Europeans have suffered from malaria (verified microscopically) contracted in Madras. These are the first cases, known of Europeans who contracted malaria in Madras." Government have just issued an order accepting Major Ross'

scheme for investigating the cause of the prevalence of malaria and the location and destruction of breeding places of anopheline mosquitoes in Egmore. They are prepared to supply and bear the cost of the agency required for the investigation, but the staff required to locate and destroy the breeding place of the anopheline mosquitoes in the neighbourhood should, the Government think, form a charge on local funds and a reference has been made to the District Board of Chengleput to accept the scheme and bear its proportion of the expenditure. Both departments of work will be placed under Major Ross who will be placed on special duty for this purpose.

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YELLOW FEVER AGAIN

YELLOW fever has made an appearance in Central America and South America.

GERMANY'S DEATH-RATE

REPORTS covering a large proportion of the empire give Germany's death-rate for 1910 as 15.08,—a little lower than the British rate.

DEATH BY COFFEE

ACCORDING to a certificate filed with the city health department, too much indulgence in coffee caused the death of the wife of a rancher of Clearwater, Cal. It is said that she took no solid food for the last thirty days preceding her death, having grown to depend almost entirely upon the coffee. The drug seems to have shattered her nervous system.

PURIFYING BY LIGHT

PHILIPPINE army surgeons report success in purifying foul water by means of ultra-violet rays generated by means of a dynamo and a small gasoline engine, so as to furnish each man of a regiment with a quart of pure water daily. Not only the parasites but the bacteria are destroyed by the rays. The method of purification by violet rays is also in practical operation in France.

SUPERSTITION VERSUS COMMON SENSE

It is stated that an old negress in Indianapolis was discovered to have leprosy, and that not only has she been rigidly quarantined but all her family and all others with whom she is known to have come in contact. We would refuse to believe it if we did not know from observation that no amount of learning seems to make men proof against elemental superstitions. Leprophobia is a very common and very infectious malady, much more infectious than leprosy.

NEW TREATMENT FOR RABIES

At a meeting of the central committee of the Association of the Pasteur Institute of Southern India, held at Madras on Thursday, the Hon. Surgeon-General W. S. Bannerman, I. M. S., made an announcement regarding the new treatment for rabies now being carried on at Coonoor as well as at other Pasteur Institutes in India. It is a modification of the method devised by Dr. Högys, Director of the Pasteur Institute, Budapest, which was introduced into Indian Institutes some years ago. Dr. Högys used the fresh brain of a medulla substance made into an emulsion with a sterilised salt solution. The new treatment uses the same emulsion, but is acted on by carbolic acid and kept at blood-heat for 24 hours. This emulsion is inert and has the advantage that it can be kept for some time without deterioration or danger of contamination. It also holds out the hope that in future it may be found possible to send out this carbolicised virus to selected centres where patients bitten by mad dogs can be treated.

CREMATION IN BERLIN

IN preparing for the administration of the new law permitting the disposal of the dead by cremation, it has been ordered that before the cremation of a body a most thorough examination must be made by autopsy, as soon as possible after death, to determine the presence of any evidence of crime in connection with the death. The physician's certificate must be very explicit as to the cause of death, and the family of the deceased must be closely interrogated regarding the course of the disease.

A CHILD SHALL LEAD US

A VERY little boy with a very big toothache surprised his mother by beginning to whistle a patriotic air, walking up and down, head thrown back, his lips emitting what were intended to be musical sounds.

"Why, dear," she asked, "has the toothache stopped?"

He shook his head, while the tears of pain rushed to his eyes. "No, Mother, but it doesn't hurt so hard when I whistle."

"But suppose the pain is so bad that you just can't, dear?"

"Well," was the manly reply, "I can keep on puckering anyway!"

Here was as true philosophy as was ever penned by the wisest philosophers!

Two Excellent Cook Books

Both excellent, up-to-date works giving practical recipes for the preparation of vegetarian dishes both tasty and appetizing.

Vegetarian Cook Book

Revised and enlarged edition:

This book contains more than four hundred very carefully prepared recipes of healthful, hygienic dishes, suitable to every condition of life. There is also a chapter on the Hygiene of cooking, explaining the various methods such as boiling, steaming, stewing, baking, braizing, and broiling.

The author has had a broad experience in restaurant work, and has given the results of his experiments and observation in this practical work. We believe the good, wholesome foods, hygienically prepared, will appeal to many who are suffering from the effects of bad foods and wrong conditions.

The classification of foods is so arranged, and the work so thoroughly indexed, that any recipe may be referred to instantly.

Cloth, Rs. 4.

Friend in the Kitchen

By Mrs. Anna L. Colcord. A practical cook book compiled for busy housewives by one who thoroughly understands healthful cooking. The book is vegetarian throughout. It consists of 400 tested recipes for the preparation of good, wholesome dishes, none of which includes meat of any kind. It gives the nutritive value of foods, rules for dyspeptics, best foods for infants, substitutes for meat, and in fact about everything needful to a person wishing to reform his dietary.

Cloth, Rs. 1-12.

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For sick or well, adult, child, or infant. Such is
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It is simply wheat so thoroughly cooked that it will almost melt in the mouth, and can be digested by the most delicate stomach.

It is the whole wheat, none of those nutrient portions next the outer shell of the kernal being eliminated as in the case of bread made from "white flour."

For the weak stomach there is nothing better, giving as it does, full nutrition while being of such a character as to be non-irritant and healing.

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