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THE NATIONAL HEALTH MAGAZINE JUNE

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The June number of the SIGNS OF The June number of the SIGNS OF THE TIMES magazine appears with a beautiful and appropriate cover illustrating the prophecy of Dan. 12:4. It contains a number of leading articles which will be of special interest to "Life and Health" readers. One of the special property cial ones is entitled -

"Many Shall Run To and Fro," by the editor, and in it is shown the providence of God in the great inventions of the past one hundred years or more, the extent and results of these to-day, and how all of this was but for a purpose —the giving of the gospel in this generation. An important article.

Others are -

"Millions for Minutes," by M. C. Wilcox, showing the intensity of the times and conditions in communication and transportation. The new New York Grand Central Terminal is one example. You will enjoy every word.

"Sane and Scientific Eating," by David Paulson, M. D. The human furnace, dietetic clinkers, heat- and energy-producing food, the backbone of a meal, fruits and vegetables the die-tetic storehouse for mineral salts, milk and eggs, natural meat substitute, and eating clink-ers, are some of the subheadings of this strong article.

"England and the Reformation," by E. E. Andross. The Breaking Day considered in the following steps: Britain's part, the reforming power, two parties developed, the cause of apostasy, and the fruits of apostasy.

"France and the Reformers," by Mrs. E. G.

"Aspects of Psychic Healing," by Prof. George W. Rine, is a valuable study of this subject, and shows the deceptive methods in contrast with the work of Christ.

"The Final Conflict," by F. M. Wilcox, showing the intensity that to-day marks the struggle between the forces of good and evil; the fulfilment of important prophecies: the marshaling of the forces; the delusive hope of peace; and the invincible God the tower of strength for the messengers of truth.

"The Promise of the Fathers," by William overt. An interesting study in Old Testament history.

There are also several pages of stirring current topics. The illustrations are unusually good. In all, it is an excellent number.

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This Issue

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R. FITZPATRICK'S call to "Come Out Into the Country" is not a play to the galleries. Mr. Fitzpatrick has for years been an enthusiastic follower of the country life. At this time, when there is such a strong tendency to turn from the farm to the city, from the natural to the artificial, from the healthy to the unhealthy, physically and morally, such a call as that by Mr. Fitzpatrick is needed.

Dr. Achard's previous articles have had reference to the care of the patient afflicted with tuberculosis. In this issue he takes up the topic which, if all realized its importance, would soon do away with the necessity of caring for tuber-

culous patients.

Dr. M. E. Olsen, an admirer of Dr. Wiley, has prepared a brief sketch of the work of this indefatigable food reformer, which may enable many readers of Life and Health to realize what it has cost to erect and maintain a pure-food standard.

Many parents think it matters not what care the infant's temporary teeth have, as they are certain to be lost within a few years. Dr. Converse gives in terse sentences the most important principles concerning the care of the infant's teeth.

Away from the medical centers, Dr. Paulding has demonstrated that one can without elaborate apparatus and fixtures give adequate and efficient rational treatment. His personal experience with "natural physical culture" will have a large and appreciative reading.

The July Issue

Dr. Achard explains why we should tell patients they have tuberculosis.

The editor, answering the query, "Where do we get our meat?" sets forth some unsavory facts, backed by government reports and reproductions from photographs.

The business woman is considering where and how she shall spend her vacation. Anne Guilbert Mahon has an an-

swer for her.

Mary Alden Carver has "A Message of Summer and Hygiene" for Life and Health readers.

Mr. Cornforth will consider, in the Department of Healthful Cookery, the berries and stone fruits.

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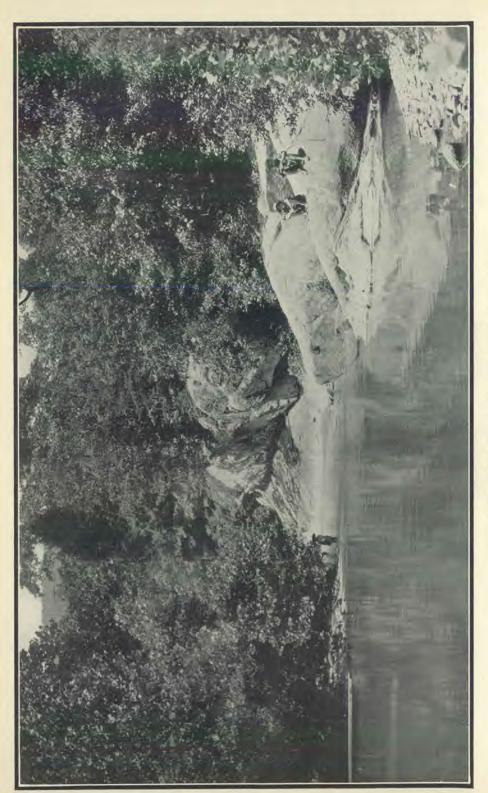
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THE BOYS KNOW WHAT BROOKS WERE MADE FOR

VOL, XXVI No 6

LIFE&HEALTH

THE NATIONAL HEALTH MAGAZINE

JUNE 1911

AIM: To assist in the physical, mental, and moral uplift of humanity through the individual and the home.

Published Monthly

GEORGE HENRY HEALD, M. D., EDITOR

Washington, D. C.

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OUR RESPECTS TO THE FLY

It is said that the fly serves no good purpose.

继

It is a mistake; he performs two very good services.

炮

He teaches the teachable to clean up and keep clean.

经

And he kills off the others.

000

That is, he assiduously works to cause a survival of the fittest!

40d

Let us give the —, that is, the fly, his due.

姬

While we give him credit for this much good, let us be among the teachable!

继

. Let us see that nothing around our premises breeds flies.

处

Let us shun the presence of flies in the house as we would shun poison!

媛

Let us screen effectually our doors and windows, so as to avoid stray flies.

98

And let us kill every fly that gets inside the sacred inclosure.

33

It is wiser to do this than it is to call the flies unkind names while they swarm around our dining-table. It takes a little more trouble, but it is more pleasant,—and it is safer.

路

Especially if there is a baby in the family the fly is dangerous!

總

For funerals are expensive, and then we would miss baby.

继

The fly is an undesirable guest.

遊

He contaminates every particle of food he crawls over.

器

He comes fresh from the privy, or the manure pile, or the decaying heap, where he takes his first feed.

端

And he takes his dessert from the food you are to eat.

必

And he does it without first wiping his feet.

900

If you could see with a microscope what he leaves, it would make you turn pale.

900

And you would make more energetic effort to keep him out of the house, and if possible you would stop his breeding.

앭

While you honor the fly for killing off the unfit, see to it that he does not get you into the wrong class!



O, gentle reader, this is not an advertisement of rural lots for sale or anything of that kind,

but just a hearty exhortation to the unblessed by one who has such a good time that he hates to see his fellows having

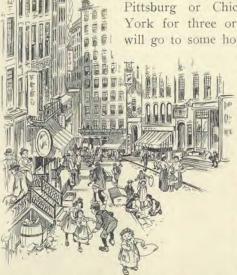
such a poky time. course, cities are essential; to have a city there must be a lot of people living thereabout, and there will always be poor wretches who do not know any better than to help form the piled-up communities that we have been pleased to call cities and towns. But this is addressed to you. That you are reading this in LIFE AND HEALTH is proof positive that you attach some importance to both life and health, and would like to enjoy the two to the fullest. I do not see how you can in a city. I can appreciate, however, why so many people, intelligent folk too, stick to the city. It is habit, heredity, the thrall of the customary. You imagine you must live near your business; that generally implies an apartment (which, next to hotel life, is a veritable curse), or a house in a row, with narrow, ill-lighted rooms; poor air, smoke-laden and

microby; a foul-smelling asphalted street; heat-reflecting walls; a canyon in which your pale-faced children have to play with all kinds of children.

Really, I look upon it as little short of criminal to attempt to bring up children in a city. They are exposed to everything that is harmful, and are deprived of well-nigh everything that is life-giving and healthful. With me this is no mere theory, but a lifelong practise. I despise the city and all it implies, and have always lived out of town, albeit I was not brought up on a farm, and have no special desire to be a farmer, though I realize that it is the very best, the ideal, most elevating and most necessary pursuit. My abhorrence of the city is so strong

that if I have business away from home, if I have to be in Pittsburg or Chicago or New York for three or four days, I will go to some hotel just out of

town, and be at all the inconvenien c e of transit back and forth over those interminable distances rather than put up with the noise and artificiality of the inner city even for so short a time.



A CANYON IN WHICH YOUR PALE-FACED CHILDREN HAVE TO PLAY

It is said that many preachers and exhorters do not wholly practise what they expound. Well, in this case, my invitation to come out into the country, or my exhortation, or whatever you wish to call it, is prompted solely by my having practised that very thing so long and found it so attractive, so satisfying, that really it would seem wrong not to get upon the housetops, so to speak, and proclaim its advantages and charms.

Really, love of the country is latent in nearly all of us. Effectively suppressed, it may be, in many, but nevertheless, the first holiday that comes along you city-dwellers will doubtless go to considerable trouble, and pack up a lot of baskets, and jam yourselves into crowded street-cars to get off for a breath of air in the country or in a city park.

What you strive for during that one day we happier mortals enjoy the year round. Some think and others say that we, my own family, are particularly fortunate and enjoy many unusual privileges. True, we have a beautiful place and much comfort, but if you can not have all those things, you can have the country and much of what that term implies on any income. It is simply a case of wanting it, insisting upon it, and being willing to make some sacrifices for it. I

have had to live on an income of one thousand dollars a year, and have not been much happier on an income of thirty thousand a year, and have been up and down the whole intervening gamut, but always in the country, or as near to it as I could possibly get. If I could not afford to drive back and forth, why, there was the street-car, the interurban lines, and if they were beyond my reach, then I walked, getting up earlier in the Some sacrifices and hardmorning. ships had to be endured, but the game was well worth the candle. The youngsters, eight of them, have been given such a foundation, such a store of good country health and training, that, live as they may, the reserve fund can not soon be exhausted. Ay, and it goes on even to the next generation. We have only reached the forty-seventh mile-stone in our lives (or, to be accurate, I am but half a mile ahead of my other and better half or rather seven-eighths), but have already been blessed with five grandchildren; and every one says they are really remarkable specimens of husky childhood.

Living as we do out of town, healthfully and naturally, implies simplicity in dress, simplicity in food, avoidance of ostentation, indeed, the simple life epit-



THE FIRST HOLIDAY THAT COMES ALONG YOU CITY-DWELLERS WILL DOUBTLESS GO

omized. Early to bed and early to rise, plenty of healthful exercise, plenty of work, no sitting around stuffing rich foods and complaining about how hot it is. The hotter the day. the more enjoyable is the good hard game of tennis, the long tramp, or the digging in the garden. You perspire and may be uncomfortable and parboiled and semiroasted, but think of the nice cold bath and fresh clothes - few of them, but just laundered - and the snooze in the hammock under

the big oak, undisturbed by din or bustle, with a bit of moonlight trickling through the leafy branches.

There is one funny thing about this mode of life that seems so out of balance to the city folk. Friends come out to see us, many and frequently. Few ever let an invitation slip by, and many do not even wait for that formality. They are welcome, and our rule is that every one shall do just as he wishes. But, as a joke, I invite a fellow, the first morning he is here,—a chap who probably crawls out of bed at half past eight, bolts a cup of coffee, and hustles to an office by nine,—to join me in a five-o'clock tramp till breakfast at eight. He comes rather reluctantly and sleepily,



SNOOZE IN THE HAMMOCK UNDER THE BIG OAK

but the next morning he is out and ready and anxious for it, and by the third day he is ready to drop permanently his tall collar and fine raiment and adopt the country mode of life with me, even to sleeping outdoors.

Perhaps I am undertaking a pretty large contract in making this in the form of an invitation to come into the country. After all, our home does have its limitations, but even if I qualify it by saying, "Go into the country," if it be but for a

day or a week, and you do go, the point I wish to carry will be so well emphasized, so much better than by pages I could write, that the good I desire will have been well started toward consummation. The normal man or woman, particularly the father or mother of children, who once gets a good sniff of country air, a taste of country life, is going back to it every chance he or she gets; and, sooner or later, the taste so acquired will develop into a positive craving, and, unlike most cravings, this is one that should be thoroughly satisfied; for I firmly believe that nothing so conduces to real life and health, the fullest and most complete enjoyment thereof, as does living in the country. Try it.



The Prevention of Tuberculosis

T is hardly necessary for me to say much in regard to the medicinal treatment of consumption. That is entirely a matter for your physician to regulate and to prescribe. I can not, however, warn you strongly enough against the quack advertisements which are still altogether too frequent in the daily papers and in a great many weekly and monthly magazines, and which are in almost all cases the most barefaced lies that you could possibly meet with. There are some preparations that are lauded as specifics for consumption. They are not specifics. In fact, although we have medicines which will be effective in a great number of consumptives, there is no actual strictly specific remedy for consumption to be found. There isn't any. There are so-called specific remedies, and they will, if properly used, be successful in a very large percentage of cases, let us say in five out of ten, sometimes even in seven out of ten favorable cases; but there is not a single remedy known that can be called a specific remedy for tuberculosis, or a remedy which is so directly and surely antagonistic to the tubercle bacillus as is, for instance, quinin to the plasmodium of malaria.

Therefore all these remedies that are advertised at so much per should be looked upon with suspicion, and should not be taken. They depend very largely on the opium which they contain, and are, therefore, extremely harmful; for every physician will tell you that opium should only be given to consumptives under a physician's direction. We have some medicines that are extremely useful, but I can hardly tell you these without going into the question more than you would care to hear. Moreover, the drug treatment is a matter for the physician to decide, and must necessarily vary in each individual case.

The question of the consumptive himself is not the only one that concerns us. The fact that tuberculosis is an infectious disease is not new to you. For a number of years it has been insisted upon and heralded far and near by physicians, boards of health, settlement workers, and sociologists, in the attempt to overcome the fatalistic do-nothing attitude which had prevailed for centuries, when it was believed that tuberculosis, or, better, consumption (that is, the destructive stage of tuberculosis), was principally transmitted by heredity; while many other factors, such as neglected colds, previous diseases, worry, deprivation, etc., were believed to furnish of themselves a further quota of patients.

The idea that tuberculosis is contagious is, however, by no means a modern one. As long ago as the fourth century before Christ, consumption was held to be communicable, and through the succeeding centuries to the most re-

cent times careful observers have again and again made the same assertion. In 1784 stringent regulations were made effective by the board of health of Naples, Italy, requiring the clothing and bedding of persons dead of consumption to be burned; and in the south of Europe the lowest beggar could not be induced to accept such garments; while in the more northerly countries the contagiousness of the disease was rather disputed. It was, as you well know, finally and definitely proved by Robert Koch, in 1882; and since then proper precautions have been elaborated to protect the well, and especially the susceptible, from contactinfection by the sick.

This is of particular importance, since the susceptible are apt to be found in the families of consumptives; for consumptive parents may (I do not say always do, but may) transmit an increased vulnerability, a susceptibility, to the action of the tubercle bacillus; and, again, it often happens that consumptives who are not sick enough to be bedfast and yet not well enough to work, are, or at least used to be, all too frequently entrusted with the care of the younger children of the family; and very small children are highly susceptible, or predisposed to acquire tuberculosis, and are practically non-resistant to the disease. Even in the case of older persons, fellow workmen, room and bed partners, husbands and wives, contact-infection has often enough occurred. Hence it was of the greatest importance that people should be clearly and positively impressed with the communicability of the disease.

Unfortunately, the pendulum swung, as it has a way of doing, very far the other way, and the earlier carelessness gave way to an excessive fear of contagion, so that consumptives, even quite early cases, were shunned, discharged from their working, ejected from room-

ing-places, ostracized, and treated as worse than lepers.

Both extremes are equally mistaken and wrong. While tuberculosis is communicable from person to person, especially if the patient deposits his expectorations promiscuously on floor and walls, it is so practically only by repeated and intimate contact, at least in grown persons. This is due to the fact that the tubercle bacilli can only act if they are introduced into the body tissues, the uninjured skin being practically impervious to them, and to the fact that they can not enter the body without meeting considerable resistance. Moreover, if they do succeed in invading the body, if only few in number, they are either destroyed or deposited and imprisoned in lymph glands. If, however, a healthy person inhales tubercle bacilli again and again, if that person is also weakened by taking care of a consumptive patient in addition to the usual duties, and possibly by worry caused by the disease, possibly of husband or of wife or of another dear one, such a person becomes a fit subject for the harmful action of inhaled tubercle bacilli, and will not only become infected but also tuberculous and probably consumptive. Hence the importance of protecting the well from the sick.

I want to give you just one instance of the infectious nature of tuberculosis. which at the same time illustrates the importance of environment for the establishment of tuberculous disease, and which is a classic, almost, in medical literature. The case occurred in the practise of Dr. Samuel Bernheim, a noted tuberculosis physician in Paris, and was reported by him. Through a strange combination of circumstances, three consumptive women patients of his each gave birth to twins. He prevailed upon each of the mothers to send one of her babies to the country, keeping the other one at home, in the care of a nurse. The

babies who were kept at home all died in the course of six months of tuberculosis, one of them incidentally infecting his nurse. The three who had been sent to the country did well, and showed no sign of tuberculosis at the age of two or three years.

In insisting upon the importance of protecting the well from the sick, I would not, as you may conclude from what I have already said, suggest that tuberculous patients should be isolated in the manner as are patients ill with scarlet fever, diphtheria, or smallpox. Such a proceeding would not only be impossible of execution, but it would be both unnecessary and cruel, provided the consumptive patients take proper precautions.

In the case of patients ill with pulmonary tuberculosis, the infectious material is discharged with the expectoration or sputum. If this is deposited promiscuously on floors or walls, the sputum will dry, and then of course the tubercle bacilli will be disturbed with the dust and inhaled by people who have to live in the room. In like manner, a patient who coughs all over the place instead of holding a rag or a paper napkin before his mouth, or a patient who sputters while talking, sprays fine droplets of sputum into the surrounding air, which float to a distance of as much as three feet, and then slowly sink to the floor, where they dry. As these droplets have been shown to contain tubercle bacilli, they may form a source of infection.

Again, if a patient holds his bare hands over his mouth when coughing, and then, as may occur easily in the case of a consumptive woman with small children, wipes the children's faces, or prepares their food without previously washing her hands, the tubercle bacilli may be deposited on the children's faces or on their food, and may infect the little ones. Such infection has undoubtedly been

produced in some children who show sores on mouth and nose. We are all familiar with the filthy spectacle of a woman spitting into her handkerchief in order to wipe a child's dirty face with the damp cloth. Given a consumptive woman and a young, feeble child, and you can easily imagine the result. Better a crust of good, honest garden dirt, than a clean (?) face acquired under such circumstances.

But the instances which I have given you are all examples which are not to be followed. Physicians and district nurses instruct consumptive patients carefully and persistently in the best manner of disposing of their spittle. The patients are taught how to avoid coughing, and how to cough when it can not be repressed. The strictest and most painstaking cleanliness is preached, and insisted upon, and if the lesson is learned and obeyed, the patients are in no manner a source of danger to their surroundings. The touch of a clean, conscientious consumptive can not give tuberculosis; and, although it is undoubtedly the consumptive with unmistakable evidences of advanced disease who represents the chief source of further bacillary distribution, this is only true for the careless patient, or for a patient so ill that he is not strong enough to keep himself clean. The latter needs a good nurse, who must take the precautions which he himself is incapable of.

It is undoubtedly true, not only for the isolated cases, but for the problem of tuberculosis from its sociologic aspect, that while careful patients are not a source of danger and need not be isolated, it is different if they scatter their bacillus-laden sputum indiscriminately, either because of the debility due to the advanced stage of their illness, or to ignorance, carelessness, or that form of viciousness which leads its possessor to have no regard for the welfare of his fellow men. In such cases it is proper for the state to intervene and to place the patient in such hospital or detention institution surroundings that the opportunities for increasing the danger to himself and to others shall be reduced to the lowest possible minimum.

The practical results possible of attainment in the effort to restrict tuberculosis must depend to a great extent upon the willing, intelligent co-operation of the patient. Public protection can never be secured in full through legislative enactment, or attempts toward municipal control, unless the individual from whom emanate the agents of infection strives conscientiously to perform his part. Faithful service in this respect, even in the absence of a suitable environment, may be obtained by instructive persuasive appeals, reenforced, when necessary, by drastic expedients for the ignorant or vicious.

Thus, while proper precautions are indispensable, they are also successful and efficient if conscientiously carried out, and there is never any need of, or excuse for, permitting the fight against tuberculosis to deteriorate into a fight against the tuberculous.

That the precautions, if followed, are efficient is proved by the fact that in sanatoria, both here and abroad, the air in the rooms and halls was found free from tubercle bacilli; and it is also supported by the well-known experience that physicians and nurses who come in frequent contact with consumptives only very rarely acquire the disease, and less frequently in sanatoria where the rules are strictly enforced than in private and in poor practise. The tuberculosis hos-

pitals and dispensaries are an educating factor of great potential value. These, in addition to taking care of the sick, form centers from which the lines of battle against the spread of the disease radiate. In addition to the medicinal and dietetic treatment, the instruction to the patient and his family by word of mouth of the physician, by judicious circulars, by the ministrations of visiting nurses, by the investigations of medical inspectors, may be very prolific of benefit, as is evidenced by the experience along these lines of New York, Cincinnati, Baltimore, Boston, and many other cities

Although all this appears very simple and easy, it is, nevertheless, in practise extremely difficult, owing to the inability of many families to give up a whole room to the exclusive use of a consumptive father or mother or child, and to give the patient all the attentions and advantages in the way of diet and other things which are necessary to enable him to fight his battle with the disease. The difficulty is enormously increased by the fact that tuberculosis is a disease which runs an extremely protracted course, so that in all too many cases the means of the patient and of his family are exhausted long before his disease is arrested, much less cured.

Another difficulty arises in the peculiar nature of the disease, which, as I have already shown, runs a course in which exacerbations and remissions alternate with longer or shorter periods of latency, during which the patient feels often quite well, and considers himself cured, only to succumb again to the next impetus that may cause his disease to make a further progress.









The Preservation of the Temporary Teeth



HY go to the trouble and expense of having the temporary teeth filled, when they will be replaced in two or

will be replaced in two or three years by the permanent teeth?"

Unfortunately, the above expresses the attitude a great many well-meaning parents take with reference to their children's temporary teeth. The result is the temporary tooth is allowed to decay until the pulp becomes exposed, and the tooth begins to ache. After days and nights of suffering on the part of the child, the pulp dies, and the tooth abscesses, causing a flow of pus in the little sufferer's mouth—a very unhealthy condition. As a final and deplorable result, the tooth is lost.

But the trouble does not end here. The temporary teeth preserve the contour of the jaws. Premature loss of the temporary teeth almost invariably causes the permanent teeth to come in unevenly, thus resulting in an unsightly mouth, and improper mastication of food.

Have the little one's teeth filled while the cavities are small, and avoid future suffering.

Save the Child's First Permanent Molars

The most important teeth in the mouth are the first permanent molars. They regulate the position of all the rest of the permanent teeth. Their extraction is a frequent cause of irregularities of the teeth.

There are four first permanent molars

— two above and two below. They

make their appearance about the sixth year, and are often called sixth-year molars. Coming, as they do, immediately behind the last temporary teeth, and before any of the temporary teeth have been lost, they are frequently mistaken by the child's parents for temporary teeth. It, therefore, comes about, in many cases, that these permanent teeth become deplorably decayed before the services of a dentist are sought.

If you value your child's health and appearance, do not neglect the first permanent molars.

The Effects of Mouth-Breathing on the Teeth

Is your child a mouth-breather? Parents should study the child's breathing carefully. If the child breathes through its mouth, it is an indication that there are obstructions, generally adenoids, in the nasal cavity. If this condition is not relieved by the removal of the adenoids, marked irregularity of the teeth will surely result.

As a result of non-use, the nasal bones and the upper jaw will not develop properly; the palate will be high and V-shaped; and the upper teeth will be rotated and displaced. The lower jaw, which will develop normally, will extend beyond the upper jaw in a bulldog fashion, and proper mastication will be impossible.

In addition to the above, the child's hearing and even its intellect is jeopardized by the adenoids. If your child is a mouth-breather, by all means have the nasal obstructions removed by a competent rhinologist.

Irregularities of the Teeth Caused by Thumb-Sucking

Thumb-sucking would seem to be a very innocent habit, yet if persisted in it may cause irregularities and malocclusion of the teeth. The alveolar process, or bony structure in which the teeth are embedded, is easily bent in childhood. The constant outward pressure of the thumb against the upper front teeth gradually forces them out, causing them to protrude.

There is a device on the market for preventing thumb-sucking, consisting of a polished aluminum ball attached to a sleeve. The child's hand is enclosed in the aluminum ball, and the sleeve is attached to the child's garment.

Preparing the Child's Mind for the Dentist

"Don't be afraid; the dentist won't hurt you."

Is that the way you talk to your child before taking it to the dentist? If it is, you are making a mistake. The dentist is sometimes forced to hurt his little patient, in spite of the greatest care. If you deceive the child by telling him it will not hurt, he will lose confidence in both you and the dentist; and it will be very difficult to get him into the dental chair a second time.

Seek, rather, to stimulate the little one's manhood or womanhood. Explain why the work is necessary, and why it will hurt; then dwell on the bravery of bearing pain without flinching. A child will generally respond when its pride is appealed to.

ILT H, on the
INGERS, or in the
OOD, or carried by
LIES, may cause typhoid
EVER. Do not
ORGET it!



DR. HARVEY W. WILEY

HONESTY IN FOODS

By M. Ellsworth Olsen, Ph. D.

F it be true that "an honest man is the noblest work of God," then the man who has not only kept himself incorruptibly honest and poor in the face of innumerable temptations to profit by his office, but has done more than any other three men to compel the food manufacturers of the United States to produce honest goods and put honest labels on them, is not unworthy of our closer acquaintance. To say this of Dr. H. W. Wiley, head of the United States Bureau of Chemistry, is but to assert what is already obvious to Americans.

Dr. Wiley has been head of the Bureau of Chemistry for more than a quarter of a century; but like most men of solid achievement, he worked under cover for years. It was his experiments with food preservatives upon living human subjects that first brought him into the limelight, where he has since remained, through no conscious effort on his part, but merely by reason of the force, pluck, and goodnatured persistency with which he has fought, at times almost single-handed,

the huge army of food-adulterators.

That "poison-squad" of his seized on the public imagination. Here was a man who had ideas, and knew how to make them take tangible form; a man whose expert knowledge of chemistry was not for sale; a man who believed in pure food, and was willing to put up a persistent, hard-handed fight for it, both giving and receiving hard blows. The people were willing, as far as they understood him, to back such a man.

Dr. Wiley's career is in many respects typically American. Of Scotch ancestry, he was born and reared on a farm in Indiana, and succeeded after a hard struggle in entering Hanover College at nineteen. His college days, too, were days of struggle. Once a week he walked to the farm to obtain his weekly supply of food, which he carried back to his lodgings on his back. During these years his diet consisted of potatoes, maize-meal porridge, bread, and homegrown molasses. His room cost him fifty cents a week. The winters were cold, but he could not afford the luxury of an

overcoat. Nevertheless, he stood at the head of his class in studies and in sports, and at graduation was regarded as one of the best students of the Latin and Greek classics that had gone out from that college.

The next aim of young Wiley was a medical education, to get money for which he tutored, meanwhile also pursuing studies, which led up to his M. D., taken in 1871 at Butler College, Indiana. But the young man's thirst for knowledge was not satisfied. By frugal living and continuous hard work in tutoring, he was able shortly to go to Harvard University, where he specialized in chemistry and allied subjects, taking the degree of Bachelor of Science in 1873. He now accepted a call to the chair of chemistry at Butler College, which he left a year later to fill the same chair at Purdue University, Indiana. Still eager for knowledge, he was able by rigid economy to save sufficient to take a trip to Europe, where he further pursued his studies under such men as Helmholtz, Hoffman, and Virchow, at the same time doing special work under the direction of the head of the Berlin board of health.

It was during his stay in Berlin that Dr. Wiley made the choice of his lifework. He there came to the conclusion that food adulteration was a great and growing evil of our modern civilization, and that he would rather fight this evil than do anything else. His first piece of work was an investigation of the molasses sold in the State of Indiana, done at the instance of the State board of health, who made him a grant for the purpose of \$50. Later he undertook an investigation on a larger scale of the glucose and sorghum industries, as a result of which he was called to Washington to serve as head of what was then the Division, but is now the Bureau, of Chemistry. His work there has been of the solid, scientific kind, which discerning men the world over have delighted to acknowledge.

Nor have the people been wanting in appreciation. The Pure Food and Drugs Act, forced through Congress in 1906, may be said to represent a personal triumph for Dr. Wiley, inasmuch as it was chiefly his persistent, popular agitation of the matter, backed up by his laboratory researches, that made such legislation possible.

Dr. Wiley's convictions on the food question are clear-cut and simple. As he summed up the matter before the Pure Food Congress at St. Louis: "The principle which seems to come out of my investigations is this one,—add nothing to foods that you can not demonstrate to be helpful. The old cry of 'add anything which is not harmful' must be held false doctrine."

On this platform the man stands, and with him he has practically the entire medical fraternity, a large number of the best manufacturing firms, and a rapidly increasing number of the rank and file of the people. It is a case of reversing the old saying, "Caveat emptor" (Let the purchaser beware); the new doctrine advocated by Dr. Wiley amounts to "Caveat venditor" (Let the seller beware). In other words, he would have food manufacturers "provide things honest in the sight of all men," the products pure, the labels truthful, and no short weights.

The conditions that obtained in America when Dr. Wiley began his work would be hardly believable were there not multitudes to testify to the facts. In his own words: "There was universal misbranding, universal exaggeration of qualities, and universal adulteration. Honest manufacturers were forced, by fear of bankruptcy, to follow the example set by the dishonest ones. Strawberry jam, for instance, was made of glucose, with artificial coloring, ethereal salt for flavoring,

and a few seeds of hay to imitate the berry seeds. What was true of foods was also true of beverages and drugs. And the misstatements on the labels concerned not only the contents, but also the place of manufacture and the identity of the manufacturer. . . . At the same time every conceivable kind of chemical was added as a preservative."

To-day, after a strenuous campaign covering many years, and which is still going on, it can at least be said that lying labels and the secret use of harmful preservatives are the exception instead of the rule, while many large firms, not only in deference to the law, but thoroughly persuaded by the sound scientific reasons adduced by Dr. Wiley, have entirely discarded the use of preservatives, and are relying solely upon thorough sterilization, as a result of which they are turning out goods of a decidedly better quality.

Dr. Wiley's general attitude is kindly and conciliatory. Firm and uncompromising in his opposition to all tricks of adulteration, he is most considerate toward manufacturers, and will put himself to no end of trouble to help them in their efforts to adopt better methods of producing their goods. He counts among his warmest friends scores of manufacturers to whom he has rendered such aid, and he is never happier than when thus employing his profound knowledge of chemistry in the interests of pure food products.

As a platform speaker, he is much in demand. His style is a happy combination of clear-cut, simple exposition clinched by convincing argument. He has a fine command of vigorous Anglo-Saxon, is happy in the use of homely illustrations, and can tell a story to perfection. His predominating quality as a speaker is probably moral earnestness, relieved, however, by a rare gift of humor, and backed up always by a solid

phalanx of facts. Using the simplest language, wholly free from technical terms, and avoiding all display of learning, he yet all unconsciously gives his audience the impression that they are listening to a man who knows his subject with rare thoroughness, has bounded it east, west, north, and south, has weighed all possible objections, and has in reserve arguments even stronger than those he is using.

He is built on a generous scale physically, stands some inches over six feet in his stockings, and is correspondingly broad-shouldered and deep-chested, his strongly molded head resting on a neck that betokens power and endurance. Hard-working almost to a fault, and with a German's devotion to his specialty, in which he is continually making fresh investigations, he has the educated Englishman's love of culture and of the higher things in life. He is passionately fond of music and poetry, and finds time amid his many activities to indulge his favorite tastes. He is extremely popular with his large staff, which has grown from the four assistants and a dishwasher, which the division consisted of when he was first put in charge, to number at the present time not far short of four hundred, including some two hundred expert chemists.

Needless to say, the scientific work done by this bureau is marked by that absolute thoroughness and honesty which gains the confidence of scientific men the world over. Dr. Wiley's decisions, it is true, have been overruled in some cases, but in the interests, it is to be feared, of commercialism rather than for the public good. If manufacturers are allowed to introduce into their products such preservatives as benzoate of soda, the law compels them to indicate the proportion on the label; and it is a source of merriment to Dr. Wiley to note in how very small, inconspicuous letters such facts

are stated, thus showing the manufacturers' instinctive feeling that the people do not want such things in their food.

Uniform success has attended the numerous prosecutions conducted under the Food Act, convictions following in all cases except a very few in which technicalities of the law intervened. The vigor and skill which Dr. Wiley has displayed in bringing both dealers and manufacturers to book for direct transgressions or evasions of the act, have contributed not a little to making it effective.

Perhaps it may be said in passing that he has hopes of living to see honesty enforced in other kinds of merchandise as well as in foods. He hopes to see the motto, "Let the seller beware," applied to merchants generally. Certainly it is not fair to require truthfulness only of food manufacturers, allowing others to do as they please.

Nevertheless, on the score of health, it must be allowed to be a matter of special importance to safeguard what the people put into their stomachs. It is, therefore, a source of much satisfaction that we have a man at the national head-quarters who is enthusiastically devoted to this one thing—to make it possible for ordinary people to assume that food products sold them over the counter are wholly free from harmful preservatives, and in general that they are exactly what they profess to be.

Dr. Wiley has lately joined the ranks of married men. May he have much joy of wedded life, and long live to be a terror to evil-doers in the food business and a friend of all who do well!



ENJOYING A MEAL AFTER A STRENUOUS DAY

THE WORK of GREAT PIONEER BY T. D. CROTHERS, M.D.

HE death of Dr. Chas. H. Shepard, at Brooklyn, N. Y., calls attention to one who in a very large sense opened up a new realm in preventive medicine. In 1862 he opened the first Turkish bath in America at Brooklyn, N. Y., and from that time to his death was a preacher and teacher of preventive means and measures. He taught that the bath by the means of hot air and steam is a remedial measure most valuable to health and longevity.

He was the first to preach the doctrine that poisons are generated in the system as a result of dietary errors and other neglects, and the importance of baths in effecting their elimination through the

skin. He taught that a vegetarian diet is the most efficient in the development of mind and body; that proper exercise, sleeping in the open air, and avoidance of all intoxicants and drugs, particularly tobacco, tea, and coffee, which irritate and stimulate the nervous sysrem, are the hope of the race.

He also urged that the bath is the greatest sanitary measure for public health, and that laws should be passed providing baths, and forcing people to use them, as preventives of disease, crime, and pauperism. He taught that the Roman baths gave a strength and vigor to that nation that is not now realized, and that much of the great eminence of Rome as a civilizer of the world, was due to the popularity and the frequent use of the bath. Dr. Shepard wrote papers showing that the public bath would do as much to break up the centers of disease and eliminate contagions as fresh air and better sleeping-rooms.

Of course many of these views were regarded as impractical when presented. but now they are coming into prominence, and the old Roman plan of providing

> public baths for the masses, making them popular, and encouraging their use in all communities, is being recognized as the highest sanitary measure for the elevation of the race. Dr. Shepard's was the first Turkish bath in this country. There were hydropathic appliances and water-cures before his day, but no one had organized a distinct bath as a health measure and presided over it personally, watching its bathers, until Dr. Shep-



DR. C. H. SHEPARD, BORN 1825, DIED 1910

ard came. During his long lifetime over twenty thousand persons passed through his baths, and were counseled, advised, and taught what they should do.

The highest sanitary teaching of diet, fresh air, proper exercise, and temperate living were the burden of constant preaching and teaching. Probably no man in this country has had such an opportunity, and used it with such quiet modesty, but with persistent and consistent enthusiasm, day after day. He was an object-lesson himself of the value of his teachings, and was able to work until the very last. In many ways he resembled Dr. Urquet, of London, who was also a great apostle of the baths and succeeded in giving them much prominence in Great Britain, but who, dying early, did not see the fruition of his work.

Dr. Shepard lived to see the Turkish bath established as a sanitary agent of great value in all hospitals and sanitariums. He lived to see the bath recognized by medical men in nearly every city of the country. The great doctrine of toxemia and elimination, violently opposed at the beginning of his career, has come to be one of the great working theories of advanced medicine. In nearly all the large cities of the country, the Turkish bath has come to be a necessity. and men and women realize that profuse sweating, massage, and rest are among the most valuable of medicinal measures. Several large prisons have introduced the bath, and find that the discipline is greatly improved and the mortality and sickness reduced. Several large hospitals for paupers have obtained similar results. These are but confirmations of the teachings of Dr. Shepard, who urged that in the slum districts of large cities, Turkish baths should be opened, and the submerged classes should be forced to use them, and in this way receive an objectlesson and an impetus toward the higher life.

The three great cardinal principles of restoration, reclamation, and evolution from the lower to the higher as taught by Dr. Shepard, were diet, fresh air, and baths. From this he urged that a permanent physical and moral salvation could be secured.

Teachings like this have inspired a new range of thought, have opened hundreds of sanitariums for the improvement and care of the body, and have lengthened out life and diminished disease. These are the lines along which scientific medicine is now moving. Instead of giving drugs and by chemical means forcing the body toward health, the poisons are removed from the body, their intake and production in the body is diminished, and the body is given the highest efficiency for growth and development.

Dr. Shepard wrote many papers along these lines which had a marked influence, but his personal contact and counsel were probably the most powerful part of his work. It is well to stop in the hurry and bustle, and note the great power of pioneers of this class, who, though almost unknown, go through the world promulgating important truths, and sowing seeds that will spring up in great harvests by and by. The tumults, the shouting of the captains, and the roar of public opinion all die away and are forgotten, but the nameless teachers and preachers of the great gospel of the higher life and higher living, live on in their efforts to make the world better.

Every Turkish bath in America has received its impetus and inspiration from the work of Dr. Shepard. His name may not be known, but the doctrine of elimination has become a fixed conviction that every bath exemplifies. Sanitariums that teach the great problems of diet and instruct patients in the value of nature's powers and the methods of removing the evils from within the body, all uncon-

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A NATURAL DHYSICAL CULTURE C By E.L. DAULDING, M.D.

OST persons, after a few attempts, lose interest in physical culture unless there is something besides the mere desire to grow well that attracts them to the work. There is much to say against excessive muscular development, but if exercise is not carried too far, it gives added health and strength to the healthy, and may be used with gratifying results by those whose principal defect is loss of physical strength through long sickness.

Once I called to see a lady who had been ill for a long time with some lingering illness which had left her helpless. She was not able even to lift her arms from the bed. There was the merest trace of muscle in her whole body. Her tongue possessed the only set of muscles that had regained power by natural physical culture.

She asked: "Doctor, what can I take to give me health and strength? My other doctor has given me everything he can think of, and has failed and given me up. He gave me iron, arsenic, strychnin, bitter tonics, digestives, alterants, cholagogues, aperients, etc. Do you know of anything else?"

She was told that her doctor had left out the one thing she needed, and I could supply that. I called in her husband and showed him some of the simplest massage treatments, simple, plain rubs and squeezes of the limbs and up and down the sides and back and around the abdomen, with the heels of the hands, in the direction the food takes in its passage through the colon.

"Now," said I, "give her these treatments twice a day for an hour. After you have given her a few treatments, have her try to lift up her hands and arms while she counts ten, then her lower limbs the same, then her head, then head and limbs. Then have her rest on her heels and shoulders, arching her body as high as she can. Then turn her over, if she can not turn herself, which she will do in a few days anyway, and rest on knees and elbows, then on hands and feet. When she can do these things, she will want to get up. When she tries to walk, support her. When she is able to do some of her housework, encourage her, but do not let her work hard and spoil the whole thing."

Well, you would be surprised to see the rapid improvement that woman made. In less than two weeks she was out of bed. In a month she was doing a good part of her own housework. In two months she was as strong and vigorous as formerly; for there is no physical culture so efficacious for a woman as housework, leaving out the sewing and mending and fancy work.

Now for another case, and this is personal experience. One year ago I met with an accident from a fall. I was standing upon a step-ladder under an archway doing some repair work on the house. The front legs of the ladder crawled under and let me down with a crash. I was picked up unconscious, with blood streaming from nose, mouth, and one ear. A pool of blood was under my head.

I did not know much for two weeks. Then I found that everything in the room appeared to be double, one object appearing above the other. I had a perforation of the drum of the ear, and my memory was defective. I had forgotten the names of my best friends, also the names of plants, medicines, and the like, though long-forgotten memories came back to me. Worst of all, my back was broken, not the vertebral column, but the junction of the sacrum with the ilium was broken and loosened up. I could not turn over.

For five weeks I lay helpless, except that I could use my arms a little. I tried to read, but my double vision prevented; by shutting one eye I could read pretty well for a little while. Finally my back ceased to ache. The clot formed by the fracture of the skull from the frontal bone back through to the temporal was nearly absorbed, and my vision was growing single again. I wanted to get up, but had no power. So I went through all the motions I had taught the patient above described. I held out my arms and rubbed them, then drew up my knees, and rubbed my legs and thighs. I raised myself on my head and heels. I was soon able to turn over. Then I had my wife fix a chair for me, and I got out of bed. I could sit up for only an hour,

next day I sat up longer. The next I walked out into the dining-room to dinner, but with help. The next day I did it alone. Then I walked out-of-doors.

In a week I cut off grass and weeds with a hoe, feebly at first, but life was coming back to me, and I was happy. The rent in my ear-drum healed. The corns on my feet went off because of lack of occupation from my long stay in bed. My rheumatism was gone. Rest and restricted diet had restored my stomach till it is as good as that of a boy. I gained fifteen pounds over my normal weight, yet I can work harder and do better work than I ever did.

The exercises I took every day during my convalescence were simple and natural, and I was careful not to overwork. When I overworked I went back. If I did nothing, I made no progress. Work among the flowers of my garden, caring for my horse, doing the chores around the house and wood-house, and walking down town after the mail and provisions, soon restored me to a healthier and stronger condition than I have known for twenty years. It has been a true physical culture.



THE WORK OF A GREAT PIONEER

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sciously go back to that first bath-house established in 1862 on Columbia Heights, Brooklyn, N. Y. For years a modest sign and a plain structure were the only outward evidences of the great movement to make the bath a prominent factor in civilization. Even to-day there is little more than the name of Dr. Shepard

on the same building, although enlarged, to indicate the center from which has sprung the ever-growing influence.

Dr. Shepard, who died at eighty-five years of age, leaving a large family, was probably not thoroughly conscious of the magnitude of the work he had built up and its rapidly increasing influence.



FRUITS

George E. Cornforth

RUITS are the queens among foods. "The esthetic qualities predominate in fruit rather than the strictly nutritive, and we eat them more for the sake of their sweetness and flavor than for the actual nourishment which they contain." Fruits are very attractive to the eye as well as to the taste. We are naturally drawn to them; we love them. This is especially true of children. Everything about them is attractive and uplifting - the cultivation of them, the harvesting of them, the handling of them, the eating of them. What a contrast between this and the preparation and display of meat as food! Walk through a meat market where meats are displayed in some stalls and fruits in others, and notice the contrast in your feelings as you look at the dead carcasses and then at the beautiful fruits. More than this - the free use of fruits in the diet takes away unnatural cravings, takes away the appetite for tobacco, liquor, condiments, tea, coffee, and even meat.

General Composition of Fresh Fruit

Water75.0	to	90.0	per	cent	
Proteid5	to	1.5	per	cent	
Fat 5	to	1.5	per	cent	
Carbohydrates. 6.0	to	20.0	per	cent	
Cellulose	4.0	2.5	per	cent	
Mineral matter		- 5	per	cent	

While the amount of nutritive material contained in fruits is small, their cleansing and disinfecting properties put them at the head of the list of wholesome foods. No patent medicine can compare with them as blood purifiers. Their nu-

tritive constituents are almost wholly carbohydrates, and these carbohydrates are in the form of fruit-sugar and grapesugar, which are predigested foods, all ready for use in the system. Fruit juice, such as a glass of orange juice, for instance, quickly affords relief, refreshment, and strength to one who is fatigued, because its true nourishment is quickly taken up by the system. But the cup of tea, so often taken instead, affords no real strength, but by its stimulating properties it deceives the user into believing he is stronger, and leads him to draw still further on his vital energies. Sad to say, instead of taking fruit juices in their fresh, natural, nutritive state, people allow them to ferment, and after their sugar, which is true food, is turned into alcohol, a poison, and their nutritive value destroyed, people are deceived into believing that they are better and stronger foods than they are as nature gives them to us.

Fruits aid digestion by reason of the stimulating properties of their acids and sweets, also by reason of their flavors. A food which is appetizing, which we enjoy, is more readily digested than one which is not appetizing. A food which has very little flavor does not arouse the stomach to action as does a food of marked flavor. Some fruits, like the pineapple, contain a digestive principle somewhat similar to pepsin, which makes them still greater aids to digestion.

Fruits consist essentially of: (1) The

cellulose framework, which contains the juice, and (2) the juice, which is water holding in solution fruit-sugar and acids. The acids are either free or in combination with minerals in the form of salts. The acids of fruits are: Malic, in apples, pears, and peaches; citric, in lemons, limes, and oranges; tartaric, in grapes, and pectic, which is the jelly-producing substance. Rhubarb, which is really a vegetable, contains oxalic acid. The acids of fruits are digestible, being used in the system as sugars are used, and when burned in the body, help to render the blood more alkaline, the value of which change has been discussed in a previous lesson. "In some diseases, such as scurvy, this property is turned to therapeutic account."

While fruit juices are very readily taken up by the system, the digestibility of fruits themselves depends upon the nature of the cellulose or framework, those fruits whose framework is most delicate and most easily broken up being most digestible. Unripe fruit differs from ripe fruit in containing raw starch, which turns to sugar in the ripening process. This raw starch, being indigestible in the stomach, renders unripe fruit unwholesome. Unripe fruits contain more cellulose, which makes them less digestible, and a larger proportion of acids, which, being irritating, frequently cause diarrhea and colic.

The idea that the free use of fruit, especially in summer, may cause bowel trouble or other digestive disturbance, probably has arisen from the fact that such troubles have resulted from the use of unripe, partially decayed, stale, or overripe fruit. The use of fresh, ripe fruit, in proper quantities, properly masticated, and at proper times, not as a dainty after a full meal, nor between meals, nor late at night, nor in combination with other food with which it does not agree, such as vegetables, can be only

beneficial. But fruit is no exception to the rule that an excess of any food may prove injurious.

As to the question whether fruit should be eaten at the beginning or the end of the meal, the writer's experience is that it is better to eat it at the end of the meal. I find the best way to begin a meal is to chew some hard, dry food, such as zwieback or crackers. This excites the flow of the saliva. The saliva when carried into the stomach stimulates the stomach to secrete gastric juice, and the stomach is then ready to digest proteid foods, which may come next. Then the fruits which require the shortest time for digestion may be eaten last. Starch foods are acted upon by the saliva, and their digestion in the stomach continues only as long as the stomach contents remain alkaline, as the saliva acts only in an alkaline medium. Fruit eaten first counteracts the action of the saliva upon the starch and interferes with its digestion.

All fruits to be eaten raw should be thoroughly cleansed before serving. As a rule, fruit, when perfectly ripe, is of greater dietetic value eaten raw than cooked. Unripe fruit requires cooking. The utensils used for cooking fruit should be graniteware or aluminum, because fruit acids act upon other metals. Fruit should be prepared just before cooking to preserve its flavor and prevent discoloration. It should be cooked in as small a quantity of water as will properly cook Sugar, when boiled with an acid, turns to glucose, which is only about one third as sweet as sugar; therefore it is a matter of economy to add sugar to stewed fruit after the fruit is cooked. and the sauce will be much more wholesome if only sufficient sugar is added to make it palatable, not enough to make it very sweet. It is well to cultivate a taste for fresh fruits and sauces in which there is little sugar, instead of the preserves so commonly eaten. Fruits should

be stewed or simmered gently, to preserve their shape, appearance, and flavor. Such strong flavors as cinnamon, clove, nutmeg, and other spices cover up the natural flavors of fruits, which the cook's art should preserve as perfect as possible. One fruit, however, may be flavored with another, or with the perfume of flowers, or with nuts. Thus, apple may be flavored with lemon, pineapple, grape, quince, rose, citron, almond, walnut, coconut.

No attempt will be made in these lessons to consider all of the infinite varieties of fruit, but only those which are most common in this latitude. Other recipes for the use of fruits in combination with other foods will be given when we come to salads and desserts.

Fruits may be thus classified: Fruits of the apple family, as the apple, quince, and pear; stone fruits, as the peach, plum, olive, and date; the orange group, as the lemon, citron, and grapefruit; the true berries, as the grape, currant, and blueberry; fruits which are called berries but which are not true berries, as the strawberry, raspberry, and blackberry; the fig group; and the gourd group, including melons and cantaloups.

Inasmuch as this article appears in June, we will first consider the fruits which are in season in June; namely, strawberries, raspberries, and blackberries.

The Strawberry

FOOD VALUE PER OUNCE IN CALORIES
PRO. FAT CAR. TOTAL
1.2 1.6 8.5 11.3

The botanical name of this fruit, fragaria, from fragrans, is given it on account of its peculiar, agreeable fragrance. The common name of the strawberry is said to have been given on account of straw having been laid to prevent the fruit from getting soiled in wet weather. Two species are native to the United States, the wood strawberry and the wild strawberry, and from these and foreign species the cultivated varieties have been derived. The fruit is wholesome and is regarded as one of the choicest of our native American fruits. We sometimes hear the cure of rheumatism attributed to the use of this fruit.

The strawberry lends itself to the making of a large variety of simple, delicious, and dainty desserts and salads.

To Prepare Strawberries for Serving

Put the berries, a few at a time, into cold water, wash them carefully till entirely clean and free from sand, then hull them. They should be served very soon after they are prepared.

Like all other fruits, if one is to reap the full benefit from eating them they should be eaten without cream and with little or no sugar. (We enjoy picking strawberries and eating them without sugar. Why should we insist upon having sugar with them at the table?) But as a delicacy strawberries and cream are so much enjoyed by most people that the term has come to be a synonym for anything supremely nice. When strawberries are served with cream, each person should add the cream to his own berries, because the cream would curdle if allowed to stand on the fruit, making an unsightly dish, and the flavor of the fruit would be impaired.

Large, selected strawberries may be served on the stem. They are then picked up by the stem with the fingers, dipped into the sugar, which may be placed on the side of the dish, and eaten from the stem.

The flavor of pineapple blends well with that of strawberries. A dish of strawberries and diced pineapple together is very appetizing.

Strawberry Foam

3 egg whites Few grains salt

½ tablespoonful lemon juice

d cup sugar

1 cup strawberries cut into fourths

Add the salt to the whites, beat till foamy, add the lemon juice, beat till stiff, add the sugar gradually, continuing to beat, and when very stiff fold in the berries. Serve in sherbet glasses with a large berry on the stem on top.

Strawberry Float

I cup strawberries d cup sugar g egg whites

Wash, hull, and sweeten the berries to taste, and set them into the refrigerator to get cold. Rub them through a colander. Beat the egg whites stiff, add the berries and sugar, and beat together till stiff enough to hold its shape. Serve plain or with cream.

Strawberry Whip

3 egg whites \$\frac{1}{2}\$ cup sugar 1 pint strawberries Few grains salt

Rub the berries through a colander. Add the sugar. Put the whites into a mixing bowl. Put the berries and sugar in with the unbeaten whites. (Do not think there is a mistake in this recipe and beat the whites before adding the berries to them.) Beat all together till very stiff, which will require from twenty to thirty minutes. When done it should be stiff enough to hold its shape.

When properly beaten, this recipe will make from one and one half to two quarts; for the whipping makes it very light. Serve cold with small cookies or lady's-fingers. Custard sauce may be served with it.

Strawberry Whip, No. 2

I pt. sweetened, stewed, or canned strawberries

Corn-starch

2 egg whites

Drain the juice from the fruit. Measure the juice, heat to boiling, and thicken with corn-starch in proportion of one round table-spoonful of corn-starch to one cup of juice, stirring the corn-starch smooth with a little of the juice saved out for that purpose. Allow it to cool while beating the whites. Add the strawberry mixture to the beaten whites and beat till very light and stiff.

Strawberry Shortcake

Make a dough, following the recipe given in this series of lessons for plain buns, potato buns, or buns with egg in them. When ready to mold, roll it into a sheet three-fourths inch thick. Allow it to rise, then bake it. This, of course, being yeast bread, should not be used till the day after it is baked. Cut the sheet into pieces of the right size to serve, split them once or twice, then put crushed and sweetened strawberries between and on top of the cake. Serve with plain cream or whipped cream. Instead of baking in a sheet it may be molded and baked in bun form, and the buns split and used as shortcake.

Strawberry Cream Cake

Bake sponge cake, a recipe for which has been given in these lessons, in layers. Use between and on top of the layers the following—

Filling

1 cup crushed strawberries Sugar to taste

½ cup heavy cream

Whip the cream and fold it into the sweetened crushed berries.



Canned berries may be used for this, in which case the juice is drained from the berries and thickened with one table-spoonful of corn-starch to the cup of juice, the berries are added to the juice, and the cream is whipped and added to them.

A Salad

I cup strawberries cut into halves
I cup pineapple cut into 4-inch dice
4 cup pecan meats sliced
Juice of 4 lemon
Maple sugar grated

Put the fruit and nuts in layers in a glass dish, sprinkling each layer with the maple sugar, then pour the lemon juice over the top. Shredded cocoanut may be substituted for the pecans.

The Raspberry

FOOD VALUE PER OUNCE IN CALORIES

Red —			
PRO.	FAT	CAR.	TOTAL
1.2		14.6	15.8
Black —			
2.0	2.6	14.6	19.2

The raspberry receives its name from its rough, prickly stem. The berry has a particularly rich aroma, and has been prized for making jellies, jams, wine, vinegar, and brandy. The fruit is sometimes given as an astringent, for which it is valuable.

Strawberry Cream With Nuts

r pt. heavy cream ½ cup strawberry juice Juice ½ lemon ¾ cup sugar

Mix the ingredients and beat till stiff. Serve in sherbet glasses. Decorate the top with any kind of nuts.

To Prepare Raspberries for Serving

They should be carefully looked over and examined so as to remove all insects, then washed and drained. They may be served with or without sugar and cream.

Raspberry Whip, Raspberry Shortcake, and Raspberry Cream

Substitute raspberries in the recipes for strawberry whip, strawberry shortcake, and strawberry cream.

The Blackberry

FOOD VALUE PER OUNCE IN CALORIES

PRO. FAT CAR, TOTAL

1.5 2.6 12.7 16.8

The blackberry is closely allied to the raspberry. This fruit also and its juice are given as astringents. It is prepared and served like the raspberry.



STRAWBERRIES AND CREAM



JAVA

J. W. Hofstra



HORTLY after the first property at Soember Wekas was bought, Brother and Sister

Thorpe, both nurses, arrived from Australia and commenced caring for the sick and afflicted. At first the natives kept aloof from the place, and only gradually learned that this white man and woman had come to do them good; that the medicine they used was superior to their own After the confidence in concoctions. our workers increased, some very remarkable cures were effected by the simplest means. The Lord was showing his hand in behalf of the work. These cures brought other patients, and the influence of this work extended to quite a large circle. Often the people come to the mission from a distance of over twenty miles. If anywhere the medical missionaries should be used as an entering wedge to the message, it should be done in Java among this Mohammedan population. It has been the foundation of our prospects among the natives at Soember Wekas.

In the early part of the month of February of last year Sister Tunheim came here from Pangoengsen to the aid of the work. After a few days' rest and recuperation, she started visiting the people in their own villages and homes, treating the sick with simple remedies. Her visits always bring a crowd, sometimes larger, sometimes smaller. After distributing medicine to those in need, she speaks a few gospel words, and sometimes has a season of prayer with

them before proceeding to another village. This, with the work done from the mission station, is producing an impression, and there seem to be indications of some desire to take their stand for Christ.

One of the buildings of the last-bought property has been converted into a school building. It was formerly used for a shed, the native gardener also living in part of it. We have built for him a new bamboo home. The building has undergone a little remodeling on the inside, and a cement floor has been put in, and it has been whitewashed preparatory for the school work. It will easily seat seventy or eighty pupils, and serves its present purpose well. At the time of this writing we have an enrolment of twenty-four students, of which twentyone are in regular attendance. Instruction is given only in the forenoon, as all the children of this age are expected to put in part of their time in the fields or herding cattle.

The following is our curriculum: Reading and writing in the Javanese language and characters; reading and writing in the Malay language with the Roman characters; arithmetic and geography in the common-school branches; also physical drills, Bible study, singing gospel hymns.

At this place we feel the need of the use and control of a piece of land large enough for colonizing purposes. It is the experience of every society working in Java that the people do not have suf-

ficient courage to make an attempt to bid farewell to Mohammedanism until a place of refuge is provided for them. No sooner is their desire to become a Christian manifested than the wheels of persecution are set in motion, often beforehand. This work is done in secret, nothing open, yet dreadful and fiendish. The government can not protect such individuals as long as they live among their fellow countrymen. This condition is a

direct outgrowth of Mohammedanism, which denies the right even to life itself of the individual who accepts Christ as God. For this reason we need land to colonize. Usually land can be secured for this purpose from the Holland government for a term of seventy-five years on very reasonable conditions. Some steps have been taken in this direction, which, we hope, will merit the approval of the home field.



A RIVER SCENE IN JAVA

NAREM SANITARIUM, DENMARK

Marie Jensen



EING asked by old friends to give a little account of my work, I will give a brief report

of my experiences before and since coming to Europe.

In 1887 I took my stand for present truth, and commenced canvassing in the city of Copenhagen. In 1889 I went to Battle Creek, Mich., U. S. A., to receive a missionary nurse's training. spending five years there, I went to Chicago to gain an experience in Christian Help work. In 1899 I came home to Denmark, and was asked to work in the Frederikshavn Sanitarium, where I remained until 1902. Being interested in city mission and rescue work, I started self-supporting work in the town of Randers. The Lord blessed my work there by manifesting his healing power in behalf of my patients, and also by adding souls to the truth. After spending about six years there, I was asked by Dr. C. Ottosen, who is also a member of the head committee of the Danish Temperance Society, to take the place as matron of a sanitarium conducted by this society (of about seventy thousand members) for the purpose of rescuing women from the slavery of intoxicating liquors.

I knew the Lord was guiding in this matter, and I accepted the call, relying on the Lord to lead on in this difficult work for which he seemed to have prepared me by former experiences. The Lord has not disappointed me. The work looked very difficult, especially as the general housework was expected to be done by the patients; but Dr. Ottosen and other members of the committee

stood faithfully by me, and even though the struggle was a severe one, I gained the victory. Praise the Lord!

We have large gardens, which produce plenty of fruit and vegetables, and now we use meat but twice a week for some of our patients; condiments are not used. This is the only home of this kind in our country where vegetables are used to any extent.¹

The same society owns and conducts a home for men, but not on our principles. One result of this is that although to this home also belong a nice garden and a large farm, their expenses are far above ours. They use about \$53 a year per individual more than we do, although they live in a part of the country where living expenses are not generally as high as they are here near the capital city.

This sanitarium accommodates about thirty-five patients. A great many of these patients have not money to pay expenses, so the work is of a philanthropic nature. To help pay expenses we rent some of our best rooms to well-to-do people during the vacation. In this way quite a number of people get acquainted with the principle of right living, and also come in contact with Bible truth. The work is of a preparatory nature, but even here the Lord has given me at least one soul, as a wealthy lady has accepted the truth and is now a member of the church.

And more's the pity; for experience has shown that on a vegetarian, and especially on a fruitarian diet, it is much easier to overcome the craving for alcohol.—En.



THE STUDY OF ALCOHOL

HE fortieth anniversary of the organization of the American Society for the Study of Alcohol and Other Narcotics, was held in the Hotel Belvedere, Baltimore, Md., April 19 and 20.

While there have been temperance societies and abstinence societies of earlier date, this society, beginning in 1870, was the first medical association in the world to take up the scientific study of alcohol and inebriety and to determine from laboratory and clinical research the phenomena of drink and drug neurosis.

The meeting was opened by Dr. L. D. Mason, the pioneer member of the society.

Dr. T. D. Crothers gave a brief account of the recent work of Dr. Winfield S. Hall, professor of physiology, Northwestern University, who has been examining the finer structure of cells by means of the ultra-microscope, and has found that even one per cent solution of alcohol produces profound changes in the cell structure.

Dr. Henry Beates, Jr., president of the medical examining board, Philadelphia, traced the relation between faulty home training and the weakened will power which falls an easy victim to alcohol or other habits. He urged as one most important preventive of alcoholism, that proper training of children in self-control be begun in the cradle.

G. Milton Linthicum, professor of physiology, Baltimore Medical College, suggested as necessary to an efficient prevention that inebriety be recognized as a disease having definite causes. He urges education of the people as to the causes, the use of proper dietetic measures, the avoidance of an excess of meats, the proper use of air, water, and exercise, the isolation of inebriates, and their care in special sanitariums. In such sanitariums in England at least one third of the cases are cured. This segregation is one of the most efficient means of controlling the evil and of preventing others from forming the habit. Legislation in order to be efficient must follow education, not precede it.

The paper by Dr. J. C. Walton, of the Richmond Sanitarium, showed that hydrotherapy, one of the most important agents we have for the relief of alcoholism, quickly aids in elimination and restores the circulation. In the steam chamber there is much more rapid recovery from drunkenness than in the dryair chamber. One under the influence of alcohol being partly dehydrated needs moist rather than dry treatment.

Dr. C. C. Hersman, professor of mental and nervous diseases, University of Pittsburg, showed that there are many obscure but significant and far-reaching changes which take place in the nervous system as a result of the continued use of moderate amounts of alcohol. Alcohol is far more injurious to muscular tissue when the muscles are fatigued.

B. C. Keister, M. D., superintendent Home Sanitarium, Roanoke, Va., referring to the very marked reduction in the amount of alcoholic drinks prescribed in hospitals and private practise — seventyfive per cent in twenty years — stated that this fact was lost on the public, which judges of the attitude of the physician by his convivial habits. While the physician has reformed as to his treatment of the patient, he has not always reformed as to his personal habits. Many professional shining lights have gone out as a result of carousals and banquets. He suggests that this society pass a resolution memorializing the American Medical Association and the various medical societies to exclude alcoholic drinks from their banquets, and add this splendid example in temperance to the magnificent work in preventive medicine.

Among the evil results of alcohol the paper mentioned one tenth of all deaths in the United States, as shown by the latest statistics, and seventy-eight per cent of all suicides, caused by the depressive effect of the alcohol and other toxins on the nervous system. It referred to the rapidly growing drink evil among the fair sex, not usually mentioned by writers. Two thirds of the sales of liquor in London are to women comparatively young. Society women frequent drinking places after theater, and sometimes continue their carousals until five o'clock in the morning. Society women in London drink more than men. We have similar conditions in America, but not to the same extent. The writer exhibited a "whisky book" such as is often carried by women, a hollow box shaped in imitation of a book, having a lid at one end for the insertion of a whisky flask. These "books," for sale in great variety at liquor stores, are purchased by women who must carry their "stimulant" along with them.

Dr. D. H. Kress's paper gave a wealth of statistics showing that there is an alarming decrease in the birth-rate in all civilized countries, and that this decrease is due largely to the inordinate use of alcohol, tobacco, tea, and coffee.

Dr. Alfred Gordon, professor of mental and nervous diseases, Jefferson Medical College, presented a statistical study of one hundred seventeen families, showing, after taking account of all contributory causes, that parental alcoholism is an important factor in the mental deficiency of children.

Dr. John D. Quackenbos spoke of the startling prevalence and increase in the use of narcotics, and their effects, especially upon the morals of girls, whom it unfits for wifehood and motherhood. Other effects from the increasing use of narcotics are: Increased mental sluggishness in the public schools, and increase in the mortality rate, in mental affections, degeneracy, and crime. The use of absinthe, which is increasing in this country, causes a temporary feeling of exaltation, followed by an increased criminal tendency. Tobacco causes symptoms which call for alcohol, and the use of tobacco explains fully seventy-five per cent of the alcoholism. The effect of the cigarette on the schoolboy is bad, including short breath, rapid heart, irritable throat, dimness of vision, loss of moral force, and general degeneracy. Nine States have prohibited the manufacture and sale of cigarettes, and eleven others are considering prohibiting laws. The use of cocain is becoming very common among newsboys and negroes, as well as those in higher life. The effects are most pernicious. The victim becomes a real madman, dead to all moral restraint. One hundred fifty thousand ounces of cocain are used annually in the United States.

Dr. Quackenbos explained how those addicted to drugs are cured by psychic methods.

Dr. G. H. Kirby, of Manhattan State Hospital, gave some interesting statistics gathered among the insane, showing that alcoholic insanity is much more prevalent among some nations than among others. For instance, it appears that among the Irish it is thirty-three times as prevalent as among the Jews.

Dr. Tom A. Williams, neurologist of Washington, asserted that back of drunkenness is a psychasthenic state with its ups and downs, seeking relief in various ways. The temporary removal of the craving for liquor is only one step in the cure. Following this there must be a reeducation of the patient and a careful attention to the general health, to diet, rest, and the like.

Dr. T. Alex MacNicholl, of New York City, reported a disquieting condition among the schoolchildren. There is a steady decrease in the ability of children to stand the strains of life. A comparison of temperate parents with drinking parents showed far more disease and death in the families of drinking parents. Now when we add to this parental indulgence drink on the part of the children themselves, we have a very serious problem.

Statistics show a steady increase, in the schools, of drinking habits, and this in spite of the law compelling the teaching in the schools, of the effects of alcohol and narcotics. But an investigation has revealed a gross neglect of such instruction on the part of the teachers, and in over one half of the Sunday-schools the Sunday-school lessons on temperance are not taught.

Dr. W. F. Waugh's paper had reference to the standards of medical schools. He frankly takes issue with the idea that we are being overrun with physicians and that the proper remedy is to "raise the standard of education." He reports a grave condition among medical students, where, on account of the severe examinations, the students find it necessary to use caffein and other drugs in

order to spur their brains on to greater action. Many of these men later resort to stronger stimulants, and finally drop out of professional life.

A number of papers considered the treatment of drug addiction by psychotherapy, by light, by hydrotherapy, etc. This session was characterized by members present as the most profitable meeting the society has held.

Wednesday evening was given over to a number of papers outlining the history of the work of the society. Two important resolutions were passed, one memorializing the American Medical Association and the various medical societies to eliminate alcoholic drinks from their banquets and gatherings. The other, having reference to the opium problem in China, is given herewith:—

Resolved, That we join in appeals of the British and Chinese parliaments and peoples, and the World Missionary Conference at Edinburgh, to the British government, for the immediate release of China from the British opium treaties.

Resolved, That we also petition the International Conference for the Suppression of the Opium Evil, which is to meet at The Hague on July 1, 1911, at the call of President Taft, to make an international law prohibiting the traffic in opium throughout the world, except guardedly for medicinal uses.

Resolved, That we authorize another petition in duplicate to the United States Senate and House of Representatives asking for the passage of pending bills designed to guard the sale of opium and cocain in the United States, in order that we may go to the International Conference with clean hands.

Resolved, That certified copies of these petitions be sent to President William H. Taft; to the Vice-President and Speaker of the House of Representatives; to His Excellency Lew Yuk Lin, the Chinese embassy, London; to the International Reform Bureau's Oriental secretary, Rev. E. W. Thwing, Hotel des Wagons, Peking, China; and to the press.



Two Congresses OR shall I say one congress of ladies and one of women, understanding by the former the descendants of distinguished forebears, and by the latter those who are distinguishing themselves by their attempt to uplift posterity through the children. Is not woman too sacred a word to apply to those who have no higher aim in life than to trace heredity and quarrel over offices?

Not unfrequently we have presented the contrast of these two organizations, which recently assembled in the national capital. The one is always characterized by an unseemly squabble, that reminds one of the nightly revels of felines; the other is characterized by aims which mean nothing less than the uplift of all humanity by helping every mother to give a right education to her child.

Whatever of ornament the distinguished daughters may be to the country, the distinguished mothers constitute one of the most potent factors for the regeneration of humanity.

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International Congress on Child Welfare National Congress of Mothers and Parent-Teachers' Association, there met in Washington, April 25 to May 2, the Second International Congress on Child Welfare, having representatives from various European fields, from Persia, and from China.

It would be impracticable in the space at our command to give any adequate notion of the scope of this great movement. As stated by Mrs. Frederic Schoff, the able president of the National Congress of Mothers, "Humanity has possibilities for good which we have not known how to develop."

It is believed that every child fails to reach the excellence and the efficiency that he might, had he been given the most appropriate education and the best environment.

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The National Congress of Mothers has worked to establish parents' associations in the schools, has attempted to encourage child study and promote child welfare, and has helped parents everywhere by providing instruction on all matters relating to child nurture.

It is hoped that eventually mothers' circles will be formed in connection with every grade in every school, and it is confidently expected that such an organization would without additional expense double the educational value of the school.

Among the departments of the congress are: Education, legislation, children's literature, child labor, child hygiene, books for mothers, juvenile court and probation, parent-teachers' associations, Christian standards of marriage.

Each of these departments, and of others which might be mentioned, has in view one object, to insure to the child his rights to the best environment and development and education possible.

More will be said concerning the congress in the July LIFE AND HEALTH.

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Creditable Civic Work

Pittsburg, Pa., has recently issued a pamphlet showing the work accomplished by the club in fifteen years.

Organized in 1895, this very-muchalive club has initiated: The playground movement in Pittsburg and Allegheny; the work of the Legal Aid Society of Pittsburg; free medical inspection in public schools. By municipal legislation, it has secured the municipal hospital, the first tuberculosis pavilion, and the Tree Commission of Pittsburg. It drafted and has been an important factor in securing the tenement-house laws governing Pennsylvania cities of the second class, antispitting ordinances, and the law providing for the Allegheny County Industrial Training School for Boys. It has organized the Associated Charities of Pittsburg, the Child Labor Association, and the juvenile court. It also owns and operates two public bath-houses.

But this is only a part of the work accomplished by the Civic Club, as detailed in the report.

Any one interested in civic work should secure a copy of this report, which can probably be obtained as long as the supply lasts, by addressing the treasurer, Mrs. William Thaw, Jr., 238 Fourth Ave., Pittsburg, Pa.

It is a notable fact that of the officers and directors of the club the majority are women.

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Her Influence EVEN a child of tender years may set in motion a wave of good that will roll down the years. Though Elizabeth McCormick died at the age of twelve, she had already displayed unusual traits of character.

She became interested in some people living in the town where the family summer home is located, and was not satisfied with the character of the house in which they lived. She thought about it a great deal, and wanted some houses built that would give more space for light and air, for gardens and flowers — for the things that give joy in life. This is

only one illustration of the interesting and unusual character of the child.

Her death was a crushing blow to her family; for she was an only daughter. With a vision and faith, and a spirit entirely worthy of the Christian religion, the father and mother created a memorial to this child. The income is to be used in philanthropic enterprises, and the trustees of the foundation are wisely fostering movements of a constructive nature and which promise large social significance.

We gave last month an announcement of the book, "Open-Air Crusaders," furnished by the trustees of the Elizabeth McCormick Memorial Fund.

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Pellagra in THE official teaching Italy in Italy regarding pellagra is that it is related to the use of corn as food, but recently investigations have been made to discover whether the disease may not be parasitic in its nature, and some Italians are quite certain that the disease is due to organism of some kind. An Italian physician, resident in New York, has presented a paper in the New York Medical Record of March 11 on "Pellagra as We See It in Italy." In this article he maintains that pellagra is much more frequent in this country than is usually suspected. A recent report states that three cases have been detected in New York State. This physician believes that many cases could be found in New York City provided the possibility were kept in mind.

Protect A SKILFULLY worded the Birds bill has been introduced into the New York Legislature permitting the destruction of plumage birds. The Audubon Societies urged all the friends of the birds to send in letters to the legislators asking them to defeat the measure. The Outlook, commenting, says:—

"The Outlook is fully in sympathy with the aims of the Audubon Societies, and it ventures, furthermore, to express the hope that its readers will try, not only to defeat the objectionable bill, but to discourage the use of birds' plumage for personal adornment. One of the oldest and most widely extended natural history societies in Russia is incorporated under the name 'Lovers of Nightingales.' If we had in the United States more 'Lovers of Egrets,' 'Lovers of Tern,' and "Lovers of Bright-Colored Birds,' and fewer 'Lovers of Hats Trimmed with the Plumage of Birds,' it would not be necessary to fight such measures as the Levy bill every year or two in our State legislatures."

Possibly some day when we as a nation have more refined tastes, we will rejoice more over the beauty of live birds singing in the branches than over the corpses of birds used to decorate hats.

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Fewer The Journal of the Drugs American Medical

Association, stating that the determination of the proper dose of medicine is often a difficult problem, quotes with approval the following from Manquat's "Principles of Therapeutics:"—

"We should like to note that it is not good practise to seek to secure complete functional correction by means of drugs. If through hygiene, the organism is placed under the conditions of optimum of function, a small dose often suffices to bring about restoration of the disturbed functions. It is often better to be content with improvement, and modestly live according to appropriate hygiene, rather than to seek the medicamental triumph of complete functional restoration, which will not last."

There is more of the quotation, but it is rather technical for a popular magazine. The *Journal* in comment says:—

"The principles stated are correct. The drug is to be regarded only as a staff to assist lightly over the difficult places, and not as a strong crutch to bear the whole burden. First throw away the pack and the other impedimenta [bad habits]; give freedom of action to all the natural forces; assist by the staff only as actually needed, and the steep will be surmounted."

It is true, as the Journal suggests, that

if there is danger of falling over the precipice, the most vigorous assistance must be supplied on the instant. The proper application of remedies is indeed "a matter of knowledge, experience, and the nicest discrimination."

A few years ago such a sentiment as this might have been considered extremely radical. Now it is heard from so many sides that it attracts little attention. The old-fashioned heroic drug medication now has few defenders; and many are finding to their surprise that they can get along as well or better with an amazingly small amount of drugs.

When the doctors become thoroughly weaned from the routine prescribing of drugs for every ailment, and carry on an active campaign showing the futility of drugs in most conditions, they will have gone a long way toward breaking up the patent-medicine abuse and its twin evil, drug-store counter prescribing.

Almost invariably is it a fact (possibly the "almost" is superfluous) that health is not to be found in a bottle. Yet that is where a large proportion of people, cultured as well as ignorant, look for it. It is a superstition that preventive medicine makes slow headway against.

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RECENT investigation The Druggist and the Doctor by an eminent pharmaceutical chemist, at the instance of a metropolitan newspaper, revealed startling evidences of substitution in the filling of physicians' prescriptions. Prescriptions were either compounded in a haphazard manner, or else there was a deliberate purpose to economize by the omission of expensive drugs. In one case a prescription for a solution of an expensive salt was filled by giving the patient plain tap water. Is it to be wondered at that physicians often prefer to dispense their own drugs? Certain it is that there are conscientious and honest pharmacists, but how is the physician to know but his patient will steer straight to some "bargain counter" pharmacist, where he can get his prescription of tap water, etc., for a few cents less than he could have the prescription honestly filled by the conscientious pharmacist?

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A Remedy for Alcoholism and more evident that prohibition is only a palliative. The real cure of the drink evil must be education of the young — not merely intellectual instruction, but the proper development of the entire being, physical, mental, and moral.

In commenting on Dr. Crothers's new book "Inebriety," the *Boston Medical* and Surgical Journal makes the following remarks, in its issue of March 23:—

"However much good medical treatment of inebriety may do for individuals, alcoholism as a disease of the community can never be eradicated until by education the human mind is brought to recognize the use of alcohol as one of the fallacies of life, a baneful custom of society, inherited as a legacy and accepted without criticism, as other fallacies are accepted, to so persist the incubus of the ages."

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Limitation of Degeneracy pointed by the governor of Massachusetts to investigate the causes of the increase of degeneracy have made some important recommendations. Whatever may be said to the contrary, and however men may rage about the "restriction of liberty," it can not be doubted that "like begets like." Feeble-mindedness, criminal tendency, and the like run in families, and are often accompanied by a disposition to breed

like rabbits. The commission was struck with the hereditary tendency of these degenerative traits, and recommended "extending the policy of custodial care of the feeble-minded, epileptic, and insane, especially of women of the child-bearing age, and prohibiting the marriage of mental defectives, confirmed drunkards, and habitual criminals, as that of idiots and the insane are now forbidden."

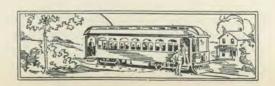
The commission does not favor the sterilization of male defectives and those of undesirable parentage, believing this would increase vice and spread venereal disease.

We believe that the state has a right and a duty to protect itself from an irresponsible increase of degenerates, and that it must do this either by segregation or by suitable operation.

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surgeon Feeble-Mindedness A PRISON and Fecundity makes a disconcerting statement in a Glasgow medical paper regarding the feeble-minded. It is, in fact, that the feeble-minded tend to have unusually large families. The average for normal families is four children: for families where the mother is feebleminded, the average is seven children. Considering the fact that feeble-mindedness is hereditary, and transmitted from parents to children, this fecundity is by no means reassuring. Dr. Sinclair gives this as the reason why the "unfit" are increasing in greater proportion than the "fit." And yet some will say that no obstacles should be placed in the way of the parentage of such persons, that it would take away their personal liberty!







CUPPENT COMMENT

USES AND ABUSES OF OLD AGE

LD age is rather an indefinite term. The deterioration of the human organism which usually results from old age is not always measured by the number of years a person has lived. Like many other machines, the human body may be prematurely worn out by abusive treatment. In the hands of a careful person who understands its delicate mechanism, a good watch will last an ordinary lifetime, but in the hands of a careless man who does not understand its complicated mechanism, the same watch would become old and worn out in less than half of that time. On the same principle, rough usage will make a man old at forty who under favorable treatment would be just as young at eighty. How long a normally sound organism will last under wise treatment has never yet been determined, but we do know that as the public mind becomes more enlightened concerning the laws of death, the average lifetime of man is notably lengthened. Of course, inherited conditions have much to do with longevity, but a strict and unvarying compliance with the laws of health and a prudent avoidance of accidents, are the most important factors in determining the limit of old age.

As old age approaches, the knowledge of diminishing physical power should be supplemented with the judgment to adjust the burdens of life to the waning capacity of the organism. An old man may have an elastic conscience, but he has not the elastic arteries or elastic muscles, and while the former will often withstand a most sudden and violent

strain, the latter will not. Herein lies a common peril of old age. A misstep or a fall snaps the neck of the femur, the fracture is beyond the reach of a reparative process, and the victim gradually succumbs to the wearing effect of pain and confinement. A banquet, liberal indulgence in wine, a funny speech, and a cerebral hemorrhage have suddenly closed the career of many an old man. A news item somewhat like this occasionally attracts our attention: Mr. B., seventy years old, attended a banquet given in honor of Mr. C. He ate heartily. A coroner's post-mortem showed that death was due to heart failure caused by acute indigestion.

Very few men die of old age. When a man arrives at the age of seventy-five or eighty years in a fairly good physical condition, and dies, it will be found in nearly every case his death was due to some avoidable cause. It is said that eternal vigilance is the price of liberty. It is equally true that eternal vigilance is the price of old age.

As the standard of intelligence advances, the laws that regulate the lives of men must be revised and broadened to meet the requirements of a higher intelligence, in order that each succeeding generation may get more out of life than its predecessor. The conservation of mental and physical forces as age advances is a problem that can only be solved by an early, careful, and constant application of those laws of health which maintain in proper balance the vital processes of waste and repair. As long as the reconstructive process keeps

up with the destructive process, the integrity of the organism is maintained; but when this balance is lost, rapid declension of the vital powers ensues.

When life is not prolonged by observation of the above laws, it is usually because the individual neglects to guard himself against exposure to diseases and accidents with which he is daily confronted. In cold and changeable seasons, it is well known, very many old people die, and pneumonia is the most frequent cause of death. A neglected cold ends in pneumonia, and pneumonia in the aged usually ends in death.

There is no single rule or remedy for prolonging human life, but to achieve this great purpose there must be brought into operation a conjunction of all the life-conserving forces that human wisdom can devise.— The Medical Review, September, 1910.

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Danger in Unwashed Fruit

UNWASHED fruit offers a danger that is too little appreciated even by many of our most intelligent and fastidious people. In cities like New York, where so much fruit is sold on the streets from open carts and stands, the evil is increased many fold. Apples, pears, peaches, grapes, berries, and other fruits that are eaten uncooked are the chief offenders, and examinations that have been undertaken show a variety of germ life that would be astounding if the bacterial contamination liable to result from street dust was not already known. Flies are another great source of contamination.

It will be claimed by some that the organisms thus found on fruit are largely if not wholly harmless, and this is unquestionably true. But enough pathogenic bacteria have been repeatedly demonstrated on these common articles of food, particularly when exposed to flies, to make it certain that the presenting danger is very real.

Many city ordinances require that all fruits—and vegetables, too—be screened. This, if followed, reduces the evil somewhat, certainly in respect to flies, but little protection is afforded against dust. In spite of the utmost care, this is bound to accumulate, and with the inevitable contamination from handling, insures myriad colonies of bacteria on every piece of fruit.

All fruit, therefore, that is not cooked should be thoroughly washed. It is hard to impress children with the urgent necessity of this, and they are the ones most endangered. Realization of the constant tendency to cholera infantum, intestinal disorders, and the graver diseases, like typhoid fever, emphasizes the necessity of preaching and teaching every one, from the youngest toddler up, never to carry a bit of fruit to the mouth until it has been washed — and well washed.

This is only one small detail in the general movement to eliminate or at least to reduce the possible causes of disease. To many who recall their carefree youth and remember that they came through unscathed, though they ate anything and everything in the way of fruit, with never a thought of washing it, the foregoing may seem trivial. But there is another picture of thousands and thousands of graves of little martyrs who did not come through unscathed. Every year acute intestinal affections claim an appalling toll of children and young adults. The cases that are directly attributable to unclean fruit may be few or many. That there are any is enough to show the danger, and once shown there can be no two opinions as to the necessity for its removal. - Editorial Comment, American Medicine.

Worry Does Kill

M ODERN science has brought to light nothing more curiously interesting than that worry will kill. More remarkable still, it has been able to determine from recent discoveries just how worry does kill.

It is believed by many scientists who have followed carefully the growth of the science of brain diseases that scores of the deaths set down to their causes are due to worry and that alone. The theory is a simple one, so simple that any one can readily understand it.

Briefly put, it amounts to this: Worry injures beyond repair certain cells of the brain, and the brain being the nutritive center of the body, the other organs become gradually injured, and when some diseases of these organs or a combination of them arises, death finally ensues.

Thus worry kills. Insidiously, like many other diseases, it creeps upon the brain in the form of a single constant, never-lost idea, and as a dropping of water over a period of years will wear a groove in the stone, so does worry gradually, imperceptibly, and no less surely destroy the brain cells, that lead all the rest, which are, so to speak, the commanding officers of mental power, health, and motion.

Worry, to make the theory still stronger, is an irritant at certain points which produces little harm if it comes at intervals or irregularly. Occasional worriment the brain can cope with, but the iteration and the reiteration of one idea of a disquieting sort, the cells of the brain are not proof against.

It is as if the skull were laid bare and the surface of the brain struck lightly with a hammer every few seconds with mechanical precision, with never a sign of a stop or the failure of a stroke. Just in this way does the annoying idea, the maddening thought that will not be done away with, strike or fall upon certain nerve cells, never ceasing, diminishing the vitality of the delicate organisms that are so minute that they can be seen only under the microscope. - McCall's Magazine, February, 1911.

In Praise of Spitting

NE of the reassuring evidences of sturdiness in this daintly refined age is the great number of persons who continue to spit with unabated vigor wherever they may be. Let the doctors proclaim what they will about the danger of this practise, it is not to be denied that spitting ranks high among American arts, having a decorative value not to be lightly done away with in deference to mere precautions of hygiene and sanitation. There is no more lovely sight and sound than a spitter in action, and the delightful traces of him, remaining when he has departed, awaken in all men and women an instant admiration. Pleasure and proficiency in this art are so wide-spread that it seems advisable to organize for its further encouragement. Possibly a helpful beginning would be the formation of a national committee to draw up rules governing the artistic expulsion in public of miscellanies from the mouth, in the advancing of which worthy cause every American who has the best interests of his country at heart will gladly furnish for experiment whatever of his that is available, from the sidewalks of his city to the ceilings of his home. - The Budget.

Health in the Tropics

A S regards food in the tropics the best way to deal with this point is to repeat my own personal experience. The rules of my household were that boiled water only should be drunk, and that no salads of any kind should be used except with the greatest precautions, and that no cold meats whatsoever should

come to the table; everything, in fact, should come to the table straight from the fire. Anything that comes straight from the fire, if digestible in the ordinary way, can not cause bacillary mischief; so that, granting that any food is suitable for digestion, if it is brought to the table straight from the fire, there can be no fear of contracting cholera or dysentery.

As a result of following this rule, neither I nor my family have had any dysentery or intestinal trouble; and it is my opinion that intestinal affections are mainly due to articles of food and drink, and that the risk of infection from dust is slight. In regard to alcohol my advice is to let a boy be a total abstainer until he has reached thirty years of age, when he can use his own discretion. [He will probably continue to be a total abstainer after that age.— Ed.] My own conviction is that alcohol is absolutely unnecessary, and if taken at all it should be as a luxury and not as a necessity.

Concerning fruit, it is my experience that fruit which possesses a rind that can be removed may be eaten with impunity by a healthy man in the tropics at any time of the year. Fruits that it is impossible to peel, or that are incapable of being thoroughly cleansed, may be contaminated and thus rendered harmful. An example of this is seen in the grape, which can not be peeled like an orange or banana, or pared like an apple or pear.

Soda-water in the tropics is dangerous, and it is better to learn to do without it. If it must be drunk, then care should be taken that the source from which it is derived is above suspicion. But in hot countries one is liable to drink too much soda-water.

Another point: A filter should not be used. If the use of a filter is insisted upon, then the water should be boiled afterwards.—Sir Richard Havelock Charles, K. C. V. O., M. D., in Practitioner, London.

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Squint-Eyed Legislation

HE present Health Bureau, in spite of its handicaps, is doing splendid work, both in the field and in the hygiene laboratory at Washington. It is the only federal service which stands between the ninety million inhabitants of this country and the bubonic plague, cholera, and other epidemic diseases, which are drawing ever nearer our borders; it is the only service to which State health officials can turn for help in cases of outbreaks of typhoid fever, smallpox, infantile paralysis, pellagra, etc. And yet this service upon which such important responsibilities devolve, scarcely has as large a staff as the Bureau of Entomology of the Department of Agriculture; and Congress, which appropriated twenty thousand dollars to rescue starying elk in the Yellowstone Park or somewhere else in the West, failed to provide about seventy-three thousand dollars, which would have enabled the Public Health Bureau to preserve its present efficiency.- New York Medical Journal, March 25, 1911.



A VIEW OF WASHINGTON. THE MONUMENT CAN BE DISTINGUISHED AT THE LEFT, THE CAPITOL AT THE RIGHT



In this department, articles written for the profession, and public lectures on hygiene, which contain matter of interest to Life and Health readers, are given in abbreviated form. Sometimes the words of the author are given, but more often the passage is abbreviated, or else paraphrased in popular language. Technical matters and portions of articles having no popular interest are omitted. Credit the authors for what is good, and blame "us" for the rest.

PERSONAL EXPERIENCE WITH A RICE DIET IN ACUTE INFLAMMATORY DISEASE OF THE SKIN



EW realize the important connection of diet with disease, especially diseases of the skin.

Local causes, including parasites and even micro-organisms within the system, undoubtedly play a part in many diseases. But from the presence of large numbers and varieties of micro-organisms, physicians question why many individuals escape while others are affected, and also why a person is susceptible at one time, and most of the time escapes. There can be but one answer. The tissues at one time furnish a proper soil for the development of such micro-organisms, and at another are capable of resisting the attack; and proper liver action and active phagacytosis account for the difference. But the action of the liver and other organs and the condition of the blood are undoubtedly influenced greatly by the food and drink taken.

Again, many diseases, including certain of the skin, are dependent upon conditions of the vascular and nervous system; these also are the result of deranged action of certain digestive organs, which are further greatly influenced by the character of the food and drink taken. Thus it is that dietetics, in the broadest sense, which admittedly is at the bottom of all nutrition, is really of overwhelming influence in regard to the production of many chronic and some acute diseases, both of the skin and other organs.

The object of the present communication is to call particular attention to a special mode of diet which I have employed in certain acute inflammatory conditions of the skin with such inestimable advantage that I desire to commend it most strongly in suitable cases.

Five years ago a gentleman aged fortyfive was referred to me with an exceedingly severe attack of bullous erythema multiforme (an acute skin disease marked by numerous pimples which become large water-blisters), of which he had had two similar attacks within the previous years. He had been eating heavily and drinking champagne, and the attack had begun at four o'clock on the previous afternoon, with a few small pimples and much itching. Within the twenty-four hours it had developed violently, and both hands and wrists were the seat of intense inflammation, with great swelling, and covered with small and large blisters more or less bloody. The intensity of the process seemed to increase even while the case was being studied. He was in real agony from the burning and itching. The pulse was eighty-eight, hard and throbbing, and the tongue coated. He was given a laxative and an alkaline diuretic, and was directed to confine his diet exclusively, for a few days, to boiled rice, bread, butter, and water. He was seen five days later, and the change was remarkable; the eruption

had cooled down at once, and the hands and wrists were then about normal, except for the peeling of the blisters, and he had no discomfort. He remarked on the striking difference in the course of the eruption under this treatment from what he had experienced in the two former attacks.

Exactly this same form of dietary treatment has been given to a very considerable number of patients with acute inflammatory skin troubles, mainly in private practise, during these five years, with the most gratifying effect, so that I can now almost promise that in a very short time there will be the greatest relief: and I am positive that the results I have secured in many of these cases far exceed anything I had previously obtained without it. In most cases there have, of course, been proper internal and external measures also employed, but in certain instances all other treatment has been avoided, and the results have been most gratifying from this dietary treatment alone, as in my own personal case, shortly to be mentioned.

In other acute skin disorders, including hives and acute eczema, there have been gratifying results.

For a number of years past I have had a very annoying condition of the hands, coming on in the summer, which I attributed to poison-ivy, but I finally excluded this cause, as the disease was not typical of ivy poisoning, and I carefully avoided exposure. By August 25 I was usually in agony with the intensity of the condition. So one year at this date, when the eruption was increasing quite rapidly, I placed myself on the restricted diet previously mentioned. consisting of rice boiled in water, bread, butter, water, and absolutely nothing else. This diet I continued three times a day for five days, using no other medical treatment, external or internal, except that I continued a mild tonic I had been previously taking, but which had had no effect on the eruption.

Within twenty-four hours of the change in diet, the tension and burning were lessened and there was no itching, and in forty-eight hours there was further marked improvement. I continued the diet for five days, and at the end of a week the skin was in almost normal condition. At the expiration of five days I resumed my ordinary diet, with some coffee and tea, taking a tonic with each meal. I had irritating itching in various parts of the body, but these discontinued, but a week later the old trouble returned to the hands; so I stopped all medication and returned to the rice, bread, butter, and water on September 15. The irritation soon ceased, and there has been no trouble on the hands since.

The rationale of this treatment is very simple. Many skin diseases, especially the acute inflammatory ones, are the result of faulty nitrogenous metabolism, and my diet cut out the nitrogen and relieved the liver. Milk was avoided because of its large content of proteid, and coffee, tea, and chocolate, because of their xanthin products [the alkaloids, caffein and theobromin].

In giving this very restricted diet to a considerable number of patients during the past five years, with the results mentioned, in no instance have they seemed to suffer physically from the absence of the ordinary ingredients of mixed diet; indeed, I have been told time and again that they feel inexpressibly better, lighter, and freer, and more able to endure when under a vegetarian diet than before. In my own instance I noticed this.

It is understood, of course, that this very light diet is not to be continued indefinitely, although I had one patient who preferred to persist in it for about three weeks, because of the uninterrupted

well-being. My common direction is to continue this rice diet for from three to five days, and then to return to a more generous diet rather gradually.

A word may be added in regard to the preparation of the rice; for this has much to do with the success of the treatment. It should be thoroughly cooked with water and not with milk, and generally it is better to have it dried out somewhat, so as to be flaky, by leaving it uncovered on the fire for a while. In my own case, however, I found that sometimes when it was not so dried out I relished it as well and it agreed with me perfectly. It should be freshly prepared, with abundance of butter and salt, and eaten slowly with a fork, with perfect mastication. The bread and butter should also be well chewed, to secure the full action of the saliva. Water, hot or cold, but not iced, should be taken freely, but not to wash down the food in the mouth.- L. Duncan Bulkley, A. M., M. D., New York, in Medical Record, Jan. 28, 1911.

Infantile Paralysis

THIS disease, which has been for many years a serious problem in circumscribed localities, has during the present year become one of our national health problems, both on account of an increase in the number of persons affected and in the area of epidemic prevalence. The number of cases reported in the world in five-year periods from 1884 to 1909 respectively, were 23, 93, 151, 345, 349, 8,054, the last figures being for the last five-year period. Making all due allowance for better diagnosis and more faithful reporting of cases of late years, there has been a progressive and rapid increase in the occurrence of epidemics from this disease. Of the last number (8,054), 5,000 were in the United States within the last three years.

These figures are not alarming when compared with those of other infantile diseases; but the indications are that the situation next year will be more serious than at present. Moreover, while the mortality of ten to fifteen per cent is not greater than that of more wide-spread infections, there is a large percentage of those escaping death who are left permanently disabled, dependent upon others, and a source of distress to their families.

It has been demonstrated that the specific cause of the disease is an ultramicroscopic organism, one too small to be seen by the ordinary microscope, and capable of passing through the filters that prevent the passage of ordinary germs. This germ, while very susceptible to heat and disinfectants, is resistant to cold and drying.

There is strong evidence that the disease is transmitted by means of nasal discharges. Among the possible means of transmission are direct contact with playmates, visitors, schoolmates, classmates, and the like. There are other factors which may be instrumental in transmitting the disease, such as food, water-supply, insects, and so forth. The agency of insects is strongly suggested by the fact that the disease is one especially prevalent in the warm months. There are reasons for believing it to be insect-borne, but there are also weighty reasons against such a supposition.

There has always been considerable evidence that the disease is in some cases connected with a similar disease in animals and poultry. But this is by no means proved, and perhaps the bulk of the evidence is against this theory.

Dust is another possible means of dissemination that has been suggested by certain facts, but, after all, the most probable means of transmission is direct contact.

The disease does not attack all with equal facility. Only a small proportion of those exposed contract the disease. After all, it must be confessed that we know very little about the disease, how it spreads, the nature of the infection, what constitutes immunity, etc.— W. H. Frost, M. D., Past Assistant Surgeon, U. S. Public Health and Marine Hospital Service, in Public Health Reports, Nov. 18, 1910.

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Care of the Teeth and Mouth During Illness

A FREQUENT cause of the decay of teeth is neglect during acute illness. It is astonishing to what degree the mouths of patients are neglected, a neglect which contributes in part, at least, to the accumulation of the thick, dry coat on the tongue, and the thick, sticky, offensive masses of so-called sordes on the gums and between the teeth.

When the patient is in bed, is fed chiefly on soft foods, and is not allowed to talk, there is greater need than during health of systematic care of the mouth. The condition of the patient's mouth is an indication of the capability of the nurse. Frequent wiping of the teeth, gums, and tongue with a piece of cotton held in a pair of forceps and saturated with an alkaline solution containing twenty per cent of glycerin, will contribute greatly to the comfort and welfare of the patient.

The greater the illness, the higher the temperature, the more abnormal the condition, the greater is the necessity of giving careful attention to the mouth. The mouth should be rinsed several times a day with warm water to which has been added a little common salt, tincture of myrrh, or cologne water to stimulate the secretions. When there is a tendency of the gums or lips to bleed, they should be rubbed twice a day with a soft cloth bearing powdered boric acid; if patients are partially unconscious, the mouth should be examined several times a day.

Ulcers should be treated with boric acid or a saturated solution of potassium chlorate or peroxid of hydrogen on a swab. If the patient sleeps with his mouth open, the tongue should be moistened frequently with a twenty-per-cent solution of glycerin and water. A drink of water should be offered the patient at least once an hour, and if he can take but a sip at a time, it should be offered more frequently.— Journal of the American Medical Association.

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Is Housing Reform Worth While?

S OCIAL workers and sanitarians have for many years recognized the relation between shiftlessness and vice on the one hand, and disease on the other. But the idea of the social causation for social ills has been of slow growth. Only recently has it been realized that the man born of an undervitalized mother, living all his life under unsanitary and immoral surroundings, put into the factory at the age of ten or twelve, and constantly undernourished, has very little opportunity to develop efficiency.

Chief among these debasing factors are the conditions which surround the individual's home; for there he passes about half his lifetime, and there, as a rule, he is subject to unsanitary conditions far worse than in the factory or on the street; and it is there that we must look for the beginnings of disease.

The influence of unsanitary housing is twofold. First, because of insufficient light and air, the growth of disease germs is favored. Second, unsanitary conditions cause an anæmic condition of the body, making the individual incapable of vigorous labor, prone to use stimulants, and especially susceptible to disease.

Bad housing always reacts upon the moral constitution of the tenement dweller, causes a weakening of the moral fiber, and loss of ideals. When men and women, boys and girls are crowded three or four in a room, modesty and cleanliness are next to impossible; the situation is still further complicated, with pernicious results, by the very general practise of introducing a lodger into the family.

Under such circumstances there can be little home life; the father escapes to the saloon, the boys to the street, and the girls to the cheap theater and dance hall. The wonder is that the resulting drunkenness, prostitution, and crime are not worse.

High tenement buildings are no necessary mark of the slum. Its constituents are more frequently the small family dwelling-house, transformed for multiple occupancy, the cottage in reduced circumstances, or the shack thrown together out of waste materials. The sleeping-room which has no direct connection with the light and air, the unsewered privy vault, the surface well generally close beside it, and the cellar apartment, are so common in our vounger cities as almost to escape notice,

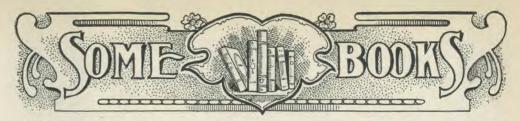
while our older towns, though they may be free from some of these evils, have conditions of overcrowding which make the problem a most serious one.

The sublime confidence with which the builder erects a building the full width of his lot, trusting that his neighbors on the other side will not do the same, is more remarkable than praiseworthy. That his confidence is misplaced is shown by the large number of buildings in which only rooms fronting on the street or back yard, receive any direct light or air.

It is an old slander that the poor do not appreciate sanitary surroundings; the fact is the reverse; but whether they do or not, the State and city, from motives of self-preservation, if for no other reason, should not permit its people to live under such conditions; for through inefficient labor, increased hospital, asylum, reformatory, and prison expenses, and the contagion which emanates from these congested centers, society sooner or later pays the bill.—James Taylor Gerould, in American Journal of Public Hygiene, June, 1910.



A TRAY LUNCHEON



Clinical Treatise on Inebriety, by T. D. Crothers, M. D., editor of the *Journal of Inebriety*. 365 pages, cloth. Sent, express prepaid, for \$3. Harvey Publishing Company, Cleveland, Ohio.

This is a very entertaining and enlightening book, being, we believe, the most complete contribution in the English language to the literature of inebriety. Dr. Crothers, who is a pioneer in this field, having studied the effects of alcoholism for many years, has constantly and consistently advocated the position that inebriety is a disease; and in this, his latest work, he has well sustained his thesis.

The historical references proving that inebriety is practically as old as the race, being as much of a problem in the early days of Egypt as now, and the account of the growth of knowledge regarding the true nature of inebriety, are decidedly interesting.

One is inclined to question the force of the arguments showing that the drinking habits of parents are apt to be transmitted by heredity. Is there any exception here to the general rule of heredity shown in the transmission of neurotic dispositions, insanity, and the like, that grandfather, father, and son are all chips off the same old block—that the father transmits an alcoholic heredity, not because he drinks, but because he himself inherited the tendency? Some of the examples given by Dr. Crothers would certainly point that way.

For instance, he tells of John Smith, an inebriate, a number of whose children became either drinkers or drug-takers, though the wife was a strong temperance woman. But does not the fact that John Smith was an inebriate indicate an inherited predisposition on his part? Again, in another case, "the male members of the family for three generations all drank spirits to excess between forty-five and fifty years of age. Many of them were total abstainers up to that time." Is it not more than probable that the children in each case were born before the parents were forty-five, that is, while the parents were yet abstainers? And does it not argue the passing down of an older taint rather than the formation of a new taint? Is it not the inherited feeble disposition of the father (which causes him to yield to alcohol) that he transmits, rather than the definite appetite for drink?

In some cases, doubtless, the appetite is transmitted; but is it not, after all, the feeble will-power that wrecks the man? Do we find examples of men of perfectly untainted stock who by becoming drunken and debauched transmit a drink heredity? The received theory of heredity is quite strongly against the modification of the germ-plasm by the habits of the individual. The question needs further study.

Thoughts on Things Psychic, by Walter Winston Kenilworth. R. F. Fenno & Company, New York.

A book of Oriental philosophy, based apparently on the teaching of the Vedas, and proclaiming the theory of the transmigration of souls. Here is a sample: "Individuality is the thread running through all the changes of personality. Personality is a ray of the individual soul incarnated in this life. The individual projects many of these rays, and each new projection is a new life."

The readers of this book should have a special dictionary; for words are used in a special Oriental sense which will not be intelligible to hard Occidental heads.

The Fasting Cure, by Upton Sinclair; Mitchell Kennerley, New York; \$1 net.

Mr. Sinclair after a somewhat checkered experience with various cures was induced to try fasting. He had such excellent results that he became convinced that he had discovered a real fountain of youth. In addition to his own experience, which he relates with becoming frankness, he gives a large number of testimonials from others who claim benefit or cure as a result of fasting.

The editor will later comment more at length on fasting as a cure. He tried fasting cautiously after reading Mr. Sinclair's book. In two days he had lost five pounds. He continued to fast for some eighteen hours longer, and did not weigh himself when he broke his fast Friday morning, but he made up for lost time in the next few days. Sunday morning he weighed one pound more than when he began the fast, having gained at least six pounds in three days!

As a diversion or pastime, the editor is not an enthusiastic advocate of fasting. There are other amusements which appeal to him more seductively.



Discussion of Articles on Hygiene and Kindred Topics Which Appear in the June Issues of the Magazines

Pearson's Magazine

"BAD Water vs. Good Health" * is a startling arraignment of our almost criminal negligence regarding one of the most fundamental health principles. The author masses a convincing array of figures and statements from inspectors, sanitary engineers, and others, which should bring home to the American people their shame in permitting - in order to avoid expense - such a condition of gross insanitation as is shown to be present in many American communities. The normal typhoid death-rate in some cities with bad water supplies is outrageous, to say the least, and the death-rate for the entire nation is far above that of Europe or Japan. The article shows, in brief, the importance of good water; what bad water is doing; how to keep pure water good; what precautions to take in the home to be sure that the drinking water is not a continual menace.

"Mutiny in the Railway Mail Service"* is a severe criticism of the administration in the recent mail-service war. The assertion is openly made that Russian bureaucratic methods are being freely used by the administration to avoid publicity. The writer pleads the cause of the railway mail employees, who are compelled to do their work in unsanitary cars, which, being of the old wooden type, are crushed by the steel passenger-cars whenever there is a collision.

National Food Magazine

Miss H. Mae Card addresses a plain article to plain people on "Home Making and Home Conveniences."* The advice is devoted largely to the arrangement and care of the kitchen, though other matters pertaining to the home have attention. While Miss Card evidently understands the needs of many of the humbler homes, where often the wife is the only housekeeper, some of her suggestions might not come amiss in more pretentious homes.

The Designer

In these days of rush many overworked people to whom rest is essential in order to prevent breakdown, find it impracticable to spend several months away from home; and to stay at home and take a rest cure is apparently impossible. "Rest Cures at Home," * by Mary H. Northend, gives the personal experience of a number of mothers helped by home rest, which may encourage other busy housewives, nearing the breaking-point, to avoid the final collapse.

"Off to the Woods in June"* is a well-illustrated and very practical article, giving directions for preparing for picnics. Many of the delicacies would not find a place on our picnic bill of fare; however, the suggestions in general are valuable and should prove helpful to any one contemplating an outing. "A Word to the Wise About Pots and Pans,"* by Mary Madeline Wood. The opening sentence tells the substance better than I can: "It is just as easy to keep cooking utensils clean as it is china, and quite as necessary." The article gives the why and the how.

The Delineator

Samuel Hopkins Adams, in "The Health Master," * relates an amusing story of a physician installed, Chinese style, in a family to guard the health of the inmates. His instruction is entertaining and withal enlightening, for he fairly covers the ground of personal, family, and public hygiene. "Health From Walking," * by H. Irving Hancock, is an account of how a delicate child, by walks of gradually increasing length, "from being a weakling was within a few months buoyantly healthy." It is an earnest plea for walking as a valuable method of physical training. Frances Duncan, in "Self-Support From Gardening," * tells how an intelligent woman, with love for plants, may establish herself in an agreeable occupation which will maintain her in independence, vigorous health, and self-respect. A number of different horticultural occupations are suggested with their possibilities and the means of securing the necessary train-

^{*}The articles designated by the asterisk have been read by the editor of Life and Health.

ing. Elizabeth Hale Gilman, in "Running a House by Rule," * gives directions for diningroom and pantry work, the arrangement of the table, the linen, and the silver.

Mother's Magazine

"The Necessity," Jessie Wright Whitcomb; how a sick child regained health by outdoor living. "The Deadly House-Fly," C. V. Trevis, the dangers that accompany it, and some ways of keeping it out of our homes. "My Daughter's Future Husband," David G. Prentiss; the necessity for knowing the physical and moral character of a prospective son-in-law. The department "Little Folks' Land" contains several stories of outdoor life by Madge A. Bigham. "Protection of Plumbing in Vacation Time," by Constance Haywood, shows how to prevent sewer-gases from entering the house when the sink and drains are not in use. "Work as a Safety-Valve," by A. S. Trude, and "Employing the Children During Vacation," by Kate M. Pritchard, point out the value of adequate employment for children during the vacation months.

Country Life in America

The June first issue, the annual vacation and outing number, will contain articles of practical usefulness, as well as enthusiasm, on boating, fishing, camping, and other forms of outings and vacations. The good health which comes through outdoor life is the theme which runs through the number. Among the articles are: "The Joy of Motor Boating," "Safe Canoeing for Children," "Fishing for Sea-Trout in New Brunswick Rivers," "A Vacation on an Abandoned Farm," "An Auto-

mobile 'Camping Trip,'" "A Motor-Cycle Vacation," "Canvas Vacation Houses in Ohio," "A Bicycle Vacation," "A Horseback Trip in the Blue Ridge Mountains."

New Idea Woman's Magazine

Miss Helen Ware, the noted actress, has written an interesting article, entitled "My Outdoor Life and My Success." When she was a small child, she was a great tomboy, expert in riding and swimming. She has always kept up her interest in outdoor sports. She says: "There is absolutely nothing that contributes more to success in any profession than perfect health, and nothing that makes for perfect health like systematic outdoor exercise. Miss Ware describes vividly several camping trips of the roughest sort that she has taken on her vacations. In the article called "Carlotta's Dinners," are also to be found valuable cooking and household hints.

The Chautauquan

"Why Is a Fly?" by Dr. Woods Hutchinson. One who has heard Dr. Hutchinson lecture on this subject assures the readers of LIFE AND HEALTH that the doctor treats the subject in a vigorous and interesting manner.

Good Housekeeping Magazine

Good Housekeeping Magazine for June contains a very striking and important article, entitled, "Eye Strain and Immorality," by Algernon Tassin, of the Department of English, at Columbia University. Mr. Tassin's recent article in Good Housekeeping, entitled "Why Our Glasses Don't Fit," made a profound stir and is still under discussion.



THE HOME OF "LIFE AND HEALTH"



Progress of Plague.— A recent epidemic is reported in the Dutch colony in Java, with more than two hundred deaths.

Medical Study of Alcohol.—The American Society for the Study of Alcohol and Other Narcotics held its fortieth annual meeting in Baltimore, Md., April 19 and 20.

Open-Air Schools.— More than sixty schools for tuberculous children have been opened in twenty-eight cities. The first open-air school was started in Providence, R. I., Jan. 1, 1907.

No More Public Cup in New York.— The board of health of the city of New York has added a section to the sanitary code forbidding, after October 1, the use of the public drinking-cup in all public places in the city.

Wheat and Rye.—The London Lancet assures us that there is little nutritive difference between a wheat loaf and a rye loaf. A distinct advantage of rye is that it keeps fresh for a longer period. Rye is also laxative.

A Mother's Expedient.—In a recent Chicago fire a mother, awaking to find herself hemmed in, bundled her baby in pillows and blankets, and dropped it to the ground from a second-story window without injuring it.

No Public Drinking-Cup in Rhode Island.

— The House of Representatives of the general assembly of Rhode Island has unanimously passed a bill abolishing the public drinking-cup. The State board of health of Connecticut has also recommended such a law.

Less Drugs Used.—Recently published statistics of the Boston dispensary show that during the last fifty years the use of drugs in that institution has steadily diminished. There has been a corresponding increase in the use of massage, electricity, and other non-drug methods.

A Queer Attempt to Thwart Nature.—It is said that a London physician, noting the excess of females in England, has urged that special measures be taken to prevent mortality among male infants. He would, it seems, let nature take care of the girl babies, while man (or woman) takes care of the boys!

Sanitary School Towels.— The Missouri State board of health has decided, as a health measure, to furnish sanitary paper towels for all schoolchildren.

Teaching Cleanliness.— The official paper of the London medical school inspectors urges that the teaching of personal cleanliness be made a part of the curriculum of the elementary schools.

Stamping Out Hookworm in Belgium.— A vigorous sanitary campaign waged for five years among the Belgian miners has reduced the presence of hookworm disease to one-fifth of its former prevalence.

More Play Space.—The Park Commission of New York has issued an appeal to owners of unimproved property to allow children to make use of such land for playgrounds during the summer. Such use of the lots would keep many children off the streets.

For the Protection of Health.—It is estimated that there are in the United States about 140,000 licensed physicians, practically one for every 650 persons, men, women, and children, and this in addition to all the "paths" and "healers" of every type and color.

Modern China,—It is said that the interior city Taiyaunfu (60,000 inhabitants) is electric-lighted, has broad, paved streets, with a cement drain on each side, has a telephone system, public schools, and a uniformed street-cleaning brigade. Some American cities might copy.

Birth-Rate in France.—According to Ambassador Jusserand, the births exceeded the deaths of infants by twenty-one thousand during the last half of 1910. This it seems is the result of active teaching of hygiene in the public schools, which has materially improved home conditions.

Straining Milk.— Dr. W. G. Savage, of London, has expressed the opinion that strainers do not materially lessen the number of bacteria in milk. In fact, if they are not kept scrupulously clean, they may actually increase the number of germs in the milk. Strainers also encourage the idea that it is not necessary to be quite so clean, if the milk is to be strained.

London and Rat Plague.— Great precaution is being taken in London to prevent the landing of rats from ships.

Baltimore School Hygiene.—The city of Baltimore is to have connected with its health department, a department of school hygiene.

Cure Alcoholism by Surgery.— A Texas physician asserting that the cause of inebriety is located in the stomach, and that the difficulty can be relieved by surgery, cites a number of cases, to prove his thesis, where operations on the stomach caused a cessation of the drink craze.

Red Cross Endowment Fund.—Two cities, New York and San Francisco, have raised the amounts \$500,000 and \$75,000 respectively, pledged to the Red Cross Endowment Fund, which is to stand as an emergency fund to be used when large numbers of people are overtaken with some great catastrophe,

To Reduce Infant Mortality.— An attempt is being made to raise \$200,000 to establish sixty milk depots in New York City. It is said that of the 65,000 babies born yearly in the city, 12,000 must have the aid of a milk depot in order to survive. At present, 8,000 have no such aid. It is the purpose in establishing the new milk depots to save these 8,000 babies yearly.

Medical Missionaries Needed.—Dr. Grenfell at a mass meeting of medical students and physicians, using lantern slides illustrative of his work in Labrador and Newfoundland, made an earnest appeal for medical men to give their lives to the practise of medicine in foreign countries. Fifteen of the New York medical students are now planning to enter foreign medical missionary work.

Wooden Soles to Prevent Hookworm Disease.— A retired naval surgeon recommends that in hookworm districts woodensoled shoes be worn as a protective, as is done in parts of Europe. The hookworm larvæ can enter any place that will admit water, so the ordinary sewed shoe is no protective. The wooden-soled shoes could be obtained as cheaply as the shoes with leather soles.

Poultry Decomposition.— A series of experiments recently conducted by the United States Department of Agriculture, and detailed in Circular No. 70 of the Bureau of Chemistry, show that undrawn poultry decomposes more slowly than poultry which has been wholly or partly drawn. The more completely the poultry is drawn, the more rapid the decomposition. In any case, the number of bacteria was found to be overwhelming even when the flesh still appeared to be wholesome.

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Tuberculosis Fund.—Patten, of Chicago, the plunger in grain and cotton, who had a brother die of tuberculosis after suffering for many years, has given half a million dollars to the Northwestern University, to be spent in research looking to the prevention and cure of tuberculosis. He expects to increase the gift to two million dollars.

Open-Air School a Success.—The openair room of the Blake School, Washington, D. C., has been a decided success. With a daily expense of two cents per pupil for food, it has resulted in a marked improvement in the general health of the pupils. Superintendent Stuart has recommended that additional fresh-air schools be established.

Another Medical Congress.—Germany is to have an international congress for thal-assotherapy, to meet in Kolzberg early in June. This congress specializes on the treatment of disease by ocean climates and sea bathing. An important feature of the present congress will be the consideration of the treatment of surgical tuberculosis at seaside resorts.

Vaccination in Germany.— Recently there has been some agitation with the object of obtaining a "conscience clause" in the vaccination law. The Berlin Medical Society at its last session adopted a resolution favoring the preservation of the vaccination law of 1874 intact. As a result of that law Germany has for years been practically free from smallpox.

Typhoid From Fish.—The health officer of London has in a recent report confirmed the suspicion that fish from contaminated waters may cause typhoid fever. A very careful investigation showed that in an epidemic in East London a considerable proportion of the cases could be definitely traced to the use of fish purchased from fried-fish shops.

A Recent Decision.—About a year ago the Boston board of health passed an ordinance forbidding the sale of loose milk, that is, milk not in bottles. The milk dealers bitterly opposed this measure, and finally it went up to the supreme court of the State for decision, this court holding that the board of health exceeded its authority in issuing such an ordinance.

Health of Troops on Mexican Border.—It is reported that there is a very small percentage of illness among the mobilized troops along the Mexican border, indicating a medical efficiency, or organization, or absence of red tape, far in advance of conditions at the time of the Spanish war. Perhaps we were galled on to better work by the splendid example of the Japanese.

Sterilization of Swimming Pools.—Where it is impracticable to renew the water of pools frequently, it has been found practicable to sterilize the water by the use of sufficient hypochlorite of lime (chlorid of lime) to give one part of chlorin to two million parts of water. The water remains practically sterile for four days after the disinfection, when the bacterial count begins to rise again.

Bizarre Legislation.— A bill has been introduced into the Illinois State Legislature providing for the award by the State of \$100 to every woman who is a mother within two years after her marriage and for each succeeding child born within two years after the next older brother or sister. The required bounty is to be made up by taxing the bachelors of thirty-five and upward. Of course such a bill will never pass.

Russia's Backward Hygiene.— A paper recently read before the French Academy of Medicine speaks of the danger to Europe from the condition of Russia, which seems unable to clear itself of cholera, owing to the ignorance of the masses, who do not seem to know the first principles of cleanliness and hygiene, and the scarcity of physicians and hospitals. This unsanitary condition, it is asserted, is an element of grave danger not only to Russia, but to the entire world as well.

Milk Inspection in Pennsylvania.— This State has probably the most complete system of dairy inspection of any State. At present, the seventh inspection is in progress. Every dairy, large or small, furnishing any dairy products for consumption, is examined as to the cleanliness of yards, barns, utensils, milk-houses, milkers, etc. There is another inspection, conducted by other officials, having to do with the health of the cows, and still another having to do with the use of preservatives and adulterants as milk.

Instruction in Hygiene. A comprehensive plan has been elaborated for the practical instruction in hygiene of teachers and pupils in the New York schools. The purpose is that the children shall be taught hygiene during the entire school course. The course, beginning with simple matters and without attempting to give reasons, will advance with the age of the pupil. Text-books will be used after the third year. An important feature of the plan will be the effort to introduce each new principle into the life and action of the pupil as soon as he grasps the idea. Only one or two new things will be introduced at one time, and these will be mastered and made a part of the life of the pupil before new topics are taken up.

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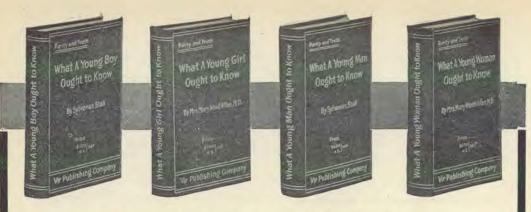
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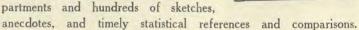
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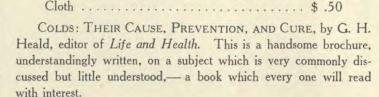
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