Life & Health

THE NATIONAL HEALTH MAGAZINE

SEPTEMBER 1911

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A Magazine of Merit

Life and Health readers will be interested in the September number of the ***Signs of the Times*** magazine. One article will be of special interest.

"What is the Danger in the Use of Milk?" by H. F. Rand, M.D. Dr. Rand shows results of some recent investigations and experiments along this line, and they merit your careful consideration.

"The Genesis of the Human Race," by J. O. Corliss, is the first of a series of articles on this absorbing subject. You ought to follow them.

"Saying 'Peace! Peace!' Planning War! War!" by the editor. A vivid word picture of the intensity of the times and conditions.

"Satisfaction," by William A. Westworth. The one thing for which every one is striving, but for which many are striving in vain. Where can it be found? Read the article.

"How We Are Saved," by George B. Starr. A candid answer to a serious question.

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WASHINGTON, D. C.

THIS ISSUE

HAT is the matter with our public-school system? Mr. Fitzpatrick made severe criticisms years ago on present methods. His criticisms at the time were received with scant favor and much opposition. Now educators are coming around to Mr. Fitzpatrick's position. Mr. Fitzpatrick's original paper, which we believe has not heretofore been published in this country, is given in this issue.

Parents do not always realize what an important time childhood and youth is for the formation of correct health habits. It is hoped that Mr. Schelin's appeal will help many parents to appreciate this responsibility, and to take up their duty to the children.

Hydrotherapy as a remedial agent has not been appreciated, partly because it has not been taught in the medical schools to the extent that drugtherapy has, and partly because of the inconvenience of administering it and the difficulty of obtaining attendants skilled in the giving of treatments. Dr. Abbott's papers are given with the purpose of making this excellent system of treatment better known.

Dr. Abbott has had an extensive experience as instructor of hydrotherapy both to nurses and to medical students, and he has prepared two books on hydrotherapy,— one for physicians, reviewed in our August issue; and a simpler text-book for nurses, which will shortly be issued by the publishers of LIFE AND HEALTH.

Within recent years, investigators have learned that a large proportion of man's physical troubles originates in the intestine. The editor in this issue begins a series of articles showing the relation of intestinal conditions to health.

To the business woman, stenographer, saleswoman, milliner, whatever her work, whose cramped position during long hours tends to produce an ungraceful figure and impaired health, Anne Guilbert Mahon's instruction in physical exercise will, if carefully followed, prove a boon.

The October Issue

W. B. Holden, M. D., " What Are We Coming To? " A consideration of present tendencies, by an able physician, which may well cause us to ponder.

The editor, " Conditions Favoring Ill Health." Second paper of the series on " The Intestine and Health."

E. L. Paulding, M. D., " Insomnia; " giving the cause and relief of sleeplessness.

Herbert M. Lome, " In Praise of the Peanut."

G. K. Abbott, M. D., " Effects of Hydrotherapy on the Composition of the Blood."

Mary Alden Carver, "Autumn's Antidote for Physical Ills."

CONTENTS FOR SEPTEMBER

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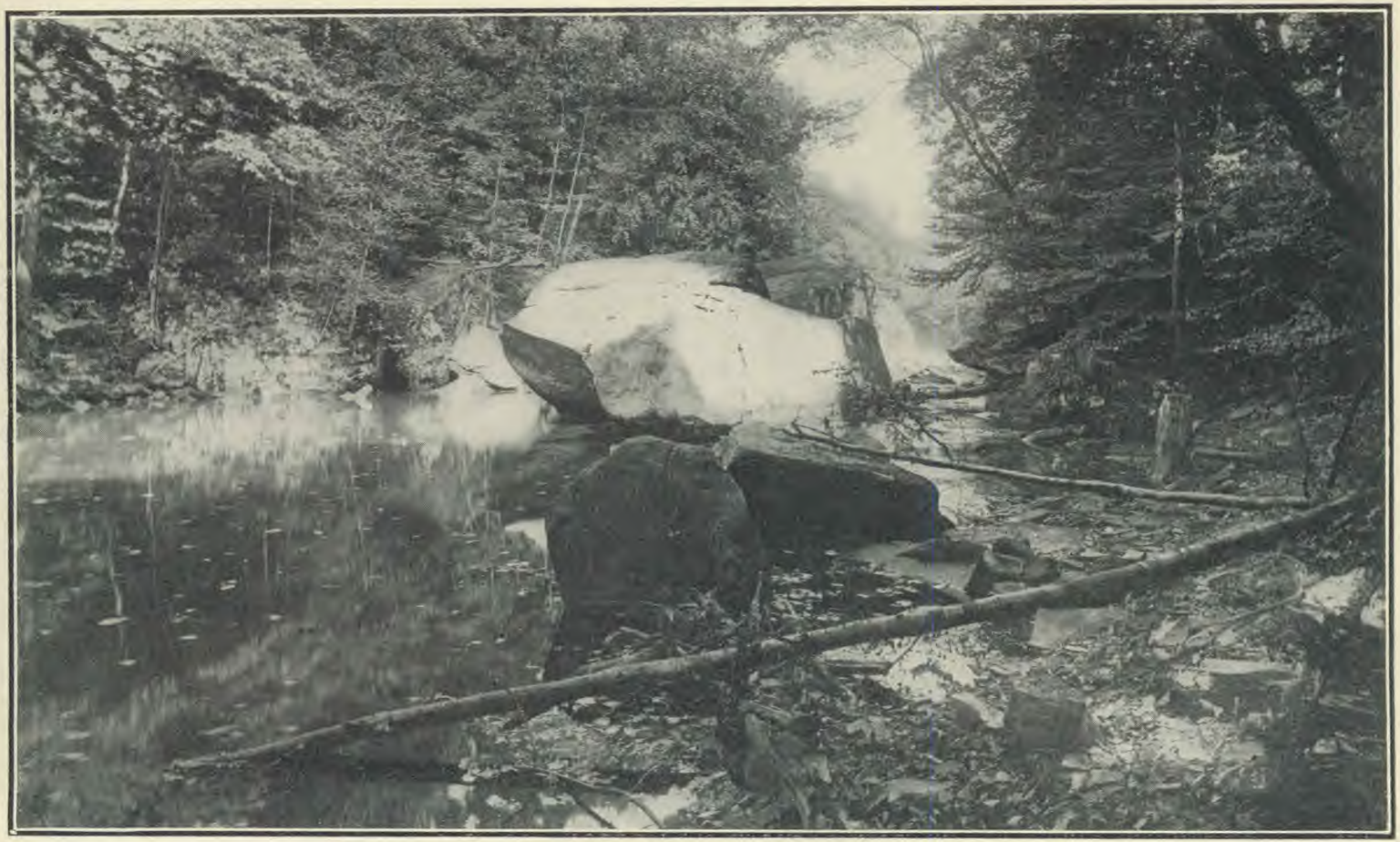

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LIFE & HEALTH

THE NATIONAL HEALTH MAGAZINE

SEPTEMBER
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.

FADS AND FADDISTS

Fad.

Defined by Webster as a "hobby, freak, whim."

One of the best examples is in a certain health magazine.

The editor, by some fatality, has the word built into his name.

He inherited the name and the trait.

He is not to blame for that.

But readers should make due allowance, else they also will be faddists.

But it is not alone in that journal. There are others.

They live off a class of people who want that kind of oddity.

England is a great country for faddists. They are legion.

There was a physician-lecturer who went over there from America. Let me call him Bliss.

Some of his admirers, after he had delivered a lecture or two, urged him to organize a cult of Blissites, and said they would all join.

Man is a gregarious animal. He likes to go in droves, like cattle.

It is economical, for it avoids the necessity for independent thought.

And thinking is an effort of which we are most sparing throughout life.

The man who wishes to lead a procession makes a choice collection of freaks.

He selects anything that is "different," anything that is a protest against something else.

The procession is pretty sure to follow.

There are two classes,—those who think and who lead processions, and those who follow.

And there are also many would-be leaders of processions.

Most of them lead their processions into the mud; then they desert them and start others.

There are few who, following principle, accept self-sacrifice and persecution.

Such secure a procession, but it is usually in the succeeding generations.

While the leader is under fire, the following is very select.

The men who worship the prophets of a preceding age stone the prophets of this age.

Man has not yet learned the lesson from the past, that however much the truth of the past may appeal to the multitude, the truth of the present is on a different footing.

Naturally we look at the popular, the successful, that which is in vogue, as being the true.

But it passes away as the grass, to be succeeded by some new popular "truth."

And every succeeding generation can plainly see that the popular truth of the previous generation was egregious error.

Our School System

F W Fitzpatrick

THE president of the Washington school board recently startled us by suggesting an elective system whereby the children may be divided into two classes,— those who will go on up to high school and college, and those who will finish school with the grades. His argument is along these lines: —

"There is a tendency in many cities where there are well-developed school systems to get back to first principles, to do away with many secondary courses which have crept into the schools, and which, though well enough in their way, are not necessary to the scholars.

"There are in the public schools to-day two divisions,— one composed of children who will go to college, and the other made up of those who will not go. The number of children who will not go to college is far larger than the number of those who expect to take a college course.

"Yet an examination of the curriculum in the graded schools, as well as in the high schools, shows that nearly all children are being prepared for a college course.

"This is a problem that requires attention. I think that, possibly, an elective system would be a solution of the question. At present this system is limited here.

"There are many who believe that the public schools should end with the eighth grade, and that it is not incumbent upon the government to provide free high schools. I do not agree with this idea; for a high-school education aids all the children greatly in their work during the rest of their lives.

"But the board of education has been besieged recently with requests for the establishment of all kinds of courses in the public schools,— courses which are of no practical value to the children who attend the schools. I should not be surprised if we received a request to start a course in mental telepathy.

"It is the duty of the board to see that the schools are conducted economically as well as efficiently. Extra courses would tend to increase the expense, as well as to cram the minds of the children with information which is not necessary."

Many educators in other cities share this educator's sane view of this subject. Little is said, because it is feared that such ideas would be deemed revolutionary, or, perhaps more correctly, reactionary, and not in consonance with what we have been led to regard as "progress." But educators are becoming bolder; they see wherein the error has been made, and realize it is time to correct it.

Twelve years ago I rather timidly ventured to express similar views in a French educational review. The article attracted some attention; it was translated into German and Italian, and even back into English, as I had it originally, but the unfavorable comments it received far outweighed the favorable. To many it was as a red rag is to a bull. I was denounced as one who wished to keep the poor down, who would refuse an equal chance to all, who would endeavor to divide the people into still more widely separated classes, and so on, ad nauseam. These rather venomous reviews were chiefly American, though no American journal published the article. After twelve years, official opinion, as expressed by the Washington school board, some noted university men, two college presidents, and many educational bodies and experts, seems to have veered around a bit. Officialdom generally but reflects and expresses what is in the popular mind. Perhaps my readers may be assisted in further developing the idea, in putting it into tangible shape, in seeing some phases of it that had not before presented themselves, by reading that twelve-year-old article, which now appears for the first time in an American journal: —

OUR SCHOOL SYSTEM

WE have insisted upon free education, education for all, compulsory education. All sorts of ologies and what-nots have been injected into our educational systems; and what is the result?

In the first place our anxiety for so-called education, a diversity of accomplishments, has been such that our children have no idea of thoroughness. They can not spell correctly; they know little if anything of the fundamentals; they have been taught to skim over the surface of things; a smattering of a subject has been accepted as a satisfactory attainment; frivolity is encouraged,—a frivolity that sticks all through life, in matters of the greatest importance: in marriage, in character-building, everywhere. Nothing is taken seriously, for no one is taught seriously or seriousness.

Then, too, so much is attempted in our schools that the youngsters believe themselves all candidates for college and higher things. Ours is a race of embryo presidents, senators, "captains of industry," directors, and managers. We make no more workers with brawn and muscle, craftsmen and mechanics. All believe themselves above working with the hands; headwork only is fashionable, and the least of that possible.

Our farms are abandoned. The young people flock to the cities. They can not, will not, do manual work. They must teach or be typewriters or petty clerks pro tempore, awaiting the time when they can be enrolled upon the lists of the great. Our trade-unions further complicate matters by limiting the number of apprentices in each trade, and otherwise making those trades hard or undesirable to get into.

THE YOUNG PEOPLE FLOCK TO THE CITIES

Immigrants catch the fever upon arrival. They have intended, perhaps, going upon the farms of the West, but the lure of the city is strong, and they stay there; and, further, they soon learn to despise manual labor. The police force and such genteel occupations are the proper caper. To actually "work" is but little short of criminal. It will not be long before our hands will be mere rudimentary, unused appendages.

The farm, the shop, the mine, are as much part of the state communal body as the office, the bank, and the store. The state should not discriminate between these, and help one at the expense of the other. It is doing that now by its free education. It is pulling people away from the farm and the work-bench, and fitting them exclusively for work requiring scholastic attainments. All of its grade schooling is planned as merely preparatory for high school, and the high school is managed as a stepping-stone to college. The state is really to blame for existing conditions, though it has but erred in judgment, and does not lack in good intent. By its excess of education, so to speak, it has vulgarized the sciences. It has tried to bring everything down to the

lowest level of comprehension. It has made millions of mediocrities,— people partially or dangerously little educated,— but it has given us few, distressingly few, brilliant minds and thorough scholars.

Are we to face about, and seek to recreate a peasant, a laboring and uneducated class? — No, but it would seem that something should be done to correct the wrong that is so apparent all around us.

The state has gotten us into this pickle; now it is the duty of the state to get us out of it. Let there be less *book education* and more *instruction* in the primary grades, more character-building, a training to get the child into the way of learning and of applying what *is* taught. Let there be less kindergarten and playful frills and a more thorough grounding in the rudiments, the three R's. If the child is fitted by nature for a professional career, he will go on, never fear; if he is not, why should the state force him into it, and spend its money and waste his time trying to make a doctor or a preacher out of him, and perhaps spoiling a good farmer or a butcher?

The state provides the education; why should it not dispose of it and its own money to its best advantage? Is not that its duty as representative of all the people and all the interests? After a certain grade point is reached, then by most discriminating and intelligent examinations, physical as well as mental, the children should be divided according to their special fitness,— this one on to high school and later to college and a profession, that one to manual training and a trade, and the other to the agricultural school and the farm. What is the sense of letting a youngster of fourteen elect as to his taking an "academic" or a "science" course?

What is the use of leaving it to the fond parent, who may have dedicated to the ministry an infant that has grown up better fitted by nature for a mule-driver? O, certainly! If papa wants to pay for it, let him educate his mule-driver in all the higher ologies of football, polo, poker, etc., that he may get at the best universities; but I am writing now about the education supplied by the state, for the maintenance of which we all subscribe.

What is the sense of having only one agricultural school, or at most two, in a State, and a high school or an academy at every crossroads village?

Our entire school system needs revamping. The state has mistakenly gone on in one direction. It is worse than folly to keep on because it started that way. It is important, most important, that a change of direction be made, and the time to make the change is now.

Here in Washington, and in other cities it is the same, we have a manual-training school, for instance, fitted up with all sorts of scientific frills,— the latest machinery, electric apparatus, everything imaginable for the boys to play with — and our other high schools have to have the latest and best in all that pertains to physical and chemical laboratories. We are positively extravagant and opulent there, while in our grade schools the youngsters sit at makeshift desks in poorly ventilated and often dismally dark rooms, and forty odd are crowded upon *one* teacher. Those schools are poverty-stricken, a shame, but the best our school boards can do, perhaps, because the money has run out. Well, if the appropriations are wrongly framed up, then it is high time to correct them.

Have teachers enough, and well-paid ones (the present salaries are shameful), in the grade schools, so that none will have more than twenty pupils. One teacher can not handle more than that number, and do any of the pupils jus-

tice. Each needs a bit of individual, special attention. With forty the thing can be but a machine, a unit, all individuality merged, and all lessons so arranged that the slowest one in the class can keep up; meanwhile the brighter ones fritter their time away, and play pranks, and get into mischief. The process is like unto that of a sausage-mill. The mass of youngsters is shoved through — hit or miss, what does it matter? its *only* the grade schools. In the high schools the classes are generally small, each pupil receives a considerable amount of attention, his bent is cultivated, he's somebody. Yet how many ever get into high school? how many leave school even before going through the eighth grade?

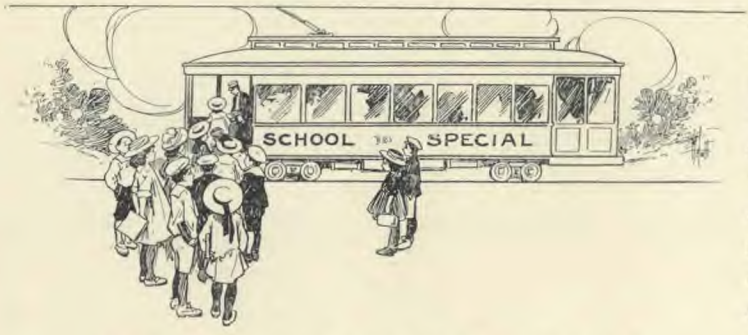
Knowing all this, would it not be wiser, more just, more conducive to the best results to the greatest number, to consider the grade "graduate" as the finished product, and treat him accordingly? Do not make all those primary years a mere preparation for high school. Ground the pupil well in the fundamentals, let him be thorough in a limited number of studies, rather than attempt to cram him up with the merest smattering in a host of branches. Work on character-building, seriousness of purpose, the care of himself physically and mentally and spiritually, his obligations to the state, his duties as a citizen; teach him *how* to learn, inculcate a love of work, a desire for information; and even if the lad but reaches the seventh grade before having to leave school, he will find the way to absorb, to get a better education by means of night classes, correspondence schools, personal study, though he has to drive an express wagon or tend cows the while. See what has been accomplished by thousands of our best men,— men in professional lines, statesmen, commercial princes, who never got near a high school,— men who left the grade schools at twelve, ten, or even younger,— and think of the possibilities, the wonders we could do, with our present opportunities, if we would only follow a saner, sounder, more thorough method of handling the children in the grade schools.

Indeed, the men who have "arrived" had a better training in the schools of their time, the grade schools, than have the boys of to-day, and the years to come will prove that these latter can not and will not, under similar conditions, give as good an account of themselves as did their fathers. The schools of thirty years ago had few frills, the rudiments were insisted upon, thoroughness and discipline were reenforced with the birch rod if necessary, and *men* were made. The present crop promises no such rich harvest. We are raising a lot of dilettante, superficial, "classy," cigarette-smoking, and frivolous youngsters; and those who do get ahead and amount to something do so because it is absolutely ingrained in them; they can't be kept down. They succeed in spite of the

THOROUGHNESS AND DISCIPLINE WERE REENFORCED WITH THE BIRCH ROD

school system and not by any means on account of it.

The problem is ours; it is not one that can be shifted, and O, so much depends upon the way we handle it! We to-day have many problems to solve, difficult ones, but none is so important as the right training of the growing, the next generation. It means the making or unmaking of the nation. We are giving close attention to, and taking infinite pains with, our business systems; everything about them is being overhauled; they are being examined, that the waste may be stopped, the efficiency raised. It is important work, but how utterly insignificant it all becomes when compared with the magnificent, the awe-inspiring and most necessary though much shirked task of properly systematizing, handling, and directing the training of the human machines that in so few years' time are to supplant us, and carry on and improve our work or spoil it. Give that task some intelligent study; give it time.



HAVE SCHOOL-CARS MORNING AND AFTERNOON

The school building requires thought, too. Heretofore it has been planted down wherever a city had the property, or where people clamored for it, or where some favored citizen had a lot to sell. City property is expensive. The buildings have to be small in area, two and three and more stories high, endless stairs; "girl-killers," I call them. Surrounding buildings darken the class-rooms. There's perhaps a bit of paved court, but nothing that you can dignify by the name of playground. City air and smoke, plus crowded class-rooms, form a combination that is not conducive to very perfect hygienic conditions.

Some day, some city will take the bull by the horns and do the thing right. We are solving our other problems of congestion in cities by the rapid-transit route. Why not the school problem, too?

Why not build schools well out of town, in the country, big one-story affairs, light, airy, really huge factories where children may be fashioned into healthy, normal, first-class human beings, rather than attempt to force them through the hot-house route, into the pseudo-scientific, anemic, "half-baked" condition in which we find so many children of the present generation? Outlying property is cheap; get plenty of it,—great playgrounds, pure air, real trees and grass.

Cut down on the ornamentation of the buildings, cut down on the high schools if necessary, and enlarge upon the grade schools, where seven tenths of the children terminate their school life. Forty in a class is an injustice to the youngsters and a crime against the teachers.

These schools will be a long way from the crowded centers, you say. Sure! So are our homes from our business offices. Rapid transit will care for that. Have school-cars morning and afternoon. Instead of expecting a youngster to be at school at such and such a time, he'll have to be at such a corner at a certain time to get the school-car on such a line that

(*Concluded on page 563*)

Some Special Exercises for the Business Woman

By Anne Guilbert Mahon

WHEN I found, after a year of office work of strenuous days from 9 A. M. until 6 P. M. spent bending over a desk or the typewriter, that I was becoming round-shouldered and hollow-chested as a result of my cramped attitude, that my breathing capacity was not so great as it had been, and that I contracted cold easily, I thought it quite time for me to take some measures to remedy this condition. My physician was one of those who believed in prescribing the "ounce of prevention," and when I consulted him for treatment for a severe cold, he said to me: "Your system is run down from the nature of your work and office confinement. That is why you take cold so easily. What you need is more fresh air and more physical exercise. Join a good gymnasium — some evening class. It will do you more good than any medicine I can give you."

FIG. 1

I acted on his advice immediately. There was a college not far from my home where the night classes were excellent, and I joined the gymnasium class at once. Apart from the enjoyment and exhilaration which those evenings afforded me, I soon found a great improvement in my condition. My round shoulders were straightened out. I found myself unconsciously holding the right position while at work and at other times. My breathing capacity was greater, and, after a short time, my tendency to catch cold entirely disappeared. I practised the home exercises faithfully, always devoting at least ten minutes to them upon rising, and the same time upon retiring. On the evenings I spent at the gymnasium of course I omitted the evening practise.

I became an enthusiast over physical culture, obtaining and reading all the magazines and books

FIG. 2

I could on the subject. Later, when the gymnasium class closed in the spring, I joined a private class in physical culture, where the exercises varied slightly from those I had learned at the gymnasium, but were equally good. I kept a physical-culture note-book, jotting down in it every variety of exercise which I found, so that I had a large list of good ones to choose from, and varied my daily schedule from time to time, always retaining those which I felt I most needed.

Finally, out of my large list I selected seven which I thought were of the most value to me, to offset the bad effects of the bent position I must keep during the day, and to bring into use the muscles which were being unused, owing to my sedentary life. I made out my list in the order which afforded as much variety as possible, i. e., after an arm exercise a leg or trunk movement should follow, thus giving one set of muscles a rest while I exercised a different set. The exercises were taken in loose clothing, before an open window, with as much fresh air as possible in the room. They were the following:—

1. "*Thumbs Locked.*"—This was so called by my physical-culture teacher, who contended that it was the best all-round exercise any one could take.

Standing position: Heels close together, toes pointing out, weight on balls of the feet, head up, chest held high, arms hanging down in front, fingers pointing to the ground, and thumbs locked. In this position raise arms slowly in front until high over head, inhaling deeply all the while (Fig. 1). Hold arms high over head and hold breath for a second, then unlock thumbs, separate arms, with palms held out, and bring them down slowly,

FIG. 3

extended straight out at the sides of the body, exhaling slowly at the same time.

This exercise practised frequently during the day will do much to counteract that feeling of bodily fatigue which every desk worker feels, and will straighten out round shoulders and exercise almost every muscle in the body.

2. "*Swimming Movement.*"— This is a familiar exercise to most physical culturists, and consists (while maintaining correct standing position) of raising the arms on a level with the shoulders, bending elbows, and resting the backs of the thumbs and first fingers on the chest. The movement is made by pushing the hands out forcibly, as in swimming, and bringing them back to position on the chest. The exercise, to be beneficial, should be done with force, and the hands should be extended as far as possible at all times when making the half-circle (Figs. 2, 3, 4).

3. "*Knees Raise.*"— Standing position. Hands placed on shoulders. Raise right knee very slowly, with toe pointing to the ground, as high as possible, trying to raise it to a level with the chest. Alternate with left leg. This is a splendid exercise for the sedentary worker, as it exercises those muscles which are usually dormant. It is also said to be a remedy for constipation.

4. "*Arm Extensions.*"—Correct standing position, as described in the first exercise, should be kept in this as in all the other movements.

(*a*) "Arms Stretch." Hands resting on shoulders, elbows held down close to the sides. Extend arms forcibly upward, keeping them parallel and close to the ears. Stretch as if trying to touch the ceiling, then bring them down to first position. In this, as in all the arm-extension movements, the arms and hands should be kept perfectly straight. Bring hands back to position (resting on shoulders) after each movement.

(*b*) "Arms Reach." Hands on shoulders, elbows down, extend arms directly in front, palms facing. Try to touch the wall in front.

(*c*) "Arms Sidewise." Extend arms

FIG. 4

forcibly at each side, palms down, arms on a level with the shoulders. Stretch as if you were endeavoring to touch the wall at each side.

(*d*) "Arms Downward." Extend arms forcibly downward, fingers pointing to the floor.

(*e*) "Arms Backward." The same movement as the last exercise, but with the fingers pointing back of the body, palms out.

FIG. 5

5. *Trunk Movements.*— These are to stimulate the internal organs, to strengthen the muscles of the waist and back, and to exercise unused muscles, all of which are so essential to the sedentary worker.

Standing position: Hands resting on shoulders.

(*a*) "Trunk Backward Bend." This should be done very slowly and carefully, taking care never to strain nor to bend too far. The movement is made by trying to raise the chest slightly, allowing the head to go back ever so little. Great care must be taken in this exercise not to strain. It should always be taken slowly, and the bend should be very slight.

(*b*) "Trunk Forward." Bend forward toward the floor, keeping the knees rigid, the movement being made from the hips (Fig. 6).

(*c*) "Trunk Sidewise Bend." Bend as far as possible to each side, keeping knees rigid and bending from the hips (Fig. 6).

FIG. 6

(*d*) "Trunk Twisting." Slowly twist body to the right, then back; to the left, and back to first position. This exercise must also be done very slowly, to be of benefit, and the knees must be kept perfectly stiff, all movement being from the hips. Do not allow the head to drop forward.

6. *"Arm Circumduction."*— Arms extended straight out from the shoulder as far as possible, fingers held out straight, palms down. Describe a complete circle with arms, the movement being made entirely from the shoulders. Breathe deeply while taking this exercise.

7. *"Steeple Hands."*—Arms extended high over head, parallel and on a level with the ears, finger-tips touching. In this position bring arms down slowly in front until touching the floor, keeping body perfectly straight and knees rigid. This exercise will be found hard to do at first, but "practise makes perfect," and after a few trials it can be accomplished with ease.

Any woman practising these exercises ten minutes each morning, at the same time inhaling fresh air, and following them with a cold sponge and a brisk rub, will be wonderfully invigorated for her daily work.

Man's Struggle for Existence

George Henry Heald, M.D

WHATEVER we may think of the cruelty of the process, nature is constantly eliminating the "unfit" for the benefit of the "fit." As some one has said, "Nature is severe with the individual, that she may be kind to the species." By a process of elimination of the weak, only the stronger, as a general rule, grow up to perpetuate the species. This is the normal condition as we find it in the brute and plant creations, the process of nature (which I may define as "the mechanism of the universe") for the preservation of vigorous species. This elimination of the unfit is accomplished by the struggle for existence — the antagonism between organism and organism to determine which shall have the field. It is often a struggle to the death, which constantly destroys the weaker of all species. As a rule, the weaker are cut off.

Man's Struggle With Man

In a sense there is a struggle for existence between man and man. The stronger rises on the shoulders of the weaker. Wealth and poverty are both in a sense cumulative; so are health and disease, power and weakness, knowledge and ignorance. In general, the wealthy and powerful tend to grow more so with but little effort, and the poor and weak tend to grow more wretched in spite of effort; though there are some strong counter-currents to the smooth flow of this rule. Naturally, the man without the capacity to amass a reasonable portion of this world's goods is unable to protect himself against the weather, against disease, against hunger. With him, the struggle against these foes is fierce, and he is in every way handicapped; and were it not for the fact that charity organizations of various kinds have stepped in to prevent, by means of hospitals, almshouses, visiting nurses, and other relief measures, the merciless results of the struggle for existence on the weaker party, his undoing would be even more apparent than it is.

Man's Fiercer Struggle

But man is engaged in a fiercer struggle than that with his fellow man, — a struggle with invisible enemies, the result of which determines very largely what will be the outcome of his struggle with his fellow men. In other words, his efficiency as a world's worker depends very largely on the result of his struggle with his unseen enemies. If he is the victim of the hookworm, or if he harbors the organism causing sleeping-sickness, it is certain he will not exert any positive influence on the world's progress. If he has tuberculosis, or leprosy, or venereal disease, or any other chronic infection, his usefulness and efficiency are limited. If he is

a victim of pneumonia, or typhoid, or diphtheria, or other acute infection, such as meat-poisoning, his existence may be suddenly terminated.

The Intestinal Putrefactive Germ

But it is not only in the matter of infectious diseases that man contends with this arch-enemy for his right to existence and health. There are many germs which, though not generally recognized as producers of specific infectious diseases like those just mentioned, are capable of causing chronic ills that greatly diminish the efficiency of the victim and shorten his life. In fact, it is a question whether the greater part of man's ills are not "digestive;" that is, due to harmful changes in the food while it is passing through the body; and it is to this struggle between man and the putrefactive germs in his intestines that this article is especially devoted.

Semi-Invalidism

Many half-invalids who are seeking for an elixir of life in the form of various patent medicines, or who are squandering their hard-earned dollars on quack doctors or fake appliances, or who, perhaps, are taking the medicine of one physician after another in a vain effort to regain health, have troubles which originate in the fact that the food they eat "goes wrong." That is, food that should be converted into tissue and energy, is by the action of the putrefactive germs transformed into irritating substances that cause some local distress, gases that produce flatulence, and poisons that are absorbed in such quantities as to overtax the capacity of the poison-destroying organs.

Poison-Production Versus Poison-Destruction

If the poisons are thrown into the system faster than the poison-destroying organs can dispose of them, there will be suddenly such symptoms of systemic poisoning as a bilious attack, a headache, a sleepless night, an attack of neuralgia, a fit of mental depression, etc. There may or may not be vomiting and diarrhea, loss of appetite, etc., but in time the bodily defenses get the upper hand, the poisons cease to be absorbed faster than they can be taken care of by the body, and the health is restored to somewhere near the old level. In some persons these attacks of acute poisoning occur at more or less regular intervals, each spell being followed by a period of comparative health.

Chronic Invalidism

When, as a result of overwork, frequently repeated, the poison-destroying organs and the poison-eliminating organs are partly disabled, there is a condition of chronic invalidism which no drug and no treatment can adequately reach. The only procedure offering any hope is the removal of the offending germs from the intestines, as far as this may be possible, and the limitation, by this means, of the production of poisons. But even this does not offer much hope; for in these old, chronic cases the harmful germs have so habituated themselves to their environment, and the intestinal wall has so far lost its functions, that it is almost an impossibility to effect a change in the intestinal microbes that will be at all permanent. It is the part of wisdom to prevent this condition. "An ounce of prevention is worth a pound of cure."

Preventive Treatment

In other words, the time to treat this condition is *before it is established.* And the treatment is not necessarily arduous. It consists principally in a careful adjustment of the body to the conditions of its existence; that is, in a rigid application of the rules of hygiene, including:—

1. Diet; *bacteriologically* clean foods, in proper amount and proper proportion.

with the abandonment of indigestible and irritating foods.

2. Air; thorough ventilation and deep breathing.

3. Exercise, rest, and sleep, properly regulated. Rest includes sexual and mental as well as physical rest.

4. Cleanliness, inside as well as outside, moral as well as physical.

5. Cheerfulness and hopefulness.

In the earlier stages of intestinal disorders, before conditions have become fixed, an adherence to these hygienic rules, which will be dwelt upon more at length later, will probably stay the disease process.

Treatment of More Advanced Conditions

When the condition has become chronic, other measures in addition to the foregoing will be necessary, and the chance for recovery will depend very much upon the progress of the disease. The additional measures are: —

1. Fasting, or very special diets selected with particular reference to the character of the disease process and the reactive powers of the patient. With a very limited diet, the rest-cure is enforced, in order to conserve the energy of the patient.

2. Flushing of the colon, repeated as necessary.

3. Lavage of the stomach when necessary on account of decomposition in that organ.

4. The use of lactic acid ferments, preferably in the form of fermented milk, or a fermented solution of milk-sugar.

5. In some cases the use of cathartics and of intestinal antiseptics may be of some benefit.

These measures, it need scarcely be added, should be followed under competent medical direction; for the patient who needs such a course of treatment, even though he himself is a physician, is no judge of what he needs. "He who treats himself has a fool for a patient, and a fool for a doctor."

OUR SCHOOL SYSTEM

(*Concluded from page 556*)

passes then,— reserved car for the youngsters, which will pick them up in such a district and land them at such and such a school, without expense to poor people; the city can pay a bulk fare, and still make money on the difference in cost of property and the maintenance of many small units scattered about. Or the item of school service may be put in the company charters.

Nothing is so economical as big centralized plants. Why, I even dream of a sort of school settlement, not a series of big schools around a city, as here tentatively suggested, but one great school town, the superintendent right there, with all his schools about him; a great gymnasium, attractive villas and apartments and amusement halls for teachers, swimming-pools and what-not for all the children. Why not a school town as well as a university town?

Just get started thinking of such a scheme, its possibilities, the simplifying of school machinery, the competition element of juxtaposition, the formative acquaintances to be made by the children, the health-giving country air, the help to the teachers, and you'll grow enthusiastic too, and "see things."

Keeping Clean Inside

William J Cromie

Instructor in Gymnastics, University of Pennsylvania

MOST of us are very careful about keeping clean on the outside, taking a certain number of baths weekly, and washing the hands and face when necessary; but how many of us give any thought to keeping clean inside? While we may not eat the proverbial peck of dirt, there are still many things that tend to make us dirty inside. We may not swallow dirt, but it is certain that we breathe it in through the mouth and nostrils.

The first thing, then, is to take pains to breathe only fresh air, as free from dust and gases as possible. When we must breathe bad air in crowded halls and street-cars, we should be careful to keep the inside mechanism of the body clean and in good working order, so as to withstand these enervating influences. Micro-organisms in the air will not hurt us unless they lodge in unclean and diseased tissue, or, in other words, in suitable soil for propagation.

Practise deep breathing while in the open air; for this is an "air drinking" exercise that will help to keep one clean internally. A little daily physical exercise is absolutely essential in keeping the internal mechanism well oiled; it acts as a polishing device, keeps away rust, and burns up dirt and filth that have not been eliminated. Every day, bend the body forward and backward, sideways to the right and to the left, and twist about from right to left, repeating each of these from ten to thirty times. Lie on the back, raise both legs, then raise the body to a sitting position. Take a brisk walk out-of-doors, regardless of the weather.

Overeating causes more internal "dirt" than anything else. Improper foods and too rapid eating form the cobwebs of disease. Laxative foods should be included in our dietary, as they are "the broom of the stomach." One of the following foods should be in each meal: apples, peaches, prunes, strawberries, cherries, currants, raspberries, grapes, plums, oatmeal, figs, lettuce, spinach.

A glass of cold water should be taken in the morning, and another at night, besides seven or eight during the day. This tends to give the body an internal bath; besides, the system needs at least this much water. However, do not drink much at meals, as liquids dilute the gastric juice, which is so necessary for digestion.

Once or twice a week spray the nose and throat with a mixture of borax and water; gargle the throat, and wash it externally with cold water daily. Where this does not suffice, it may be necessary about once a month to "clean house" by taking Epsom or Rochelle salts in lemon juice, or a colon lavage. It is unnecessary to mention daily bathing, cleaning the teeth after meals, etc., yet we are prone to become careless about keeping clean inside.

Philadelphia, Pa.

GUARD *the* HEALTH *of* YOUR CHILDREN

A. E. SCHELIN.

NATURE amply rewards those who follow her closely. A natural man is a healthy man. The sickly man is in some way out of touch with nature. He has not understood his physical construction, and has not known how to adapt himself to nature's requirements. In his early years he went to excess. In his old age, when he pays with compound interest the debts of early life, he bitterly laments his youthful ignorance and folly.

Had he been taught in childhood how to be careful of his body, and why he should be careful, how much better, how much more efficient, and how much more useful and happy, he might have been!

Is it not his duty, and my duty, and your duty, as parents, so to rear our children that they will benefit from our experience, and have good health to thank us for when they are older?

Physical efficiency is the foundation of all efficiency. In order to be a strong race, we must give more attention to physical development. A man's physical health is like the foundation of a house. The better the foundation, the more can be built upon it. If it is weak, its burden will crush it, and all will go down together.

If children were thoroughly taught the value of physical development, their capacity for intellectual development would be far greater. Many children grow up with the impression that they can endure almost anything, and as a consequence they tax their physical organs in many foolish ways. When a wagon is new, it will stand much rough usage without breaking down; but the effects of this rough usage will show as it gets older. If children could comprehend this; if they could be made to know that every wrong use of the body, every careless indulgence, every excess, is that much in preparation for an early breakdown; if they could understand that later efficiency depends on the economy of their powers in youth, they would be more careful not to misuse them.

The child should be made to realize that without good health one can not make the best use of an education. In fact, no one can consider himself truly educated who does not understand what is necessary for the proper care of his body and the development of all his powers.

If at school and at home our children were taught the value of hygiene; if, in addition to these theoretical lessons, cleanliness and personal hygiene, mastication, deep breathing, and physical exercise were encouraged, rewarded, and if necessary, enforced, we should soon have a nation of healthy — and therefore happy and efficient — people.

Advocates of moral reforms will make the greatest advancement when they begin by teaching the importance of physical reform. When we have more walking and less car-riding, more careful mastication and less gluttony, more natural living and less following of fads and fashions, we shall have an excellent foundation on which to build up great moral reforms.

And the place to begin such reforms is with the children. Those who have fixed habits of life do not often change,

much as they may appreciate the desirability of change. The time to work a reformation in habits is in the plastic period of childhood, when the mind and the habits, like the bones, may be molded into almost any shape.

There is much agitation for a national department of health. Such a department will be of great value in many ways; but meantime every family should establish its family department of health. So far as the home and the well-being of its inmates are concerned, such a department will be of far greater value than a national department.

In establishing such a department it will be necessary to make use of reliable health books and health magazines. Also the services of the family physician, as personal adviser and counsellor in health, will be invaluable. Remember that the early health habits formed by the children, and the lessons learned by them regarding the care of the body, will be of incalculable value throughout life.

Effects of Hydrotherapy

Through The Nervous System, And Local Effects

G K Abbott, M D

[This is the second of a series of papers prepared from the manuscript of a book on hydrotherapy for nurses by Dr. Abbott. The first article, which appeared in the August issue, showed the effects of hydrotherapy on the circulation. Articles will follow showing the effect of hydrotherapy on the composition of the blood and upon muscular strength.— Ed.]

DURING health the nerves exercise a continual control over the activity of the various organs and structures of the body, so that their functions are performed in a normal manner. It is possible so to stimulate these nerves as to increase the activity of a function. On the other hand, by cutting off the nerve supply, or depressing the nerves, the activity of an organ may be decreased. This is especially manifest in the blood-vessels, since changes in their size and action are very apparent. One experimenter found that ice applied to a nerve-trunk caused the blood-vessels of the pia mater of the brain to contract. Ice applied to a small skin area of the head or face, causes the same result, while warm water produces opposite conditions; viz., dilatation of the blood-vessels.

While strong stimulation of any nerve in the body may cause changes in all or nearly all of the blood-vessels of the body, yet these changes in size are most pronounced in certain parts which have the most perfect nerve connection with the part stimulated. For example, an ice-bag applied over the stomach may cause a brief change in the size of the blood-vessels of the brain, but the pronounced and lasting changes are in the blood-vessels of the stomach. We may therefore say that for each internal organ there is one area, which, when stimulated, causes the greatest change in the blood-vessels of that organ. In all or nearly all instances, this area of most direct nerve connection, through which a maximum effect is obtained, is the skin surface over that organ. Effects that are produced because of nerve connection are known as reflex effects.

The following are a few of the more important effects upon the internal organs produced through nerve connection with the skin: —

1. Cold applied over the trunk of an artery causes contraction of the artery and of its distal branches. Example: Ice-bags applied over the carotid arteries decrease the blood going to the brain and head generally.

2. An ice-bag applied over the heart slows the heart-rate, increases its force, and raises arterial blood pressure.

3. Long cold applications to the chest, at the back, front, or sides, contract the blood-vessels of the lungs, slow respiration, and increase its depth.

4. A short cold application to the chest, as a cold rub, cold friction, or cold douche, at first increases the respiration-rate. Soon it results in deeper respiration, with a somewhat slowed rate.

5. The reaction from a moderately prolonged cold application to the epigastrium causes increased gastric secretion.

6. Hot moist applications to the chest facilitate respiration and expectoration.

7. Long-continued moderately hot applications over the stomach after meals increase gastric secretion and hasten digestion.

8. Prolonged hot applications, such as fomentations to the abdomen, lessen peristalsis, and are a help in checking diarrhea.

9. A large hot application to the trunk, as a hot trunk-pack in biliary or renal colic, relaxes the muscles of the bile-ducts, gall-bladder, or ureters, and aids in relieving the pain due to spasm of these muscles.

Mechanical Effects Through the Blood-Vessels

In health a warm application to the skin surface draws blood about equally from all parts of the body, chiefly, however, from the interior. Where there are congested organs or parts, a hot application will draw proportionately more blood from the congested organ than from the other parts of the body. The decreasing of congestion is known as depletion, and the means of producing it as derivation. While large and distant areas are often used to secure derivation, yet in some cases other areas nearer to the congested organ are more useful.

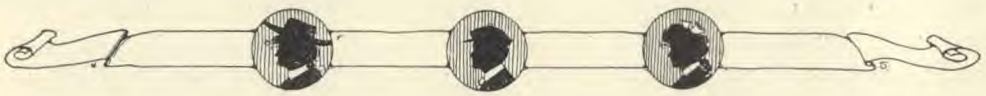
The following are a few of the organs frequently congested, together with a list of the areas used for purposes of depletion: —

1. The brain. Blood may be withdrawn from the brain by applications to the feet, legs, or the entire lower limbs; also to the spine and entire surface of the trunk.

2. Spinal cord. If spinal congestion is not extreme, large fomentations to the spine are useful; also hot applications to the feet and legs.

3. Throat and larynx. Applications to the neck, either fomentations or the heating compress.

4. Lungs. It is necessary to use applications to large areas, since the lungs may contain so much blood when congested. These areas are the feet and legs, and the entire skin surface of the trunk and hips. In pleurisy it is best to use a fomentation directly over the affected area.



THE WONDROUS WISE MAN

A SONG OF THE JUNIOR CIVIC LEAGUE

(Tune, "Yankee Doodle")

There was a man in our town,
And he was wondrous wise:
He threw some paper in the street,
Right front of people's eyes;
And when he saw that paper gone,
With all his might and main
He jumped into the street — he did —
And picked it up again!

Encore

He put that paper in the can,
As every man should do, sir;
He went and joined the Civic League.
And was that wise man you, sir?

THE CANNING OF FRUITS

George E. Cornforth

THE time when fresh fruits, which may be called nature's "health foods," are in season being so short in this latitude, it is very desirable to preserve them in as nearly natural a state as possible.

Healthful cookery does not include the preserving of foods by the use of salt, vinegar, sugar, or chemical preservatives. Any of these substances which preserve foods against the attacks of germs preserve them also against the action of the digestive juices. Chemical preservatives are injurious to health. We shall therefore give, in this lesson and the following, healthful methods of preserving fruits and vegetables.

The fermentation and decay of fruits and vegetables are caused by germs which are everywhere present. Most of these germs are killed by a temperature equal to that of boiling water, if subjected to it long enough, and a temperature several degrees below this is sufficient to destroy some of them. The secret, then, of canning fruits or vegetables is to cook the foods sufficiently to destroy all germ life which they may contain, and to seal them in air-tight receptacles while they are so hot that germs can not live in them. If sealed under these conditions, they must keep indefinitely.

I shall first give a few general directions for canning, then give specific directions for each kind of fruit.

If Mason or "lightning" jars are used, see that the covers and rubbers are perfect. The jars may be tested by partly filling them with water and standing them bottom upward for a time before using them. If they leak, there is some imperfection that must be remedied. It is hardly safe to use rubbers a second time. It is better to buy new ones each season than to lose the fruit as well as the time spent in canning it. Mason jar covers are sometimes damaged in opening the jars, and should be carefully examined before they are used a second time. If there seems to be any possibility that they will not properly seal the jars, they must be rejected. Of course, the jars must be so thoroughly washed that they will be perfectly clean.

The fruit selected for canning should be of first quality, fresh, sound, ripe, but not overripe. That which is not good enough to use fresh will be liable to spoil if it is canned. Graniteware or aluminum kettles should be used, and the fruit should be cooked gently, but so thoroughly that all germ life in every part of it will be killed. This will require from fifteen minutes to one-half hour, according to the nature and size of the fruit.

If the canning is properly done, the addition of sugar is not necessary to make the fruit keep. When enough sugar is used to "preserve" the fruit, so that it will keep even though imperfectly canned, its wholesomeness is spoiled. Only sufficient sugar should be added to

make it palatable. After the can is sealed, it should be watched for a few days to detect any signs of fermentation. If such appear, the fruit may be saved by opening the can and boiling its contents. It is best to use such fruit at once, as recanning may not preserve it.

When using foods that have been canned in tin, always remove them from the can as soon as it is opened. This precaution may prevent serious poisoning.

The amount of sugar given in the following recipes is only a suggestion. Some may like more, others may think it better to use less. The less you use, the better. It is well to cultivate a taste for fruit with little sugar.

To Can Strawberries

Select sound, highly colored fruit, and put it up the day it is picked if possible. Wash the berries in cold water, lifting them out of the water with the hands, thus allowing any sand or grit to settle to the bottom of the pan. Hull the berries; and as they are hulled, measure them and put them into a graniteware or aluminum kettle or pan. Over each quart of berries sprinkle from one-half to three-fourths cup of sugar. Allow the berries to stand overnight. In the morning drain off the juice, and put it on the stove to heat. When it boils, carefully put the berries into it, and boil them gently for fifteen minutes or longer, using a graniteware spoon to keep the berries under the sirup, and to remove the skum. Have the jars perfectly clean. Put the covers into boiling water. Set the jars into a pan of hot water on the stove beside the kettle of boiling fruit. Dip the rubbers into boiling water, and put them on the jars. Keep the fruit boiling while the jars are being filled. Put a little fruit into two or three jars; this will warm them, and they will be less liable to break. Then fill one jar till it begins to run over. See that there are no seeds nor fruit on the rubber. Remove one of the covers from the boiling water, and put it on the jar, tightening it securely. Set the jar bottom upward to cool, but not on a cold, wet surface or in a draft. If you are using Mason jars, tighten the covers frequently while the fruit is cooling. If a jar leaks, and can not be securely tightened, its contents must be returned to the kettle, boiled, and put into another jar. When one jar is sealed, fill another, putting a little fruit into each jar a few minutes before it is to be filled. There will be more juice than is desirable if the fruit is to be used for sauce, so some jars may be filled with fruit, and others with juice alone. This may be done with all kinds of berries, and thus you will have a nice supply of a variety of fruit juices. The canned fruit should be stored in a dark place, or wrapped in paper to keep the light from it, as it loses its color if exposed to the light.

To Can Blackberries, Raspberries, and Other Small Fruit

Carefully pick over and wash the berries. Use from one-third to two-thirds cup of sugar to one quart of fruit. Put the fruit to cook in a very small quantity of water. Heat slowly, and boil fifteen minutes longer. Then follow the directions for canning strawberries.

To Can Peaches

Select sound, ripe peaches. Wash, divide, stone, and pare them, putting them into cold water to prevent discoloration. Place the fruit in a kettle, sprinkling each layer with sugar, using one-fourth to one-half cup to each quart of peaches, or, if preferred, the sugar may be omitted. Add a little boiling water, only sufficient to cook the fruit. Heat slowly. Boil fifteen minutes or longer, till the peaches are tender. Then follow the directions for canning strawberries.

Pears and apples may be canned in a similar way.

To Can Plums

Prick each plum to prevent its bursting. Use from three-fourths to one cup of sugar to one quart of fruit, according to the acidity of the plums. Follow the directions for canning other fruit.

To Can Cherries

Cherries may be put up whole, like plums, or they may be stoned first. Use about one-half cup of sugar to one quart of fruit.

Quinces and Sweet Apples

These may be canned together, using from one-fourth to one-third cup of sugar to one quart of fruit. Quarter, core, and pare the fruit. It is well to cook the quinces until tender before adding the apples. Then cook till the apples are tender, and can as you would other fruit.

Crab-Apples

Crab-apples may be canned whole, following the recipe for plums, or they may be halved and cored before cooking.

The Grape

The grape has been cultivated for thousands of years, as we know from ancient Egyptian and Israelitish history. It is widely distributed, growing wild in many countries. Of the ten species indigenous to the United States, four have been cultivated, and have given rise to numerous varieties used for wine-making purposes. A comparatively new but constantly increasing use for the common Concord grape is the making of grape juice, or sweet wine, which is valuable in illness, and makes a delightful and refreshing drink at all times.

To Make Grape Juice

Use Concord grapes. Pick them from the stems, rejecting imperfect ones. Wash well. Put them into a graniteware or aluminum kettle. To each three quarts of grapes add one quart of hot water. Stew till the skins burst, and the pulp is well softened, but do not cook too long, for that will give the juice a strong flavor. Put the grapes into a bag made of two thicknesses of cheese-cloth, and hang them up to drain. Allow them to hang till all the juice which will drain out has done so. This juice may be bottled as first quality. The bag may then be squeezed to remove the rest of the juice, which may be bottled as second quality. To bottle the juice add to each quart one-third cup of sugar. Boil the juice five minutes. Have the bottles thoroughly clean. Set them in a pan of water beside the kettle of juice. Fill the bottles full with the boiling juice. Have corks in boiling water to soften them. Use corks that will fit tightly. Remove one of the corks from the boiling water, and put it into the mouth of the bottle right on top of the juice. As the juice cools and contracts, press the corks into the bottles. When the corks have been pushed in, seal them by dipping the end of the bottle into melted sealing-wax or paraffin; or if the cork can be pushed in a little below the neck of the bottle, fill the neck of the bottle above the cork with the melted wax. The juice may be put into glass jars, as fruit is canned. This juice is about equal parts of grape juice and water. If desired stronger, add one pint of water to three quarts of grapes. If it is desired to bottle the juice pure, crush the grapes, and cook them in their own juice till well softened. Then proceed as directed when the grapes are cooked in water. The juice may be bottled without sugar or with from one-third to one-half cup of sugar to the quart of juice. This juice may be used pure, or it may be diluted as desired.

One common-sized basket of grapes makes one and one-half quarts of grapes when picked from the stems, and is sufficient for about one pint of pure juice.

A chafing-dish in which the properly cooked fruit is kept boiling while it is being filled into the jars, which are placed in a dish of hot water. To the right of this is a dish of boiling water in which are the jar covers, and into which the rubbers are dipped just before they are put on the jars, also a towel with which to wipe the jars.

THE MEDICAL MISSIONARY AT WORK

PREPARING FOR MEDICAL MISSIONARY WORK

H. J. Williams

BEFORE leaving Great Britain, for medical missionary work in South Africa, I felt impressed that it was my duty to get all the knowledge and experience possible while in the home land. Consequently, I spent two additional years in various hospitals, making a special study of surgery. In this connection I may say that, although I have been connected with our sanitarium in South Africa only eight months, I have found this knowledge to be exceedingly valuable, and it has already repaid me for the additional time and labor expended.

While studying in Edinburgh, I had the good fortune to become acquainted with a number of medical missionaries who had labored in different parts of the world, as well as many volunteers, who, like myself, were preparing to enter this work. The Edinburgh Medical Missionary Society is the oldest and largest society of its kind in the world. I had the good fortune to become acquainted with Dr. J. W. Ballantyne, the president, and Dr. Fry, the secretary, from whom I received much encouragement and many valuable suggestions.

While studying at Edinburgh, like many other students pursuing a long course requiring large sums of money, I ran short of funds on one or two occasions, and so, in order to pursue my studies, I had to seek some method of raising money, such as doing locum-tenens work for a few weeks, and then going back to the hospitals.

On one occasion I accepted an appointment as surgeon on a vessel going to Canada. There were a large number of passengers, many of whom were sick, especially among the emigrants, the weather being very cold and rough. I had an excellent opportunity to assist these people both physically and spiritually. This voyage was unexpectedly prolonged, owing to a case of smallpox on board, which necessitated the quarantining of a large number of passengers.

Upon returning to Great Britain, I pursued my work in the hospitals for several months, afterward accepting an appointment on a vessel bound for South America, and returning by way of the West Indies and New York. This vessel carried a large number of emigrants from Portugal to Brazil, and, although I was unable to speak the language, I was able to assist many of them physically, and to make them feel that I was interested in them.

My special purpose in taking this South American voyage was to study tropical diseases. While on shore, I visited the hospitals as often as possible. I was somewhat handicapped by ignorance of the language; but as there were English hospitals as well as English-speaking doctors in nearly all the other hospitals, I got along very well.

At Rio de Janeiro I looked up our mission workers, and spoke to the church one Sabbath through an interpreter. The laborers in this country wish very much to develop the medical missionary

work, and it seemed to be a needy field. I see no reason why such work would not prove successful.

After leaving South America, our first call was at Barbados. Here I was glad to meet Dr. Chas. Cave and his wife, who have been carrying on medical missionary work in this beautiful little island for some time, with good success. I was sorry not to be able to see Dr. Greaves and his wife, laboring in British Guiana.

After a three months' voyage, I returned to Liverpool, spending most of my time on board ship. During the return journey, I prepared for my examinations, but also spent considerable time in Christian conversation with the passengers and members of the crew, and in giving health and Bible talks.

After successfully passing my advanced examinations, and being admitted as Fellow of the Royal College of Surgeons, I immediately made preparations to sail for South Africa.

Having enjoyed my experience as ship's surgeon, I secured an appointment on a vessel bound for African ports, expecting to make only the outgoing voyage. The first part of the trip was rather boisterous, but after rounding Cape Good Hope, the weather was fine. Our vessel called at the principal ports along the east coast of Africa, as far as Beira, and on returning again called at the ports, the last one being Cape Town, at which place I expected to be relieved; but unfortunately the man whom I expected to take my place back to England, failed to appear, and I was reluctantly compelled to leave my wife and little one ashore and return with this vessel to England. This was a great disappointment to me; but believing that the Lord overrules, and that every experience is permitted for our good, for some lesson it is desirable for us to learn, or for some duty we must perform, I soon reconciled myself to the circumstances, and endeavored to spend the time as profitably as possible in conversation with the passengers and crew, and also in giving medical missionary lectures for those on board.

Upon arriving in England, I sought the first boat returning to Africa. The ship was very crowded, my berth being the last one available. I spent the three weeks of the voyage in a manner similar to that of the previous voyages. My lectures in the smoking-room were usually crowded. As there were no ministers on board, I was asked to take the Sunday evening service, which I was glad to do.

On my arrival in Cape Town, I found my loved ones and friends anxiously awaiting my return, and I also found plenty of work.

The Lord has greatly blessed our work thus far, and we have been gratified to see some restored to health and strength, and still more rejoiced are we to see them turn to the great Medical Missionary.

A LETTER FROM JAVA

Lily M. Thorpe

OUR new home in the city of Weltevredon, a suburb of Batavia, is in the Arab quarters, where night and morning we listen to the monotonous droning of the Mohammedan priests as they read the Koran. Although they seem so religious, they are very wicked.

There are a host of miserable beggars in these large Eastern cities, maimed, decrepit, blind, and afflicted with terrible sores. These men, women, and children have been deformed by the Arabs for profit. They are sent out in twos, one leading the other, to beg from door to door. Some of them have their

hands and feet so deformed as to be useless, and have to crawl the best they can; others have huge, hideous sores, into which an irritant is rubbed in order to create an intense inflammation, and so more effectually to call forth the pity of the beholder; others, again, had their eyes put out when they were children. Can any one imagine the horrible torture of some of these children of men? The Captain Arab, so called because he is the officer over the Arab quarters, lives opposite us. He is a wealthy man, owning a ten-thousand-guilder motor-car, and a beautiful carriage besides. This man gives rice and a little flesh each day to a number of beggars who beg money for him. These poor creatures are completely under the control of such men, and plod the streets from morning till night for the pittance in food that they receive, growing more miserable and forsaken as the days pass by. Surely the cry of such enters into the ears of the Lord of Sabaoth.

At the present time there is much sickness in this city. Cholera has broken out again, and there are many deaths. Recently when walking down the street, in ten minutes we met five funeral trains. But amid it all we are encouraged to seek the protection of the covering wings of the Almighty. God is even better than his promise, and so our courage rises continually, and our confidence in him is strong.

FINDING PEACE IN JESUS

John N. Herboltzheimer

WE have had some good experiences in our work during the last few months. God has graciously blessed the efforts put forth, and we praise and thank him for his wonderful goodness.

Recently four young ladies were baptized in the sea near Kobe, Japan. One was a patient at the sanitarium, and the other three were helpers. The patient was a nurse (not one of our nurses), who is afflicted with consumption. A few months ago she was a perfect picture of health; to-day she is nothing but skin and bones. Through kindness shown her by Dr. Noma, by her nurse, and by some of our brethren, she was led to cast her lot with ours. She said she would soon fall asleep, and wished to rest in the arms of her Lord and Saviour; therefore she requested to be baptized. When the elder of the church, Brother Noma, made this plea for her, there were very few dry eyes in the church.

The sanitarium is enjoying a prosperous season. During the last three months it has had more patients than in any previous three months. The Lord is blessing our medical work, and Dr. Noma and her nurses are doing a good work.

Japan seems already to have entered on its round of calamities. Never a year passes but the people in one or another part of this empire suffer from some calamity. Following close on the floods of last fall, the northern and eastern provinces have been flooded again this spring. Recently a fire in Tokyo destroyed 6,340 houses. The exact number of lives lost is not known, but it probably runs up to one hundred.

Our hearts are full of hope and courage, and we are in good health. The outlook for Japan seems brighter than ever before.

THE PUBLIC HEALTH

A COMMUNITY has the obvious right to do whatever is necessary in order to preserve itself from disease and other evil agencies. This right is so self-evident that, in times of emergency, the resort to procedures not prescribed by law are justified in the attending results.

In time of general conflagration there is no hesitation about dynamiting buildings in order to break the course of the fire. No time is taken to secure a court permit. In times of general epidemic, the things needed to be done in order to check the disease are *done*. The permission may or may not be obtained afterward. At such times the injustice to one or two or a dozen is disregarded in the attempt to prevent disaster to all.

It is with this generally conceded power of a community to protect itself at all hazards against harmful influences, that boards of health are constituted, though often the laws prescribing their limitations show lack of appreciation on the part of the lawmakers of the importance of the public health work. Ordinarily the powers and the limitations of such a board are quite sharply defined. But many a city facing a scourge owes its escape not to its health laws, but to some brave man who, in the time of emergency, did not stop to consider the petty limitations set on his work by the law, but who, seeing what needed to be done, did it. It is true this is a hazardous procedure for the man; for it gives the jealous politician "higher up" the opportunity later to sever his political head, on some legal technicality.

A few years ago plague had obtained a footing in San Francisco. Certain business interests and some health officers, thinking it would ruin *business* to admit the existence of plague, denied its existence, and vilified the physicians who had carefully proved the city to be plague-infected. Had it not been for the resourcefulness of a few men who would not be browbeaten by men who regarded their own interests as greater than the health of the city, a permanent focus of plague might have been established in the city.

It is obvious that a community, as a community, has not the technical training nor the executive ability to meet epidemics and similar emergencies. It is at such times that the man with the proper technical training, if public spirited and courageous and gifted with the ability to do the right thing at the right time, may be the means of preventing disaster.

But disaster does not always come suddenly, like an earthquake. We are now threatened with plague, with infantile paralysis, with hookworm disease, with pellagra. These diseases are becoming more prevalent, and the problem of prevention is not one similar to the dynamiting of houses in a fire, but it is the more lengthy problem of learning all about the diseases, their cause, their means of transmission, the conditions that favor these diseases, and what may be done most effectively to limit them.

Tuberculosis is a disease ever with us. The Egyptian mummies show that tuberculosis was already a problem thousands of years ago. It is not a disease that a brief campaign is going to eradicate. All

the present antituberculosis movements, combined and working to the extent of their power, make very little inroad upon the prevalence of the disease. But something is being accomplished. The people are being educated as to the necessity and the advantage of air, nourishment, and sunshine.

To some extent, the tuberculosis curve is downward, but the disease is not about to be eradicated by any means. As a matter of fact, some of us are just awaking to the gravity of the tuberculosis problem.

Do we need health departments? Do we need men who specialize in the knowledge of the prevention of disease? Do we need trained men to watch that epidemics do not get started from infected milk, from infected water, from infected food, from infected schoolchildren, from infected immigrants?

What would we think of the proposition to dispense with the fire department and the police department on account of the expense? To ask these questions is to answer them.

What we need is not health departments poorly paid and bound down with all sorts of silly limitations, but health departments so well paid that they command the services of the most capable men,— men who have had the most thorough training for this highly specialized and exceedingly important work. And these men should not have their technical skill and knowledge all bound up by legislation made by men who know nothing of the situation.

Drug Action and Medical Science

THE stock in trade of certain "drugless healers" who, whether they manipulate the vertebræ, or the mind, or what-not, of the patient, never fail to manipulate the pocketbook as a necessary part of the procedure, is the oft-repeated dictum that drugs never cure disease; drugs are poisons, and poisons should have no place in the human system.

Admitted that drugs are poisons, what then? Some of the glands of the body exist for no other purpose than to manufacture substances, which, if they are present in excess, may act as violent poisons, or if they are deficient, disease or death may result.

The statement that, because a substance is a violent poison in a certain quantity, it must be harmful in any quantity, is now known not to hold good.

Epinephrin, a substance produced by the ductless glands just above the kidneys, while absolutely necessary to the health of the body (Addison's disease is caused by a deficiency of this secretion), in excess is no less poisonous than morphin. Measured by its action on rabbits, one-fourth grain would be a fatal dose for an ordinary man. Yet the absence from the blood of this important substance would be disastrous.

These glands are only one example of many laboratories in the body making minute quantities of substances which in an overdose would be violently poisonous. The fact that a substance is a poison, is no evidence that it may not be useful in the body.

It is, however, evidence that we, in using a poison, are using a two-edged sword, which cuts both ways; and our knowledge of the chemical changes in the body are yet too crude to enable us to use even the best-known drugs with the assurance that while they are accomplishing certain results (e. g., the destruction of the malarial parasite by quinin, or the destruction of the hookworm parasite by thymol), they are not at the same time producing other and unfavorable results.

In fact, we know the contrary; that is, in taking quinin, thymol, and similar drug remedies, we are taking with them certain evil consequences which we can not avoid.

The effort of non-drug therapeutics — at least that which has a scientific basis — is to bring about the desired result without the use of substances known to be harmful. For instance, it is more in accord with reason to fight the malarial parasite by stimulating the malarial defenses of the body, the phagocytes, than it is to use a substance which, while it poisons the parasites, also poisons the phagocytes.

The opposition of the "non-drug" schools to drug medication is too often an opposition based on ignorance rather than knowledge,— an ignorance which is hopeless for the reason that these schools are utterly opposed to the principal means of obtaining a true knowledge of physiological processes — laboratory research.

It is to the credit of those who rely largely on hydrotherapy, that they have abolished this ignorant opposition to all research, have ceased to be "water-cure specialists," and have placed themselves in the attitude of receptiveness to all methods which may favorably influence the physiological action of the human organism.

At the same time, the school which was once thoroughly committed to the drug system of treatment has most thoroughly learned that prevention is better than cure, and is now working more and more into the line of personal and public hygiene.

There is a tendency on the part of the only other school of medicine worthy of the name to drop its old exclusiveness and all sectarianism, and to come onto the only tenable field, that of scientific medicine, using the word medicine in its broad sense.

There is no more reason for the existence of "schools" of medicine than for "schools" of mathematics, or "schools" of biology. As the science broadens, all that is of any value in any of the cults will be absorbed, and the rest will be extruded. Medical science is a great ameba, engulfing, absorbing, extruding, and growing!

Plague and the National Health Service

WITH the expiration of the Sixty-first Congress the immediate hope of passing the bill providing for the establishment of a national department of health has, of course, vanished; but the measure is still a live one, and will not down.

Senator Owen, in order to meet certain objections, amended the bill by making it state distinctly (1) that the national health work shall not exercise any of the functions belonging to any of the several States; (2) that no officer of the department of health is authorized by the act to enter the residence of any person unless invited to do so by the inmate; and (3) that no discrimination shall be made in examinations for positions in the service of the department against any applicant on account of his school of medicine.

This was the intent of the bill in the first place, but this amendment may serve to remove the fears of some who have had objection to the bill on this score.

As to how the national health body acts in States, we have the example of the splendid work of the public health service in the eradication of plague in California. Human plague has been stamped out. San Francisco has been cleaned of rats and made practically rat-proof, and a vigorous warfare is being carried on against ground-squirrels, which, besides being a menace because plague-infected, are a source of constant pecuniary loss to the farmers.

At a meeting of the medical society of the State of California, held at Sacramento last year, Dr. W. F. Snow, State health officer, said:—

"I would only emphasize what our president has said with regard to the work done in California. The State board of health was most fortunate to be able to turn this very serious problem over to the United States service for guidance, and for ninety-nine out of one hundred parts of the work. This is really a national problem, and probably an international one. The State of California could not possibly have met it, and could not even now, after our training with such men as were sent out here to us, handle it alone. I have had some letters which have disturbed me somewhat, which are most important to you. They have come from the East from very reputable men, keenly interested in the welfare of this country. For example, some men of the faculty of Cornell, and others, have heard of plague on the Coast, and have written letters asking for further information, saying that there is the greatest danger of plague spreading eastward through Texas by means of its transfer in squirrels, and therefrom through the rest of the United States. Such statements have come through slight exaggerations with reference to the squirrel problem. There is danger if we fail to control the problem; but the active work being done warrants our statement that both ourselves and the United States are being protected."

This statement shows how the national service, without interfering with the State health service, but cooperating with it, is capable of doing what the State itself is unable to do, in averting what might prove to be a national calamity.

The Owen bill plans to gather into one department all the public health machinery of the national government in order to prevent duplication of work, increase efficiency, and lessen the cost. It in no way proposes to make the national department interfere with the work of States, or in any other way override the Constitution. In fact, if it did, the Supreme Court would soon take care of it.

The International Hygiene Exhibition at Dresden

THE first impression of the visitor is the immensity and inclusiveness of this exhibition; not that it compares, in the floor and ground space and in the size and number of exhibits with, say, the St. Louis Exposition. One here does not require a tram-car to get comfortably around the grounds. But for an exposition devoted to hygiene, it is certainly unique in the amount and variety of the material exhibited and in the excellence of the exhibits.

One may at first be disappointed to find, in an international exposition, that practically all inscriptions are in German. One might reasonably have expected to find at least the principal labels in the three great languages. Yet this would probably have given offense to the Spanish, Italians, and Russians, who, because of their proximity, might patronize the exhibition fully as much as the French and the English. Moreover, physicians nowadays are supposed to understand German; for much of the important medical literature and literature of the allied sciences is in the German language. However, there are physicians who are not acquainted with German, and perhaps many others who would be attracted to such an exhibition only to be disappointed in finding nearly everything in a language unintelligible to them.

The English and Americans are characterized by Continental Europeans as a one-language people, in contradistinction to the French, Germans, and other Continental peoples, who are supposed to be generally conversant with two or more languages. But here in Dresden, where there is a large English and American colony, one is surprised to find that very few Germans speak or understand English. One may go into a restaurant, for instance, and not find a waiter able to speak English. The English and Americans are not the only one-language people.

It was a matter of regret that there was no greater enthusiasm in England and the United States to have part in

this exposition. Many physicians of both nations were anxious to be well represented at Dresden, but neither government could be persuaded to make a substantial appropriation for the purpose; and as a result the British exhibit was very late in its installation, and the United States has no representation whatever.

No pains has been spared to make this exhibition thoroughly representative of every branch of hygiene, personal and public. The physician and the health officer could profitably spend days and even weeks in study here; and the person with no professional learning will find much to interest and instruct. In fact, the attempt to popularize physiology and hygiene, by means of diagrams, wax or clay casts of healthy and diseased tissues and organs, microscopic sections almost without number, stereograms, and apparatus for demonstrating various functions of the body, are admirable in their number and variety, and would delight the teacher of physiology, and render the study of physiology and hygiene a real pleasure.

There are large numbers of statistical tables relating to health conditions in various countries, nutritive values of foods, effects of alcohol, etc. The representations in wax of diseased parts and organs, or of the diseased body as a whole in various diseases, is well worth a careful study. For instance, any parent could well afford to study thoroughly the wax models showing a child with measles, with scarlet fever, with smallpox, diphtheria, etc. The figures showing the horrible effects of venereal disease ought to be a powerful incentive to a clean life; and those representing the condition in smallpox and in vaccinia, with the accompanying statistics, ought effectually to overcome in any reasonable person his objection to vaccination.

There are some amusing things for those who have regarded hygiene as applied largely to the regulation of the diet and the personal habits. For instance, in the building devoted to an exposition of foods there are exhibited as an advertisement or for sale, wine, beer, bitters, punch, sausages, hams, sardines, salmon, and "57 varieties" of sauces, canned fish, etc., chocolate, cocoa, tea and coffee, cigars, cigarettes, and pipes. One sign reads "Manufacturers of the Cigar of Health." There is a demonstration of the manufacture of beer by the hygienic process; i. e., with thorough sterilization and absolute cleanliness.

Among other articles shown in the exhibition stalls are various kinds and flavors of alcohol,— free grape juice, apple juice, and other temperance drinks, drinks containing only a minute quantity of alcohol; jogurt (pronounced yogurt), the real article, caffein-free coffee, lecithin-albumin (wheat-gluten) prepared in very attractive form, and bananas, plantains, and other tropical fruits dried in a form that is appetizing and doubtless healthful. This last line of foods could be introduced with benefit in the American market, but the absurd tariff may prevent.

Back to the Country

As Professor Bailey says, there are two country-life movements, antagonistic to each other,— the "back to the land" movement, attempting to call the ne'er-do-wells of the city into the country; and the "country life" movement, which is an attempt to make rural life worth while, and to retain in the country the good blood now there. But there are those in the city, who although they have made more or less of a success in the city, need the advantage of country life, and are capable of making a success of farm life.

The United States Department of Agriculture has recently issued a pamphlet, Farmers' Bulletin No. 432, "How a City Family Managed a Farm," which recounts in detail the experiences of a lawyer and business man who had been earning three thousand dollars a year, but who, on account of ill health, was compelled at the age of sixty to abandon his lifelong occupation. With his wife, and family of ten children, ranging from two to twenty-one years, he moved onto a farm; and though he was absolutely without experience, his courage, energy, business ability, good judgment, and the moderate capital he had been able to accumulate enabled him to establish a model farm, and to do as well financially as he had done in the city.

The pamphlet, which gives careful details of his experiences and of his income and expenditures, and which can be obtained by sending a postal-card request to the department, is well worth the careful perusal of any one interested in taking up farming as a new business.

Pure Food Law Emasculated by a Decision

THE Supreme Court of the United States has recently affirmed the decision of the lower courts to the effect that the provision of the Pure Food law can not be made to cover cases of falsification regarding the curative properties of a remedy so long as there is no falsification regarding its composition. The decision followed the attempt of the Pure Food officials to put a cancer-cure fraud out of existence. Uncle Sam says Mr. Johnson can lie as much as he likes regarding the curative properties of his remedy, so long as he does not make false and misleading statements regarding its composition.

That means that the Pure Food laws, which were intended to protect buyers of both foods and drugs, permit a man to put up colored or sweetened water or bread pills, and label them "cancer cure," or "consumption cure," or anything he pleases regarding their effects. This would indicate that either we have a very lame Pure Food law, or else that it fell under the misfortune of a very lame decision. We would infer the latter; for the law reads, "The term 'misbranded' . . . shall apply to all drugs . . . the package or label of which shall bear any statement . . . which shall be *false or*

misleading in any particular." (Italics supplied.)

It is said that the intention of the lawmakers is the law. If the men who framed this language had anything in view other than the complete protection of buyers from the false statements of sellers, we would like to have it shown to us. We are from Missouri. And so were three of the Supreme Court judges — Justices Hughes, Harlan, and Day — who dissented from the decision.

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Resorcin Disinfection

Dr. Chalmet's method, described in a French journal in 1909, and quoted with approval in the Boston *Medical and Surgical Journal* of May 4, 1911, seems to offer remarkable possibilities. It is "practical, inexpensive, and claimed to be highly effective as demonstrated by bacteriological tests." A little resorcin powder, fifteen to thirty grains for an ordinary room, is placed on a plate and gently heated over an ordinary alcohol-lamp, the resorcin vaporizing quickly. Not only does this method disinfect the room, but it may, so it is said, be used to prevent the development of disease in those who have been exposed. Frequent fumigation of the sick-room is advocated by the author, and schoolrooms may be fumigated with the children present, as the resorcin vapor may be inhaled without injury, and in many cases with benefit to the respiratory tract.

If this be so, it would be an excellent practise to fumigate schoolrooms frequently during an epidemic of grippe, scarlet fever, measles, "cold," or other diseases transmitted by means of the respiratory passages, including, perhaps, infantile paralysis and cerebrospinal meningitis. Not that such fumigation should be relied on to the neglect of other preventive measures, but it should be used as an adjunct.

Play a Science

The first impulse, on learning that the University of Pittsburg has a professor of play, is to laugh. When we were boys, we knew how to play without the services of a professor. Any one can play. Why not have a professor of swimming among the fish? and a professor of flying among the birds?

The old idea of play was that it was a pastime to occupy children and keep them out of mischief until they grow into a more useful age, where they will need no play. Now we know that play is more than a pastime. It has marvelous educative possibilities; for through play not only the muscles, but the nerves, the intellect, and the emotional nature may all be trained.

The more we realize of the possibilities of play, for evil as well as for good, — and by play, I mean to include all activities that are not directly in the line of toil, the activities in which we engage for the enjoyment of it,— the more we are convinced that there is a decided gain in making a scientific study of play, and of having specialists who can teach the science of play.

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Alcohol and Tuberculosis

Dr. Walter Kern, in the *Zietsch für Hygiene,* reports a series of experiments on guinea-pigs to determine the effect of alcohol on resistance to tuberculosis. A number of guinea-pigs were given from one to two cubic centimeters of fifteen-per-cent alcohol, according to their weight, daily for several months. Animals similar in all other respects, but without the administration of alcohol, were provided for control. Both series of animals were inoculated with equal doses of tubercle bacilli. The alcohol animals invariably died before the controls, and far more of them than of controls succumbed to lobar pneumonia.

Animals born of the alcoholized pigs were less resistant, and died in greater numbers, than those born of the control animals. The doctor concludes that "alcohol, even in moderate doses, diminishes the resistance of the animal organism to infection, and hastens the fatal termination in tubercular infection;" that "alcohol has a deteriorating effect upon the progeny. It shortens the duration of life, and unfavorably influences the course of tubercular infection." These experiments merely confirm the observations of tuberculosis specialists, such as Knopf, who has repeatedly warned the tuberculosis patient against the use of alcohol in the belief that it is "strengthening." The old Book says of strong drink, "Whosoever is *deceived* thereby is not wise."

Britain and the Decimal System

THE council of the British Medical Association has been considering how the decimal or metric system may be adopted for prescription writing, with the least inconvenience and the best results. Heretofore the decimal system has not met with much favor in England. Though other civilized countries, even including Canada, have adopted decimal systems of coinage, Great Britain has clung to the antiquated system. Think of reckoning compound interest, partial payments, etc., in pounds, shillings, and pence! This move of the medical association seems to be a small break in the ice, but whether conservatism and national pride can ever be overcome sufficiently to adopt a decimal coinage remains to be seen.

One thing which has resisted the decimal system in all countries is the measure of time, or the division of the day. It could be very feasibly and conveniently changed, but think of the changes in clocks! Every town clock and every watch would be put out of service! There's the rub. Aside from that, a decimal system for time is as far superior to the present system as our money system is superior to that of Great Britain.

Consequences of Overeating

BOARDMAN REED has recently translated a paper by M. Marcel Labbe which points out that much harm may come from a superabundance of food, no matter how nourishing and digestible it may be. He finds that the digestive disturbances of people living in restaurants are very frequently caused by the excess of food rather than by its quality. Reed names the long list of diseases mentioned by Labbe, and adds to the list arteriosclerosis, which recent writers are much inclined to attribute to overeating. The *Medical Record*, from which the foregoing conclusions are taken, comments as follows: —

"There is little doubt that overindulgence in eating is very frequent in this country, especially in the cities. There is probably no other country in which so large a number of foods are placed on the table. Furthermore, this is essentially a country of restaurants and hotels, where there is a very wide choice of viands. Especially are the breakfasts consumed by the average American often immense in quantity, and not always of the most digestible ingredients. In short, it is obvious that many are digging their graves with their teeth, and it would be well for them if they paid heed to the advice of Labbe and Reed. Moderation in eating is almost as important to health as moderation in drinking alcoholic and other stimulating beverages."

These words are significant, coming as they do from a magazine that does not by any means pose as a dietetic reformer. In our opinion there has been rather too much preaching of late regarding the danger of undereating. It seems to have become almost a craze, notwithstanding the definite work by Chittenden, Folin, and others, showing conclusively that existing dietary standards are too high.

Life Insurance and Health

THE Postal Life Insurance Company, of New York, a company that does away with agencies, and deals directly with policy-holders, effecting a saving which goes largely to the policy-holders, has recently absorbed the Provident Savings Life Assurance Society, and in doing this has continued the health bureau of the last-named company, which had proved to be a very profitable venture. The purpose of this bureau, as outlined in former issues, is to educate policy-holders in the matter of disease prevention.

When it is realized that so small a matter as habitually taking one or two glasses of wine a day distinctly lessens the length of life (that is, one hundred thousand strictly moderate drinkers will show a much larger mortality rate than one hundred thousand total abstainers of the same age), it may readily be appreciated that timely information given by means of periodical bulletins to its policy-holders will materially lengthen the life average of these policy-holders, and thus increase the net receipts of the company.

While this is, so far as the company is concerned, a business proposition, it is not altogether the product of a selfish motive. The insurance company desires that these instructions shall also reach non-policy-holders as far as possible.

Thus the Postal is in reality a life insurance company, in that it actually, by its educational campaign, lengthens life, not only among its own policy-holders, but among those outside its ranks as well.

Another activity of this health bureau is the periodical examination of policy-holders. Many of the diseases which carry off elderly people before their allotted time, such as tuberculosis, cancer, and Bright's disease, may be cured or arrested in an early stage. As a rule these diseases, at this curable stage, manifest no symptoms which alarm the patient, and a physician is rarely consulted until it is too late to effect a cure. The periodical examinations of these policy-holders, arranged for by the medical officers of this company, detect the signs of such diseases in time to save the patient. Here in another way the Postal furnishes a real *life insurance* as well as a death bonus.

The Postal has also established a total abstinence class, wherein the savings arising from a lower death-rate in such class shall be shared in solely by its members.

Wisconsin and Pure Food

SOON after the passage of the national Pure Food law, the "glucose trust" succeeded in circumventing the law by obtaining permission to label its product "corn sirup." The authorities of Wisconsin refused to allow glucose to come into that State except under its proper name. The trust determined to boycott the State, and so shipped no more glucose to Wisconsin. Persistent efforts were made at the session of the Wisconsin Legislature, just terminated, to pass a bill permitting the use of the name corn sirup, but the measure was defeated, so the people of Wisconsin must do without their glucose sweetening, at least until another session of the legislature. Why, it is asked, does not the corn products company use its campaign money in educating the people to understand the wholesomeness of glucose, instead of trying to make it pass under a false name? The Wisconsin people are right in their fight for properly labeled foods. Manufacturers should not put out foods which they dare not market under their proper names. Glucose is not so bad a food, provided it is properly made, and is not bleached with sulphuric acid. Why not call it glucose, and then educate the people to understand what glucose is?

The Growth of the Playground Movement

It was not so long ago that the idea began to germinate that children in congested districts might be saved by the playground. Some few people had the idea hard. Others received it with becoming suspicion. Now the playground wave has swept cities, large and small, East and West, North and South, in its wake. Beginning as private philanthropies, the playgrounds are becoming, in many cities, as much municipal affairs as the schools. We now know that the playground is a good thing not only for the East Side boy, but for the Fifth Avenue boy. Not only is it working wonders for the young, but it can also work wonders for adults. We are now learning that recreation — recreation — is a duty which should be binding on all of us during life. It is not a question as to whether one has the time and means to take recreation. He has not the time and means not to take it; for proper recreation is a preserver of time, and means, and health, and an augmenter of efficiency.

Fruit Exposed on Stands

Two French hygienists about a year ago made some observations (recorded in *L'hygiene Générale et Applique*) on samples of raisins, currants, and strawberries exposed for sale in fruit stores. The first washings of the fruit contained enormous numbers of germs, varying to some extent with the dustiness of the street and the degree of exposure of the fruit. A number of disease germs were isolated. The number of bacteria present in the washings were greatly reduced in the second and third washings. The lessons to be learned are: All fruit exposed for sale should be protected by glass from street dust. Even when so protected, it should not be eaten until it is thoroughly washed. Fruit, like the strawberry, which will not admit of thorough washing, is not safe to eat in a raw state when it has been exposed to street dust. Other possibilities of the strawberry are the fertilization by human excrement,— a very dangerous as well as filthy procedure,— and the unclean hands of the pickers. These possibilities suggest that it is safest to eat the strawberry after it has been cooked.

Activities of the Playground Association

At the annual meeting of the Playground and Recreation Association of America, an organization formed for the purpose of encouraging in all American cities better recreation facilities, the secretary issued a report stating the activities of the association and its needs.

The association carries on a very extensive correspondence with men and women in cities and towns all over the country, regarding recreation work; it keeps constantly at work a secretary and four field secretaries, who act as experts or consultants regarding the details of recreation work; it furnishes recreation officials throughout the country with the names of possible play leaders.

It has, the past year, held four playground institutes (at Holyoke, Baltimore, Detroit, and Minneapolis), and the annual meeting at Washington; it has had special committees prepare reports on Rural Recreation, Games, Badges, Boy Scouts, Folk Dancing, Equipment, and Amateur Athletics; it has advised with educational institutions regarding courses of play.

It publishes a monthly magazine,— the *Playground*,— and a year-book giving a summary of development; it loans lantern slides, cuts, and photographs.

This vast work necessitates a large outlay of means, and the officers estimate that they can not do the work necessary this year on less than fifty thousand dollars.

CURRENT COMMENT

THE CHILD'S START TO SCHOOL — INTERESTING ADVICE TO PARENTS FROM A MEDICAL STANDPOINT

THE school age in most cities is six years, but the medical inspector of a large city tells the writer that many children are smuggled into the public schools under that age.

Thoughtful physicians, as a rule, believe that the child of six years is too young to shoulder the regular work of the first grade; and some doctors believe that the age of eight would be a safer time for the average child to assume the long hours of mental drudgery of the grammar school.

No one may turn the pages of any recent text-book on nervous diseases without being struck with the fact that the bulk of nervous and mental disorders are attributed to a constitutional instability of the nervous system plus some undue strain or stress in life. Unquestionably many cases of neurasthenia, hysteria, chorea, epilepsy, and insanity are attributable to "the educational strain," says Dr. Gordon Lloyd, in the Houston *Post*.

Some children are possessed of a more stable nervous organization than others. Consequently the school age should not be the same for all. Children of nervous temperament, particularly if they are the descendants of neurotic parents or grandparents, should take up school work late and gradually. Certain extremely excitable children should never enter a regular school course; though it is needful for them to take carefully selected work at school, so that they may mingle naturally with other children of their age. But even the normal child of six has a brain and nervous system much more unstable and impressionable than has the older child or adult. Accordingly, we should realize the tremendous necessity of avoiding undue mental strain at a tender age. A disturbance of the nerves that would scarcely be noticed by a grown person is often enough to throw a child into convulsions, or into a fever.

All well-informed persons are familiar with the menace of precocity. A large per cent of our neurasthenics and mental wrecks are recruited from the ranks of prodigy. And how seldom do we hear in after-life of the achievements of the individual who was a child prodigy! And even in those rare instances of prodigy that grow into adult genius, how long do the geniuses live? Witness the early death of such musical prodigies as Mozart and Chopin.

On the other hand, biography abounds with the accounts of men of achievements who were slow to begin school, and slow to acquire certain kinds of information after they did begin. Herbert Spencer, accounted by many to be the greatest thinker of all time, started to school quite late, and was never pushed with his studies.

Despite occasional adverse opinions from ultra-practical folk, the kindergarten start is the best for any child. The first training should be muscular rather

than mental. The next training should be concrete rather than abstract. And abstract studies, such as grammar, should not be attempted before the high school or college course is reached.

The modern tendency to adopt some of the kindergarten methods in the first grade of the grammar schools is admirable, and should be encouraged and extended.

No intelligent parent has done his full duty to his children until he has read Pestalozzi's "How Gertrude Teaches Her Children," and Spencer's "Education: Intellectual, Moral, and Physical." —*Juvenile Court Record.*

Hygienic Errors in Rural Schools

WHEN the child enters school, the diseases which afflict him are mostly of a transmissible nature. They are so characteristic of this period of life that they are termed the diseases incidental to school life. The after-effects of these diseases are grave and numerous, lessening the resistance of the child to other diseases. The transmissibility and the time of life when these diseases are most manifest has led to the examination of the habits and the conditions surrounding schoolchildren.

The situations of rural schools have been made irrespective of the character of the soil. Many are located in natural depressions, where water collects, and there is no provision for drainage. They are often so situated that proper lighting is impossible, trees or a hill shutting out the light. The foundations are often so defective that it is impossible to secure warm, dry floors. If they are not so situated as to make lighting and dryness impossible, they are often placed where the wind renders ventilation a difficult problem.

The usual structure consists of a schoolroom, and a hall for wearing apparel. The stove is in the center of the room, and frequently emits smoke and gases. The teacher's feelings are generally the only thermometer in use. Windows are of small and inferior panes of glass. The sashes are often difficult to manipulate for ventilation. There are no ventilation flues, no window boards for ventilation, and only one door. Ten to twenty pupils are sandwiched in a small space with no ventilation.

Notice, especially just prior to recess, the languid attitude and pale faces of those attending school. At intermission the children escape to freedom from restraint, but in their exultation they are careless about the protection to which they are accustomed. They scarcely take time to don the cap, and neglect the overshoes and coat.

The teacher should pay as much attention to the bodily welfare of the child as to the development of gray matter and the drawing of his pay. In times of wet weather and soft snow the child often remains in school with damp clothing, thus lessening the resistance of the body to disease. At such a time an exposure to scarlet fever, diphtheria, measles, mumps, or whooping-cough bids well for the contraction of the disease.

Some attention has been paid to the relative proportion of the desk and seat to the child, which is very important in securing a proper poise of the body. Some attention is directed to the crayon and blackboard as to dust and assistance to vision. Schoolbooks are furnished free, which arrangement is the only feasible one. Care has been used in the selection of large, clear type to aid the child's eyes. But these books are transferred from child to child without being subjected to germicidal fumigation, unless there has been an epidemic, during which the school has been closed and fumigated.

Slates are discarded for pad paper, thus avoiding the filthy and dangerous

method of erasing with saliva laden with bacteria.

The socialistic drinking-cup, washdish, soap, and towel are potent agents in the dissemination of disease.

Except in times of severe epidemics little attention is given to the spread of disease in the schoolroom. The schoolroom and its contents, including the books, should be fumigated at regular intervals during the school year. This would lessen the spread of disease by rendering the storage places of bacteria untenable to the germs. Children should be made to realize that all articles in the schoolroom are septic, including their hands, and therefore they should be kept out of the mouth under all circumstances.

Mary had a little cold
That started in her head,
And everywhere that Mary went
That cold was sure to spread.

It followed her to school one day
(There wasn't any rule);
It made the children cough and sneeze
To have that cough in school.

The teacher tried to drive it out;
She tried hard, but — kerchoo! —
It didn't do a bit of good,
For teacher caught it, too.

— *Selected.*

Anything that lessens the cellular resistance of the body will facilitate the contraction of disease. Therefore attention should be required by the State to accepted and approved scientific methods of heating, lighting, and ventilating, together with effective methods of fumigation of the schoolroom and its contents.

Each school should have a water-supply from an unpolluted source, to prevent the rapid dissemination of disease from the water used. All privies should be constructed with a removable drop, which should be cleaned at stated intervals, irrespective of the quantity accumulated.

All seats, books, desks, blackboards, crayon, and other school furnishings should be passed upon by a board of medical experts connected with the State department of health. All plans for remodeling or constructing school buildings should be submitted to, and accepted by, this health board before work is begun.

Regulations of importance to the health of the public should be in charge of qualified medical inspectors, who should examine both the premises and each pupil who attends school. The necessity for a healthy body to insure the well-balanced development of the mind is apparent on reflection. The necessity of a well-balanced mind for an intelligent voter is accepted, but we want a class of citizens equal to all requirements of the State. Hygiene of the school forms an important link in the chain of effective citizenship, by lessening the number of diseases incident to school life.— *Herbert W. Knight, M. D., in the Dietetic and Hygienic Gazette.*

The Evils of Mouth-Breathing

AT night the mouth-breather is restless, and suffers from disturbed sleep. His head is thrown back, due to the relaxation and shortening of the lower jaw muscles and the tension of the extensors at the nape of the neck. For this reason the mouth remains open in spite of cloth or leather jaw supports, which are frequently used to overcome mouth-breathing at night. Besides the increased drag on the lower jaw, there is also added the disturbed circulation of the head, due to its retroflexed condition.

Mouth-breathing is due to several causes, but in most instances it is purely

a habit. In the case of a nasal obstruction the amount of air possible to be drawn through the nose may be entirely inadequate, and mouth-breathing becomes a necessity until the obstruction is removed. In other cases it occurs in constitutions in which the muscle tonus has been lowered in various parts of the body, resulting in relaxed and flabby muscles and ligaments. When this occurs in muscles supporting the lower jaw (the temporals, masseters, and pterygoids), the jaw drops, and mouth-breathing occurs and becomes a habit. The relaxed lower jaw muscles remain shortened, the reduced traction on the bone itself producing the small mandible and receding chin. The drawn skin of the cheeks, produced by the dropping of the jaw, presses on the superior alveolar process, and this, added to the vaulted palate, is a second factor, producing the contracted alveolar process and irregularity of the teeth.

Hence, the immense importance of unrelaxed effort on the part of physician, and especially of parents, to induce children from infancy to keep the mouth closed and make every effort to breathe through the nose, even if there is a temporary swelling of the nasal membrane or even a permanent obstruction.

Breathe through the nose, and the air pressure will prevent excessive growth of adenoid tissue. Remove adenoid growths if they form an obstruction; but if nasal breathing is not persisted in after their removal, the excess of adenoid growth will again take place.

Besides repeated remonstrance on the part of physician, teacher, and parents, or others in the home, nasal breathing can be enforced during sleep by closing the lips by means of skin plaster. When this is done, sleep is more peaceful, and the head rests in its normal position. The child accustomed to the sensation of nasal breathing at night can be so much more readily prevailed upon to persist in nasal breathing throughout the day. So, also, much of the harm done by neglect during the waking hours can be mitigated by the normal breathing during sleep.

Not only can all the ill effects of mouth-breathing be prevented, but after they have existed a number of years, they can be corrected by the changed mode of breathing; that is, by normal nasal breathing. The oftentimes hideous physiognomy of the mouth-breather can be remodeled and changed into a normal, sometimes even a handsome type, if the error is corrected before the firmer bones have hardened to too great a degree.—*A. E. Schmitt, M. D., in New York Medical Journal.*

Revaccination

THE protective power of revaccination is not sufficiently realized by sanitarians, civil or military, and there is a tendency to repeat the operation unnecessarily, with the consequent though small risk of pus infection, and the worse risk of stirring up the opposition of the zealous antivaccinationists. Only a small percentage of persons successfully vaccinated in childhood ever contract smallpox, and few die of it; but these failures to maintain immunity make it incumbent upon every one to submit to one revaccination in adult life. There are very few cases of smallpox in such revaccinated persons, and the statistics published some years ago by Welch, of Philadelphia, raised considerable doubt as to whether a single one of them really had been successfully revaccinated. That is, there are no cases in which two good normal scars proved to be the results of successful vaccination in infancy and adult life respectively. If this is true, it is unnecessary for a general practitioner to vaccinate himself and all contacts every time he finds a case.

It is highly necessary, then, to find instances of smallpox after two such normal vaccinations. At present, there is ample justification for the charge that we revaccinate too often. Soldiers sometimes are vaccinated twenty times in as many years, and it seems ridiculous. Nothing should be done, of course, to put the slightest obstacle in the way of universal vaccination; but it is beginning to be felt that too much revaccination is unwise. We hope, therefore, that there will be detailed reports of every case of smallpox in which it is certain that there have been two successful vaccinations, in infancy and adult life respectively, being careful to eliminate cases of spurious vaccination, or those in which pus infection has been mistaken for a success.— *American Medicine.*

Alcoholism and Phthisis

DR. THOMAS D. LISTER writes, in the *Medical Press and Circular,* on certain conditions which bear on the prognosis of phthisis. He is of the opinion, which is fortified by an experience of many years, that among the most common conditions found associated with consumption is that of alcoholism. At one time, and not so long ago, it used to be the custom to give alcohol in somewhat large quantities to phthisical patients. The administration of alcohol, combined with overfeeding, used to be the routine practise in the Nordrach Sanatorium; this, however, is now discontinued. In the opinion of Lister, alcoholism is closely allied to the causation of tuberculosis, and in the prognosis of the disease he thinks it may be accepted as an axiom that the chronic alcoholic does not materially benefit by any amount of treatment. For instance, studies of mortality statistics show that the list of occupations suffering most from alcoholism almost coincides with the list of occupations in which phthisis figures most significantly. Thus in the liquor trade the incidence of pulmonary tuberculosis is most conspicuous. In short, the abuse of alcohol conduces to the diminution of the resistance of the individual to the tubercle bacillus. Of course, the life led by the bartender is inimical in most respects to health. The confinement, the oftentimes foul air, the spitting, and the dirty habits of many of the people with whom he is thrown into contact are all factors to be taken into consideration, and all tend to produce a lowered vitality. But in any occupation in which the abuse of alcohol is practised there is invariably a high mortality from tuberculosis, and the statement that there is a very distinct relationship between alcoholism and pulmonary tuberculosis, Lister claims, is fully shown by mortality statistics.— *Selected.*

Gardening and Health

NO form of exercise is better, on the whole, than gardening; for it has a psychic as well as a physical value. The mind is interested while the muscles are exercised. And with the professional man the change of interest is of almost as much value as the purely physical exercise.— *New York Medical Journal.*

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.

THE PUBLIC SCHOOL AS A FACTOR IN UNHEALTH

THE school year, especially in the grammar schools, is too long. These schools ought to close by the first of June. It would do no harm to have them closed until October 1, so that the pupils may spend the most delightful months of the year out-of-doors in the parks and meadows, storing up health and energy, and getting acquainted with nature and mother earth.

My friends of the pedagogic persuasion would say, in answer to this, that if we shorten the school year, we must shorten the curriculum. I say, Let us shorten the curriculum by all means; for what shall it profit a child if he gains the whole world of knowledge and loses his health? There are more things in the modern curriculum than were ever dreamed of in our philosophy, and many of them could be dropped to the benefit of the child.

A very important factor in the production of tuberculosis is the confinement, for so many hours a day and for so many months in the year, of weak, poorly fed and poorly nourished children in crowded and poorly ventilated schoolrooms.

Another factor that makes for unhealth is the dry sweeping practised in many schools. While this is going on, all windows are supposed to be open, but this is not always the case. After the dust has settled, the windows are closed, and some hours later the desks and furniture of the room are dusted off with a feather duster or a dry cloth.

When the schoolrooms are swept, sawdust soaked in oil and colored with Paris green is used on the floors as a dust absorbent and disinfectant. I can not find that the desks are ever scrubbed or treated to an antiseptic bath; no vacuum sweeping is employed in any of the schools in this city. I made some inquiries from janitors at the suggestion of the department, and learned that schoolrooms are swept every night; halls are scrubbed once a week, other rooms once in three or four weeks.

Another potent factor which makes for unhealth in the school is the attitude of indifference on the part of the school authorities toward such defects of mind and body as might materially affect the child's chances of success and happiness.

All the children have been received on an equality, and have been treated equally, no matter what their mental endowments or physical condition. Formerly the backward child, who seemed stupid and restless and unable to learn, received a dose of the rod. To-day far better results are obtained by copious doses of fresh air and sunlight, together with proper nourishment. The proof of this is shown in the results obtained in various schools where teachers who have

tried the above methods, prove by figures that backward children show an increase in weight, lessened absences from ill health, and far superior mental tone and brightness. Overcrowding is another element which makes for unhealth. Such overcrowding as I have observed in some schools is nothing short of criminal.

Finally, let me say that the schools play an important part in unhealth by serving as centers of exchange for contagious diseases. Notwithstanding the fact that the schools serve as centers for the propagation and spread of contagious and infectious diseases, the occasional closing down and the rare fumigation have constituted the sum total of preventive measures, with the single exception of the commonly insisted-on requirement of vaccination.— *Edward Clark, M. D., Medical Officer, State Department of Health, Buffalo, address before conference of New York sanitary officers.*

The Training of Janitors in the Sanitary Care of School Premises

STANDARDS of school cleanliness should equal those of the best hospitals and private homes. The factor in school environment that is most completely under the control of school authorities, that most affects efficiency both at school and in future life, is schoolhouse air. The official having direct and continuous charge of the air is the janitor, who has to deal with details of dust, humidity, temperature, and effluvia. This responsibility is given to those who make no pretense of fitting themselves for sanitary duties or inspection, but who do the best they know how with picked-up knowledge.

Teachers are usually expected to report neglected details to the principal, who is nominally responsible for sanitary conditions. All good housekeepers know that such matters require persistent following up. Thus the teacher must "nag" the principal and "tell on" the janitor, both usually men with no training beyond what unstandardized experience has given them. Teachers can hardly be blamed for neglecting this thankless task, which creates hostility and jeopardizes their positions, while undoubtedly it does not secure the results desired.

Studies of schoolhouse air show humidity often nearer twenty per cent than the normal forty per cent; temperatures are more often in the seventies and eighties than in the healthful sixties; carbon dioxid, indicating animal exhalations, more often measures twenty parts in ten thousand (i. e., technically bad air) than the normal four in ten thousand; anemometers prove many ventilating flues out of order through neglect. Dust, foul floors and air, which are the rule, are what no good home-maker or hospital official would tolerate.

Meanwhile a very few schoolhouses, even in "soft-coal cities," by no means the most expensive structures, have floors as clean as the home or hospital; a few are practically free from dust; a few others have good air; a few schoolrooms have a temperature at sixty-eight degrees or below, with red-cheeked pupils and teachers, who become depressed and dull in warmer air when it accidentally exists.

Such schools and schoolrooms prove the possibility of achieving each of these results, even in buildings that are not equipped with an elaborate and expensive heating and ventilating apparatus, which forbids opening windows, and is very frequently out of order. Open-air schools are likewise demonstrating the wholesome reaction of children to cool air of sufficient humidity and comparatively free from dust and effluvia. In them delicate children invariably make more rapid progress mentally as well as

physically.— *Dr. Helen C. Putnam, Providence, R. I., in Journal of the American Public Health Association, February, 1911.*

The High School and the People

OUR educational conditions are going through a transition period, and we find the necessity of adapting ourselves to new things. This new condition is characterized as chaos or as the millennium, according to the view-point of the critic.

The high school has become a new problem for several reasons: —

1. Changed conditions. A few years ago our secondary schools were training very largely boys and girls from the farm, for a definite purpose — some profession. They were boys of the best class, the ambitious, the resourceful, who on the farm had learned how to meet and conquer difficulty, and had had a better system of manual training than it is possible for any school to give. At present in the high schools we are educating, for all sorts of possibilities, a much larger proportion of our children, principally from the city, having no particular aim and coming from every walk of life. These young folks are not the kind whom you can entrust with responsibility. The city does not train for resourcefulness.

2. A new conception of education. Formerly the aim was to inculcate a knowledge of certain books. That was well enough for the boy or girl who had had a splendid manual training course on the farm. Any books would give the proper mental drill to the ambitious pupil who was well trained manually. Now our work is to take boys and girls as we find them, without manual training, without natural resourcefulness, without a definite purpose in life, and make good citizens. Formerly we wanted to lift the ambitious boy out of the masses, make a professional man of him, educate him for leadership and aristocracy; now our aim is to educate for service and usefulness, and we realize the need of fitting this education to the needs of each student. Our education is being socialized.

We must change the content and the method: —

1. We must be democratic. To do this we must find the bent of each pupil, and give him the opportunity to develop in that line.

2. We must be cultural in the broadest sense, and this culture will depend not so much on the facilities of the school as upon the personality of the teacher. We impart what we are.

3. We must be disciplinary. I must quarrel with those who would make Latin and algebra the exclusive means of mental discipline. There is excellent discipline in any study which is a hard task, and which enlists the pupil's determination to master it.

4. We must conserve health. In training for citizenship, we must make our training democratic, cultural, disciplinary, and practical. Science? — Yes, the accurate methods of the laboratory, the scientific method of thinking. History? There is nothing so useless as history as it is often taught, filling the head of the pupil with facts about the kings of Egypt and Greece, and leaving the mind an absolute blank regarding the tariff, and the facts of the present and recent administrations.— *William D. Lewis, Principal William Penn High School, Philadelphia, before the Mothers' Congress, 1911.*

School Hygiene

EDUCATORS have told us very glibly that health is the main thing, but we may go into any school and find the lie given to these pretensions. I defy you to find any schools in the United States

where there are not conditions inimical to health. We have advanced to the point where we say that the school should not injure the health of the child, and we appear to be satisfied with that, but it lacks much of being an ideal standard. We ought not to be satisfied until we can say truly that the school positively promotes health.

An idea still lingers with most of us that health is a special gift of Providence. That is all true, but it is a blessing we must fight for, as our fathers fought for the blessing of liberty. Some say that man in a former, natural, uncivilized state was healthy, that disease is a characteristic of civilization. [All study of primitive races and of archeology seems to teach the opposite.— ED.] I am not certain as to this, but I know that the economic loss from ill health amounts to billions annually, and the monetary loss is far from being the most important. The lack of efficiency and attainment is the real evil of ill health.

The schools, instead of being merely places avoiding the unnecessary transmission of disease, may become actual promoters of health,— the harbingers of a better and sounder physical organization. Suppose every school were properly constructed as regards sanitation and hygiene; were properly lighted, so that no teacher or pupil would have the eyes subjected to strain, and properly ventilated; suppose every school system in the United States had a department of health organized within the system, coordinate with the other departments, concerned not only for the suppression of contagious disease, but also with the physical life and growth and health of the pupils as correlated with their mental life and growth and health. Such a condition would be followed by as great a change in our schools as is wrought in the face of nature by a few warm spring days.

We need to understand that physical health and mental health are not two things, but one, and that there is no sound mental growth without sound physical growth. If we can get that idea installed into the minds even of the educated, it will result in marvelous changes in our schools.

Suppose we should bring about in our schools the use of text-books with proper type, good paper, and illustrations which would not strain the eyes of the child, it would have a marked effect on the general health of the school; for the eye is used a large share of the working-day, and any strain there is reflected in the general health. The eyes of the child are peculiarly subject to strain. You can not find a school in which there are not books or boards or apparatus that strain the eyes of the pupils.

For several years I have tried to make a correlation between the mental character of the boys and girls in my school and their physical condition, and I find that thirty per cent of the pupils who are doing poor work in school are suffering from remedial eye defects.

Here is a responsibility of the home, and of the parent-teacher organization. The child is a foolish animal, and can not be made to understand that the wearing of glasses is not a mark of inferiority. What is worse, we can not make the parents believe it. It should be the duty of the parent-teacher organization to agitate the matter and urge that pupils have their visual errors corrected. To create right ideas on this subject in the schools will be to accomplish great good for the physical welfare of the pupils.

Suppose again that our schools had proper furniture. We have furnished them with rigid seats and desks, with the supposition that pupils must sit still for three or four hours. Such a supposition is ridiculous. Doctors are now realizing that there must be a reasonable adaptation of the child to the desk. There should be movable tables and movable seats, where a child may wriggle and not

defy all the laws of nature. The parent-teacher association should insist on throwing out the fixed desks and seats, and installing movable chairs and tables.

The schools should observe the laws of fatigue, and the absurdity of home work should be cut out. A child up to sixteen requires nine hours' sleep; after allowing for five hours in school, and time for meals and recreation in the open air, there is only about one and one-half hours left for home work, and that should be used in getting acquainted with father. It should be sacred to the cultivation of domestic life, and not be sacrificed on the altar of home work.

Finally, if we could have healthy teachers, it would be a great blessing. As it is now, one half are under medical care. The nervous and irritable teacher is a fruitful source of irritable children [applause]. It works both ways; the teacher is not to blame for that.—*Dr. Willard D. Small, Principal Eastern High School, Washington, D. C., address before Mothers' Congress, 1911.*

Tuberculin Treatment of Tuberculosis

AFTER a large experience in the treatment of all forms of tuberculosis, my firm conclusion is that tuberculin is a valuable remedy in many cases. As nearly all cases of pulmonary tuberculosis are of human origin, it is necessary to use bovine tuberculin.

Tuberculin is not a specific remedy in advanced tuberculosis. Combined with treatment to raise the general nutrition, it produces a temporary immunity; but its chief effect is to prevent the further spread of the disease, so that as the original tuberculosis process dies out, no further development takes place. The immunity must be acquired slowly, allowing the blood to become accustomed to its presence. The milder the affection, the greater the reaction from tuberculin inoculation.

I warn against the use of tuberculin by injection where there is encysted pus, or tubercular caseation. If there is no outlet for this material, it may be disseminated through the blood stream. Remove suppurating neck glands before using tuberculin.

My opinion after the treatment of over three hundred patients with tuberculin is that it is a remedy of greatest value, especially where the deposit is localized. When the tuberculosis is disseminated, and when it is complicated by secondary infections, tuberculin is of much less use. However, it should be used even in these cases rather than allow the patient to die without making an effort in his behalf.—*Nathan Raw, M. D., M. R. C. P., in London Lancet.*

Open Air for Well Children

I HAVE been called to give up my school in Chicago in order to help the pupils of other schools to healthful conditions. In Chicago we took the benches and pitched them out of the windows (our windows are open). This gave room for the children to perform their stunts. We have learned that the children may spend half their time in the open air, and then learn faster than those who spend the entire schedule time in the schoolroom.

Another thing we have learned is that if we want healthy children, we must have healthy mothers [and vice versa.—ED.]. God's greatest gift to man (if we may except the "helpmeet" made from the rib) was when he breathed into his nostrils the breath of life. Man has built houses, and impudently put glass into his windows to shut out this God-given air, and has invented ways to heat and devitalize what little air is inside. On this devitalized air, it is impossible to

think properly. Unless one utilizes this gift of God, he can not be well. Witness the catarrh and colds that affect so large a proportion of our population.

Of the thirteen hundred children in my open-air school, *not one* suffered from catarrh or colds. Does that mean anything to you? Air is *wrong* when it is warm. Humidified cold air is right. I am now going around introducing steam jets into schools for the cool weather next fall. We do not need them now, as the windows are all open, allowing the entrance of the pure air from the outside.

All our public buildings, even the Capitol, are ventilated and warmed on wrong principles. Our legislators are not to be blamed for making rotten laws when they have rotten air to breathe [laughter]. You have to have one of two things, either humidity or stupidity.

There is a vigor in outdoor air (whether due to radio-activity or not, matters not) which is destroyed by present ventilating methods. Air that is warmed is devitalized. What we need to do is to cut out the elaborate ventilating systems, moisten the air with steam, and open the windows.

Some of you are fifty per cent alive, some forty per cent, some thirty per cent. We can not be blamed entirely for this, but some people have brought this inefficiency on themselves through the air they breathe day and night. I want you women to help me in the greatest reform — to teach the people to breathe pure air.

I have learned how to make sick children well. I can take a kindergarten and make the children practically immune to children's diseases. There is a very simple way to increase the resistance of children, and to promote their happiness and good conduct. Lowering the temperature ten degrees diminished the amount of office discipline in my school eighty per cent.

When there is disorder in your school, and it seems the devil is in the children, do not blame the devil for what you are responsible for. Lowering the temperature and purifying the air of the schoolroom takes the chip off the teacher's shoulder, and doubles the efficiency of every teacher and child, yes, quadruples it. The children in the open-air room in *one half* the number of school hours and in *half* the year, did more work than they did in the closed rooms on full hours for the entire year.

Ninety-seven per cent of the work of the ordinary school is *review*, ninety-seven per cent of the work is *wasted*. What we need to do is to get the children *alive* and receptive, and then, with a live teacher, once telling will be all that is necessary to impress the lesson.— *Dr. W. E. Watt, Chicago, address before the Congress of Mothers, Washington, D. C., 1911.*

Mouth Conditions and Health

AT a certain time my duties brought me in very close touch with dentists and their patients, and the conditions which I found in the mouths of the laity were appalling. I found that thousands of people were practically physical wrecks as a result of faulty mouth conditions. Young and old alike were struggling through life with a fearful handicap.

So thoroughly impressed was I at that time that I became convinced that a man who would prepare himself in such a way as to be able to educate the people to a point where they would realize the true value of healthy mouth conditions, would fill a greater want than in any other profession.

Within the past two years it has been demonstrated that ninety-six or ninety-seven per cent of the schoolchildren of this land are in need of dental care. In other words, ninety-seven per cent of the

mouths of schoolchildren are in an insanitary and unhealthy condition.

The health organizations have been spending millions to bring to the human family healthful foodstuffs. But how much have we gained when we have brought this thoroughly sanitary and hygienic foodstuff and drink to the consumer, and then before it can nourish him, it must pass through grinding machines ninety-seven per cent of which are filled with pathogenic micro-organic life?

With ninety-seven per cent of the people having defective mouths, every one a harbinger of pathogenic micro-organisms, I would ask if in our search for sources of infection, we have not overlooked and neglected the greatest producer, and at the same time the widest disseminator, of pathogenic micro-organic life.

The mouth not only contains, but breeds and disseminates pathogenic micro-organisms, which are to-day wielding a stronger detrimental influence on the human family than those which you have been so nobly fighting for all these years. I refer, gentlemen, to the streptococcus media, which produce caries, or decay of the teeth. Caries is the most prevalent disease known to modern civilization.

You are familiar and thoroughly conversant with the manner and means whereby the organisms which produce typhoid fever, scarlet fever, diphtheria, pneumonia, and tuberculosis are transferred from one individual to another, and know only too well the tremendous havoc these organisms are capable of producing when unrestrained. But the micro-organisms which produce caries are just as readily transferable from child to child and from adult to adult as the other organisms just mentioned, and are causing far greater havoc in the human family than all the others put together.

In support of my statement, let me quote from Professor Osler: "You have one gospel to preach, and you have to preach it early and late, in season and out of season. It is the gospel of cleanliness of the mouth, cleanliness of the teeth, cleanliness of the throat. These three things must be your text throughout life. Oral hygiene, the hygiene of the mouth — there is not one single thing more important to the public in the whole range of hygiene than that."

Not only do the "tooth-decaying" micro-organisms aid in producing a breeding-ground for other pathogenic micro-organisms, but they, by their action, produce two of the most favorable conditions for possible infection.

First, by their activities around the necks of the teeth they produce softened and bleeding gums, which offer an excellent opportunity for infection. But, worst of all, by their inroads into the tooth substance, they destroy the dental tissue until the dental pulp is exposed, producing the best and probably the most frequent means of infection which takes place in the mouth.

A tooth with an exposed pulp, or more particularly one with a dead pulp, the cavity or pulp chamber of which is filled with pathogenic micro-organisms, becomes the best possible means for infection; because in chewing the food, the pulp chamber acts in the capacity of the barrel of a syringe, and the foodstuffs forced into the same act as a piston, thus forcing the contents into the soft tissue at the apex of the tooth.

The percentage of infection which takes place from this means, no man can estimate. But when we consider that of the enormous number of mouths that have dental lesions, at least fifty per cent show teeth containing exposed or putrescent pulp, we must be able to explain many of the heretofore "not understood" sources of infection.— *William G. Ebersole, M. D., D. D. S., Cleveland, Ohio, address before conference of New York sanitary officers.*

Confessions of a Physician, by V. Smidovich. Translated from the Russian by Simon Linden. Published by Grant Richards, London. 289 pages.

This is not a new book. It is now ten years since it was run as a serial in a Russian literary magazine. In Russia and elsewhere the work stirred up a wasp's nest in the way of a heated discussion, especially by medical men, some bitterly denouncing it, others warmly defending it.

One has not to read far to realize that the writer is of a neurotic make-up — a psychasthenic. His self-consciousness, his overconscientiousness, his lack of self-confidence, his exaggerated attitude toward life as it came to him, all bespeak an abnormal individual, but only abnormal in that the emotions that smolder in others are a raging fire in him.

The book is for this reason an intensely human production, and one that, once begun, is not likely to be dropped until it is finished. The author's characterization of existing methods of medical education could scarcely be more scathing if written by one of the numerous medical sectarians, and yet he is loyal to the old school of medicine.

His principal criticisms of the medical schools, that they cram the brain to bursting with useless theory and yet turn the young doctor out absolutely helpless, so far as practical knowledge is concerned, is not far amiss.

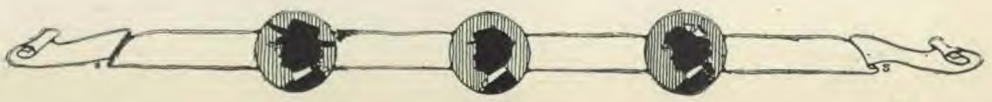
But how can he say of the regular school that "still it is of incalculably greater practical utility than all the systems ever evolved by the human brain alone, or crude empirical generalizations. Also, it is conscience which prevents the physician from compelling the sick to seek the aid of quacks and falling into the grasp of homeopathists, various pastors, Kneip and other charlatans," and yet a few sentences farther on admit, in a case where by diagnosing an aneurism as a *globus hystericus,* he allowed the patient to die suddenly without warning and without making her will, that, "had a born physician been in my place, he would have diagnosed rightly," and again, "half-heartedly, I still continued my duties [the fifth-year graduate of one of the best universities in existence, followed by a postgraduate course], laughing bitterly in my soul at the patients who were simple enough to apply to me for aid. They also thought, as I had done before them, that he who completed a course of study at the medical faculty was a doctor."

With that astounding admission, he calls the man Kneip, who cured people, a quack, because, forsooth, he had no university medical degree! One can understand why the ordinary university man would call the outsider a quack, but how reconcile such an epithet with the admission that medical men are born, not made, and that he himself, with all his education, was a failure and was still practising?

This book will make good reading for physicians. It will renew questions which have arisen in their own minds, and which they hushed after a fashion. Laymen will get good from it if they read intelligently.

Popular Drugs, Their Use and Abuse, by Sydney Hillier, M. D. Published by T. Werner Laurie, London. Cloth, 192 pages.

As the name indicates, the author believes there is a proper use for drugs, including alcohol, and that the abuse lies in the excess. He believes that the statement that alcohol is a poison overstates the case, and hesitates to make an emphatic pronouncement as long as there is a voice on the other side. He, however, notes the general tendency of the medical profession to use alcohol in lessened quantities. It is a very comforting book throughout for those who desire to use tea, coffee, and even opium. Regarding tobacco the author says that "of all forms of self-indulgence to which frail humanity is addicted [why that expression?], that of tobacco-smoking is most general and least harmful." Evidently he has gone through life with his eyes closed.



IN THE MAGAZINES

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

Pearson's Magazine

"THE Farce of Medical Ethics" is a striking article on the subject of "fee-splitting" between physicians and surgeons.

Country Life in America

The issue of September contains another story regarding "Cutting Loose From the City;" also some personal experiences under the head of "More Health Experiences." The September 15th issue will contain an article on "The Truth About Electric Cooking," also one on "Fireless Cookery."

The Designer

"The Enemy in the House" is another blow struck against the house-fly. In the department "Back-Door Confidences," we note suggestions on "An Outdoor Refrigerator Without Ice," "Those Poison Bottles," "A Curtain Hint," etc. "A College Baby," shows the unusual physical and mental development of a son of college-trained parents.

Harper's

"My Second Visit to the Court of Napoleon III." In these letters of Madame de Hegermann-Lindencrone is presented another intimate and delightful picture of a social week spent with Napoleon III and the empress Eugénie at Compiègne during the days of the Second Empire. The writer, who was at the time Madame Charles Moulton, a young American woman of social prominence in Paris, describes in letters written home to her mother the pastimes and diversions of the royal court, and the anecdotes and little happenings among the distinguished people gathered there.

"Insect Life Along the Seashore." Howard J. Shannon pictures the curious ways of insect life along the ocean's edge in midsummer, when, like man, whole colonies of nature's smallest creatures migrate to the seashore. The article is accompanied by sketches and drawings by the author.

"Life Upon an English River." Sydney Brooks describes the picturesque and little-known places above and below London on the famous River Thames. The text is accompanied by a series of exquisite drawings and sketches by Frank Craig, which are reproduced in full color and in tint.

Mother's Magazine

Perhaps the greatest problem confronting the United Charities of Chicago is that of preventing and curing diseases among schoolchildren. "Fighting the Children's Battle," by H. Bedford-Jones, is an interesting account of their method of fighting tuberculosis.

Dr. Caroline A. Watt has pointed out to mothers the fact that a child "knows that there is a future ahead of it, and strives to build for it through present actions," in her article "A Child's Physical and Mental Sense of the Future."

"The proper washing of clothes is as much an art as the proper painting of pictures." In "The Science of Wash Day," Laura Crozer explains the why and wherefore of this statement.

"The Outlook for the Child in the District School," by Joseph Flanagan, is a suggestion as to the effect of daily environment upon the mind and health of the child.

"The Problem of the Nervous Child" is ably discussed by Dr. Lucy N. Eames.

Again we are reminded of the danger of the fly by "House-Flies in September," by Sceva Stephen, and "The Fear of the Fly," by Louise Roblin.

The department, "Baby's Realm," by Kate Davis, contains discussions of colic, fear, burns, emergency remedies, convulsions, remedies for pinworms, walking, night-crying.

The Woman's Home Companion

"Every cheap or undignified or emotional or sentimental or unlovely relationship between men and girls is a misuse of the lovely uses of the body and mind and spirit, an indignity offered them, a lessening of their powers. If I could make you see that; and then, in contrast, if I could make you see the power and the beauty of a woman whose whole being is dedicated to the high destiny for which she is intended!" So writes Anne McCall in "A Girl's Ideals of Love and Marriage." Christine Terhune Herrick, herself a mother of sons, contributes a strong article on "The Boy and His Opinions," in which she asks, "How shall a boy be taught to think for himself?" and proceeds to answer the question, and to give some methods for the best development of the boy. The careful housewife will appreciate the article on "The Home Butter Supply," by Clarence B. Lane. It tells how to judge creamery butter, the significance of color, how to test butter at home, etc.

Good Housekeeping Magazine

The September issue contains an article on "How to Prevent Any Decay of the Teeth," by Louise Scudday. "A Delicate Problem for Parents," by the Rev. Lyman P. Powell, discusses the question of sex hygiene, and the advisability of teaching its problems. An article entitled "Save the Children's Eyes," by W. L. Nida, deals with new methods of lighting schoolhouses,which relieve the eyes of the pupils from the harmful effects of the direct rays coming through side-wall windows.

A. W. Rolker's series on the woman in business is becoming notable. In September Mr. Rolker strikes home to all women who work in "Hunting the Worth-While Position."

Do the Milk Dealers Get It? — One wall card at the Dresden exposition informs us that in 1900 the average per cent of fat in the milk used in Dresden was 3 3/10 per cent. In 1910 it was 3 per cent. This apparent small difference, we are told, means a loss to Dresden consumers of 450,000 marks, or more than $100,000.

Warfare Against Liquor in France.— There is a National Anti-Alcohol League, with headquarters in Paris (50 Rue des écoles) which publishes leaflets and pamphlets showing the vital effects of drink. It also issues post-cards having such expressions as these: "Alcohol injures; alcohol destroys; alcohol kills! Absinth makes one crazy," and pasters to be pasted on letters, envelopes, etc., each one containing a short but pungent quotation by some noted man regarding the evil of alcohol.

A Temperance Lesson in a Nutshell.— In the alcohol exhibit of the Dresden exposition is a wall chart, giving, with illustrations of the various articles, the following information: "One glass of beer, costing 10 pfennig, contains 13 grams of extract, the equivalent of 6 g. malt, 25 g. (½ slice) bread, 13 g. (3 lumps) sugar, or 80 cubic centimeters of milk. For 10 pfennig one could buy 55 g. malt (9 times as much), or 2½ glasses of milk (8 times as much). Beer is therfore not a "liquid food." Moreover, one glass of beer contains 10 grams, or one whisky-glass of absolute alcohol!"

Yearly Food Requirement.—One interesting exhibit at the International Hygiene Exposition shows a large quantity of various kinds of food. It is said to represent the amount of nourishment one person requires in one year. The accompanying card informs the reader that the requirement is 600 kg. (150 gals.) water, 175 kg. (385 lb.) potatoes, 250 kg. (550 lb.) grain, 20 kg. (44 lb.) sugar, 30 kg. (66 lb.) peas, 250 liters (60 gals.) milk, 25 kg. (55 lb.) fat, 50 kg. (110 lb.) meat, and 7½ kg. (16½ lb.) table salt. Nearly all who pass pause and smile as they contemplate in one mass the yearly ration.

An Interesting Program.— In the school-hygiene exhibit there is given this interesting program of a farm school: 6, exercise; 6:30, first breakfast; 7, forty-minute study periods, alternating with ten-minute recesses, until 9:20; second breakfast, 9:40; forty-minute study periods, alternating with ten-minute recesses, until 12 dinner; 12:30, free time (on Saturday, preparing clothing); 1:30, field or garden work; 3:30, bath or air-bath; 4, vespers; 4:30, work hour; 6, free time; 6:30, supper; 7, free time; 7:50, evening worship; 8:30 to 10, work hour or free for older pupils. If this is carefully considered, it will be seen that the child is given very frequent rest periods. This divides the time as follows: 2¾ muscular work; 3¼ or 2¾ hours free time, 4 hours meals, 4½ or 6 hours mental work, and 9½ or 8½ hours sleep. Where two sets of figures are given, the latter are for older pupils.

England's Death-Rate.— The returns of the British census show a death-rate of 13.9 to the thousand.

Mothers, Nurse Your Babies.— In Chicago during the summer fifteen bottle-fed babies die for every death of a breast-fed baby.

Prohibition Sunday.— A movement is on foot to have the second Sunday in November each year observed as International Prohibition Sunday.

King Alphonso III.—The king's physicians have ordered Alphonso to Switzerland to take treatment for tuberculosis of the throat. He is only twenty-five.

To Study Mountain Sickness.— An expedition to Pike's Peak is planned for this summer by a professor of physiology in the Yale Medical School. The purpose of the expedition is to study mountain fever.

English Schools for Mothers.— At Bath, Birmingham, Cardiff, Dundee, Glasgow, Sheffield, and other places, schools are established — eighty in all — in which the principles of hygiene and the care of infants are taught to women.

New Health Commissioner.— Dr. George Bright Young, of the United States Public Health and Marine Hospital Service, has been chosen to succeed Dr. W. A. Evans, the former efficient health commissioner of Chicago. Dr. Young has had an excellent preparation, and has shown himself eminently competent as a public health official. He enters his new work with an enviable record.

An Excellent Health Program.— The Nebraska association of school principals and superintendents urges that the following be made compulsory: installation in all schools of ventilating heating plants; cleaning and disinfecting of schoolhouses at least twice a year; medical inspection of schoolchildren and teachers; submission of all schoolhouse plans to State architect for approval.

"No Uncared-for Tuberculosis in 1915."— The president of the movement in New York having this motto as its watchword reports the following increase in one year: hospitals, from 8 to 16; dispensaries, from 15 to 25; visiting nurses from 32 to 39; localities providing special relief, from 8 to 15.

Ice-Cream and Typhoid.— A report was recently issued by the local government board regarding an outbreak of typhoid fever which occurred a few months ago in the Borough of Eccles (London). The investigation showed conclusively that the outbreak was due to the consumption of ice-cream.

Tuberculosis Among English Children.— Four-tenths per cent of the schoolchildren of England have active tuberculosis, as shown by examination; but fully thirty per cent have the stigmata of the disease. That is, they will escape if given healthful surroundings, but will pretty surely succumb otherwise.

Health Instruction for Schoolchildren.— The director of physical training of the New York board of education recommends that each child be furnished with a set of rules, or suggestions for conduct after school hours, in the matter of bodily hygiene, care of room, clothing, hours of study, sleep, etc.

Office Hygiene.— The new union hospital of New York City has undertaken the work of instructing business and professional men concerning conditions under which they should work, and the proper number of hours for employers and employees, in order to secure the greatest efficiency and preserve the best of health.

Plague Prognostication.— An editorial in the London *Lancet* of April 29, says that while the total loss of life in the Manchuria epidemic is not high compared with the epidemic in India, yet "if the disease spreads southward, in the densely populated areas of China proper, with its four hundred million inhabitants, the prospect will become one of extreme gravity."

New Indiana School Law.— Indiana has a law which places a heavy penalty on the construction of insanitary schoolhouses, forbids the employment of teachers and janitors having tuberculosis or syphilis, and requires that children be sent home who are in any degree sick, dirty, or malodorous.

To Prevent Typhoid.— The officers of the United States Public Health and Marine Hospital Service have been instructed to offer free antityphoid vaccination to all beneficiaries of the service, including, roughly, all those engaged on vessels in the service of the United States outside of the regular army and navy service, also the lighthouse and life-saving services.

World Prohibition Movement.— The second biennial conference of the International Prohibition Confederation will meet at The Hague, Holland, Wednesday, September 13, in connection with the Thirteenth International Congress on Alcoholism, which meets there by invitation of her Majesty, Queen Wilhelmina and the Dutch government. Prominent temperance workers from many lands are expected to be present at this conference.

New Medical Legislation.—The following have recently become laws: In Iowa, a bill authorizing the sterilization of criminals, and a bill requiring the disinfection of premises previously occupied by tuberculosis or infantile paralysis patients; in Kansas, a bill regarding vital statistics which will doubtless add that State to the registration area; in Michigan, a bill requiring physical training to be taught in city schools, and a Sane-Fourth-of-July bill; in New Hampshire, a bill forbidding the use of the common drinking-cup.

Anti-Tuberculosis Work in London.— In England, tuberculosis has been steadily decreasing as a result of the policy of segregation. The hospitals have capacity for only a small proportion of the patients, and often they do not reach the hospital until it is too late. Through the dispensary eighty per cent of the cases are treated at home. Patients are taught the open-air doctrine, and are given simple instruction as to the care of sputum, etc. The poorest houses and the meanest slums, according to Dr. Sutherland, can be made one hundred per cent better by the voluntary acts of the occupant if properly instructed.

Forbids Distribution of Patent Medicine Samples.— A law was enacted in Ohio in 1902 prohibiting the giving of patent medicine samples to children under sixteen years of age. At the last session of the legislature a bill was passed limiting the giving of samples of proprietary remedies to the places where they are kept for sale. In other words, the samples must be handed out in the drug-store.

Boston Recreation Department.— Boston is so well satisfied with the consolidation of the street, water, and engineering branches of the city government into a board of public works, that it is now proposed to form a public recreation department, taking over the park, public grounds, bath and music departments, and reorganizing the entire recreation service of the city, including the parks, playgrounds, baths, gymnasiums, athletic fields, and band concerts.

Warning Against Salvarsan.— Sir Jonathan Hutchinson, in the *British Medical Journal* of April 29, states that he has in the past repeatedly observed that the medical use of arsenic was followed by cancer. Others, he says, have observed the same thing. He warns his colleagues against "the newly vaunted remedy for syphilis," and states that little has been alleged concerning the new remedy that is not also true of mercury and the iodids when properly used.

Temperance in Great Britain.— The British Temperance League, the oldest national temperance league in existence, held its seventy-seventh annual conference in London, June 10-14, in connection with the meeting of the National Temperance League. The meetings were characterized by marked enthusiasm. There were present noted physicians, among them Prof. Sims Woodhead, president of the league, and the British surgeon-general. There were also present at least two members of Parliament.

New Zealand Statistics.— Mr. George, the delegate from New Zealand to the Imperial Temperance Conference, London, says that seventy per cent of the crime, forty per cent of the old-age pensions, one third of the asylum patients, and one third of the hospital expenditures are the direct result of drink. By bringing such facts prominently before the people, the area of no license is being gradually increased. In the schools, also, the children are taught scientific temperance, and are thus prepared, when they are of age, to vote on the right side.

A Fallacious Argument.— At the Chicago Child-Welfare Exhibit, a card was displayed with the legend: "The bigger the family, the higher the death-rate among the children." Figures gathered from the slum districts showed that "in families of four children the death-rate is 118 per thousand, in families of six the rate is 267 per thousand, and in families of eight, it is 291 per thousand." The Boston *Medical and Surgical Journal* points out that "with these figures the family of four has a survival of 3 1/2 children, the family of six, 4 2/5, and the family of eight, 5 2/3 children," indicating a net gain in numbers to the community from larger families, and constituting in reality an argument for the desirability of increasing rather than decreasing the number of children.

Banquet to President Taft.— The Medical Club of Philadelphia, on May 4, gave a banquet, attended by representative physicians from various parts of the nation, President Taft being the guest of honor. More than any other president, Mr. Taft has come into close touch with the medical profession in his administration of our island possessions and of Cuba before his election to the presidency, and he has shown his appreciation of the value of the scientific medical administration of our dependencies. In his address at the reception following the banquet, Mr. Taft demonstrated that he thoroughly understands and appreciates the importance of the hygienic and medical problems which confront us as a nation holding dependencies in the tropics.

Training-School for Domestic Nurses.— An admirable feature of the new Union Hospital in the Bronx, New York, will be a training-school, fitting nurses by means of a short course to care for those in moderate circumstances. As a matter of fact there is nothing so aristocratic as the modern nurse. She must have her twenty-five dollars a week or nothing, if you please. Many physicians, graduates of good colleges and careful practitioners, through bad accounts, etc., fail to net that much. It is a satisfaction to know that ordinary people are to have the services of a nurse. The present nurse's course in many of the hospitals is a little top-heavy, and encroaches dangerously close to the functions of the physician. The training-classes had to do it in order to have an excuse to keep the nurses in the hospitals for so long a time. In a course of two years, or even less, excellent nurses can be made from the right kind of material, provided the physicians have the say in the training-course.

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