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Questions or correspondence relative to any of the departments should be sent to the head of that department.

If questions are sent to this Office in connection with other matter, they should be written on a separate sheet addressed to the editor; otherwise they may be overlooked. The editor does not look over the business correspondence.

All questions must be accompanied by return postage. If the reply is not worth that much to the inquirer, it is not of sufficient value to take up our time in replying. We are glad to answer all reasonable questions of subscribers, but we do not wish to pay two cents each time for the privilege of doing so.

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THE PROLONGATION OF LIFE BY BEN-Benevolent associa-EFICIAL ORDERS. tions have come to realize the impor-

tance of making provision for the treatment of their curable tuberculous members. In next issue an illustrated account of how one prominent fraternal order cares for its members.

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NERVOUSNESS ON THE INCREASE. This is emphatically a time of disordered nerves. Better sanitation and improved hygiene diminish the danger from tuberculosis and other preventable diseases; but nervous diseases are on the increase. How much of this nervousness is due to early home training? See article by Dr. Hetherington.

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TUBERCULOSIS AMONG THE WASH-INGTON POOR. In this issue are outlined some of the pitiable conditions; in the next issue, Miss Eugenia Bray gives an account of some of the organized work being carried on for the relief of the poor consumptive.

INTESTINAL AUTOINTOXICATION. Some laboratory men have attempted to prove that there is no such thing. The observant bedside physician knows better. Dr. Leadsworth presents a convincing article, which should be read by all who are subject to "bilious attacks," or to periodical headaches, or to other periodical symptoms of which they do not know the cause.

More Healthful Desserts. Cornforth will explain carefully how to prepare cakes without the usual objectionable features.

CHILLE CHILLIS CHILLS CHILLS CHILLIS CHILLIS FREEZE CHILLISS GENERAL ARTICLES Rice; Its Value and Adulteration, Rev. Henry S. Clubb........ 271 Symptoms of Autointoxication, J. R. Leadsworth, B. S., M. D.... 273 The Need of Organized Antituberculosis Work 274 Garden Reveries, R. O. Eastman 277 Moderate Drinking, President Eliot 279 To Cure a Bad Cough - A Fading Blossom - A Mouth Breather - Spring Biliousness. Cooking Lessons, No. 5, Healthful Desserts. RATIONAL TREATMENT IN THE HOME, W. A. George, M. D. 288 Home Treatments for Common Diseases, No. 3. CURRENT COMMENT Our Dietetic Education - Dr. Wiley Should Be Retained - The School Garden. Lengthening Human Life — The Passing of Overfeeding in Tuberculosis - Acne or Pimples - Tobacco and Alcohol on the Young Man. in Cows as Viewed in America and Scotland - Nerve Strain in Schoolchildren - Knowledge Versus Manners - Foot Deformity. THE MEDICAL MISSIONARY AT WORK Healing as a Part of Gospel Work, A. A. John, M. D..... 301 Medical Missionary Work in Java, Elder J. E. Fulton 303 As We See, So We Are - Always Positive, Sometimes Accurate - Report of the Royal Commission on Tuberculosis 309 TERMS: \$1 a year; 10 cents a copy. Special rates in larger quantities. POSTAGE IS PREPAID by the publishers on all subscriptions in the United States, Canada, Hawaiian Islands, Philippine Islands, Guam, Porto Rico, Tutulia, Samoa, and Mexico. To all other countries in the Postal Union the price is \$1.25 a year. CHANGE OF ADDRESS.— When a change of address is ordered, both the new and the old address must be given. The notice should be sent one month before the change is to take effect. is to take effect. HOW TO REMIT.— Remittances should be sent by Draft on New York, Express-order, or Money-order, payable to order of Review and Herald Publishing Association. Cash should be sent in Registered Letter. Address, Review and Herald Publishing Assn., Takoma Park Station, Washington, D. C. OUR GUARANTEE TO EACH SUBSCRIBER. We guarantee the reliability of every advertisement inserted in Life and Health. We want every subscriber to feel that he can deal with our advertisers with Health. We want every subscriber to feel that he can deal with our advertisers with the fullest confidence of fair treatment. If, notwithstanding our most thorough investigation of all advertising submitted for publication, an advertisement should be published through which any subscriber is dishonestly dealt with or imposed upon, we request that full particulars be sent us at once so that we may take proper action for the protection of our readers. The conditions are: 1. That subscribers in writing to advertisers shall say that the advertisement was seen in Life and Health; and 2. That the particulars shall be sent us during the month the magazine is dated which contained the advertisement. us during the month the magazine is dated which contained the advertisement.





Takoma Park Station, Washington, D. C., May, 1000 Vol. XXIV

No. 5

Why Eat Meat?

D. H. Kress. M. D..

Superintendent Washington Sanitarium, Takoma Park, D. C.

Meat, even from healthy animals,

contains retained body wastes.

Meat extracts contain practically

effect is due to poisonous wastes.

from diseased animals, and con-

Much meat, apparently sound, is

tains dangerous disease germs.

Among diseases which have been

Meat eating tends to make men

attributed to the consumption of

meat are tuberculosis, cancer.

gross and to produce animalism.

The stimulating

no nutrition.

and scrofula.

T the recent International Congress on Tuberculosis much was said regarding the importance of

breathing pure air. A great deal, it is

claimed, has been accomplished in the prevention and successful treatment of tuberculosis a n d other diseases (which were considered almost incurable a few years ago), by merely supplying a liberal amount of pure air both day and night.

Why is pure air

so essential? Not because it contains a greater amount of oxygen; for impure air may not be deficient in this respect. The chief objection to the inhalation of impure air is the fact that the desirable element - oxygen - has undesirable poisonous organic wastes associated with it. Impure air is not alone responsible for the prevalence of tuberculosis. The same objection that applies to the breathing of impure air applies to the eating of impure food, namely, the beneficial, or nutritious is contaminated by the harmful.

Meat is not a clean food. The proteid found in meat is an essential food element; if this were all that meat contained, no serious scientific objection

could be raised against its use as a food. But the proteid in meat has associated with it certain wastes, and it is therefore impure.

In vitiated air we have a mixture of oxygen and eliminated body wastes; so in meat we have a mixture of proteid and retained body

The inhalation of impure air. and the ingestion of impure food, are alike injurious, for both tend to vitiate the blood and to lower the vitality of the tissues, making a person more subject to disease.

This naturally leads to the inference that the liability to take germ diseases is increased by meat eating; that those who use meat freely are more apt to die of these diseases when stricken down with them than are those who use meat moderately or not at all; and that the free use of the flesh of animals as food may be in part responsible for the rapid increase in deaths from tuberculosis, pneumonia, Bright's disease, apoplexy,

and heart failure.

If, in breathing, the aim is to get the oxygen unassociated with impurities, why, in eating, should not the aim also be to get food elements unassociated with impurities? Meat and meat extractives are sometimes recommended for the sick. Would it not be as rational to recommend vitiated air for the sick, as to recommend these extractives? The sick need pure air and pure food.

Even meat from a healthy animal is impure, because constantly circulating in the tissues of the living animal are waste products on their way to the kidneys, lungs, and skin for elimination. When the animal dies. these wastes are retained in the tissues from which is sliced the juicy

beefsteak. It is estimated that one pound of meat contains at least fourteen grains of uric acid, besides other wastes. The only nutritious part of meat is the insoluble meat fiber. The soluble portion, or extractives, are chiefly wastes.

Dr. H. W. Wiley truly says: "There is no nourishment in broth or in the so-called extracts of meat. Every one of the so-called invalid foods made from

meat is a fake of the worst kind. Extract of beef is absolutely without value as a food. A dog fed on beef extract for eleven days died of starvation. He was given all he would . eat. Makers of the best - known extracts do not claim that beef extract is a food. They say it is a stimulant, not a food." The stimulating properties found in meat are the poisonous wastes it contains. These. when introduced into the system, fever it, the same as does alcohol, or produce what is known as stimulation. But there is reason to believe that these poisons render the blood and tissues impure, diminish their vital resistance, and predispose to germ diseases, and that



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UNLOADING CATTLE FROM OCEAN
STEAMERS

they also produce degeneracy and premature old age.

Aside from the fact that flesh foods introduce impurities into the system and lower the vitality of the tissues, thus preparing the soil for disease germs, such germs are directly communicated to man through the consumption of the flesh of diseased animals.

One investigator maintains that leprosy is due to the use of diseased fish, and it is generally conceded that flesh eating may be, in part, responsible for the prevalence of tuberculosis. While impure air and impure food lower the vital resistance of the tissues of the body, infection, it is now held by some. the poor meat were condemned, half the population would have to go without any at all." That means that at least one half the people are eating diseased meat all the time, or all are eating diseased meat one half of the time.

True, the butcher eases his conscience by cutting out the conspicuously diseased portion, but the remainder of the carcass he sells to an unsuspecting public. But how can the meat from a dis-



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COWBOYS BUTCHERING BEEF

frequently takes place through the alimentary canal, by the use of foods or drinks which contain the germs of tuberculosis.

Tuberculosis is a common disease among cattle. Many of the animals slaughtered at the large abattoirs give visible evidence of having the disease. In the District of Columbia, one out of every four of the dairy herds, it has been discovered recently, has this disease, and it is not the only disease that exists among cattle.

So common is disease among these creatures that a member of the city board of health of Chicago said that if all the diseased meat was rejected, the price of beef would be a dollar a pound. A chief inspector of meat said, "If all

eased animal be other than diseased and dangerous? At the Royal Commission on Tuberculosis held in Great Britain in 1895, it was reported that, of the numerous experiments that had been made, "the apparently healthy flesh of tuberculous cattle, not the manifestly diseased organs, had been swallowed by various animals, with the effects that the disease had, in many cases, fatally followed the ingestion of such infected material." But if it has been demonstrated that the lower creatures become diseased by eating such meats, we may ask, Will not man?

It is estimated that one fourth of the cattle are afflicted with tuberculosis. Creatures having the disease may be well nourished, and give no visible evi-

dence of disease. It is only during the later stages of the disease that the animals become emaciated, and are suspected.

Burton R. Rodgers, D. V. M., in an address published in 1904, stated that hogs are easily infected by tubercular disease. He said: "In four years' work as inspector of meats, I have seen no less than ten thousand such animals, to say nothing of the like proportion which two hundred other federal inspectors have seen." He further said: "The high-bred, high-priced, pedigreed animals, those in prime fat, and apparently healthy in condition, are often as thoroughly saturated with the disease as is the scrub. Among seven hundred fifty hogs which were discovered to be tuberculous after being slaughtered, we were not able to discover, on examination before slaughter, a single hog that we could say positively was tuberculous." Tuberculosis is not the only disease among hogs. The deadly trichina also gains access to human beings by the use of measly pork.

Cancer is another disease that is very common among cattle. In New Zealand, where I saw the fattest and bestlooking cattle I have seen anywhere in all my travels, I found cancer to be a common disease. It did not surprise me to be told later by a resident surgeon that cancer in man was equally prevalent. Excessive fat is no indication of health. It is, in fact, an indication of disease; for this reason, the cancer germ often selects fat subjects, both among cattle and among men. It is not at all surprising, therefore, to find animals which have been fattened for slaughter, cancerous.

I am convinced that the free use of meat is responsible, to a great extent, for the prevalence not only of tuberculosis and cancer, but also of scrofula, tumors, and other like affections which are becoming so common among menand women. It has also been affirmed by some medical authorities that appendicitis is practically confined to meat-eating countries, and to meat eaters in those countries.

In view of all this, there certainly can be no good reason for eating the flesh of animals so long as it is possible to get the food elements to supply the needs of the body from safer sources, unassociated with impurities.

In the simple products of the earth furnished by nature for such a purpose, no food element required by the human body is lacking. Does not the animal itself upon whose flesh we subsist, derive the elements out of which it builds strong bones and muscles, from the vegetable kingdom? If so, why should man take his food at second hand, or after it has become animalized and contaminated, and thus fill his body with animal wastes, and run the chances of introducing germs of disease? Why should he lower the vitality of the tissues by introducing such degenerative changes and premature old age?

Meat eating also tends to make men gross, and it develops animalism. Dr. Armand Gauthier, a noted French authority and dietetist, in his extensive laboratory experiments upon animals, discovered that they were gentle when fed upon grains, but became quarrelsome and unmanageable when given flesh to eat. "This [vegetarian] régime," he says, "tends to make men pacific beings, and not violent." Although not a vegetarian himself, he adds, "It is practical and rational."

Byron the poet once said, "Flesh eating makes me ferocious; the devil always comes with it, until I starve him out." Henry Ward Beecher said: "I have known men who prayed for the grace of good temper in vain, until their physicians told them to stop eating

meat. So long as they ate animal food they could not control themselves, they were so irritable." Certainly every one who has given it a trial can testify that a moral or religious life can be more successfully maintained by living upon the simple, non-stimulating products of the earth.

Canon Home Littleton, who is at the head of the greatest British public school, observes: "It is well-nigh impossible for even the best-intentioned man to live physically pure if he eats meat in excess,"

It was because God designed to make of the Jewish nation a healthy people, with clean morals, that he withheld fleshmeats from them after leading them out of Egypt. He purposed that they should, in turn, communicate to other nations this knowledge, which would

preserve their health and their morals. In this way the church was to lead in reforms, and be a blessing to the nations about her.

Israel despised the pure food given them by the Lord; and when they lusted after "evil things," he gave them their request, but sent "leanness into their soul." The plague also came upon them, and "slew the fattest of them." Here was demonstrated for all time the result of living on such diet; namely, that it is dangerous both to health and to morals.

Many, in these days, are discovering that to live on the simple, clean, non-stimulating foods which God gave man when in a sinless state, not only insures health, but aids in attaining and maintaining a state of morality which could not be attained while subsisting on flesh.



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STOCKYARDS, KANSAS CITY, MO.

The Bigygle --- And Why BY RO EASTMAN O O O MUSTRATIONS DIERRORN MELVILL A COMPANY OF THE PROPERTY OF THE P

FEW years ago the trust came along, picked up the bicycle industry, lusty and thriving, and waddled off into its own back yard to play with it. But at the first pinch, it collapsed like a toy balloon. And the mourners

were few, for the

There have been pages written to tell why the bicycle industry went to smash - many and many of them. Not a few have been from the well-paid pens of advertising experts who have deduced the fact, and wisely, that there was one reason only. and that was - lack of advertising. And if any one can find a better reason for the collapse, he is welcome to step to the head of the class.

But the facts are these: There was a trust formed, and it did not advertise, and in an astonishingly short time the bottom fell out of the bicycle business, so that the most prosperous manufacturer or dealer of a year or two before was ashamed to look a bicycle in the face. They mostly had no time. Not a few of them were looking for jobs.

Others had gone back to board with father. Still others, and these were, financially, the fortunate ones, cast their eyes upon the young automobile industry, tried their luck there, and, for the most part, stuck to it and waxed opulent. But the country at large lost one of its most exhilarating and enjoyable,

least harmful, and most helpful sports.

Those were great days - the old bicycle days. How well I remember my first wheel, an old Columbia fiftypounder, with steel rims, and a saddle on it like a flat boat. It was, in fact, a lady's wheel, and I got it third hand. I wonder where it is to-day? Unless it has been buried, it is on earth somewhere; for it could not be worn out or smashed. It was just as indestruct-



MY FIRST LONG BICYCLE TRIP

ible as the deacon's "one-horse shay," and almost as heavy. So I thought, anyway, when I pumped it one summer over some seventy-five miles of hills and sand to a camp-meeting. And even though I sat gingerly all through that week of meetings, what pæans of joy surged through my youthful breast at the thought of my accomplishment in ma-

king successfully that long-distance trip!

Then there was my second wheel, which I bought second hand, and which I believe I esteemed as my best earthly friend, except my mother. Many long pilgrimages that wheel and I took around

the lakes and over the hills, and I wondered if Alexander ever loved Bucephalus more than I did that old nicked-up bicycle. Now my whole family were on wheels, and not a few family trips were undertaken over the countryside to dinner. How much better than a stuffy day inside the house, with all the fresh air outside going to waste! And at school there was a long row of wheels

in the basement, and he was a poor youngster indeed who could not ride to school if he so desired. Even the tête-à-têtes with the schoolgirl friends were conducted awheel, which situation held more virtues than that of good exercise; for it takes an expert to sidle up real close to his companion, and usually

both arms are required for steering, at least on country roads.

And my third wheel I bought first hand; and the days of the trust were upon us. I moved to a larger city, where I was engaged in work. I sent

> for my wheel, and it came. I rode it once down the asphalt street, which was swirling with automobiles, with an occasional grocer's boy or messenger dodging in and out on "bikes"-I rode it once, and felt that I was either lost, strayed, or stolen; then I left it in the corridor at the office. The office boy came up and said, "Say, youse, watcher want me t' do wit' yer wheel?" I



"WATCHER WANT ME T' DO WIT'
YER WHEEL?"

said, "Take it away," and I guess he did, for I have never seen it since.

A certain Irishman once opposed the use of the bicycle, on the ground that one might just as well walk afoot as ride afoot. Maybe he was right. But people will not walk if they can get out of it. Why? — I think it is perhaps be-



"THE WHOLE FAMILY WAS ON WHEELS"

cause most of us have that peculiar disease called abroad "Americanitis." We want to get somewhere, and get there quick. Some walking clubs have been formed, and have operated successfully, but they are nothing like the old bicycle clubs, which needed no organizer in order to form and to thrive wonderfully.

The bicycle was an American institution, and one of the best. It got people outdoors and out of themselves. It promoted a healthful social intercourse. It was unparalleled as an "exerciser." Some people abused it, but not many. Finally, the bicycle lost its place, not through any fault of its own, but through the usurpation of its place by the automobile. The unadvertised bicycle became a back number with the faddists,- the sorority,- which elegant body adopted that vehicle of fortune, the motor-car, which was much better adapted to their purposes because the rabble couldn't afford it. And then the public, like the apes which certain eminent scientists would foist upon us as our ancestors, followed suit, except that, not being rich, they were compelled to hang their wheels up in the barn, or sell them to the second-hand man, and take the tram-car.

I am glad that bicycles are coming back into use. I ride one myself now, and am proud of it. The office boy who gets this one will have to be careful not to let me see him first. I am glad, too, to see that certain enterprising dealers and manufacturers are beginning to raise their voices in behalf of this clean, healthful sport, the employment of the bicycle for pleasure as well as for business. And even though they are doing all their shouting at so much per shout, I wish them luck.

It was a bad bargain for us to trade the bicycle for the automobile. All that most of us get is the smell of burnt gasoline, and a dead dog once in a while. And we, being vegetarians, or nearly so, can not use the latter, even in sausages. The therapeutic value of the automobile is nil, or nearly so. Most people who can afford to have automobiles can afford to be sick. I have noticed that many of those who visit sanitariums have automobiles; some bring them with them. I have never yet seen a patient ride up on a bicycle.

And that might be considered a convincing argument; so it is a good one to close with.

Battle Creek, Mich.



"ALL THAT MOST OF US GET IS THE SMELL OF BURNT GASOLINE"



Copyright, Underwood, New York City

A RICE-FIELD IN TEXAS Harvesting and irrigation

Rice: Its Value and Adulteration

Rev. Henry S. Clubb

ICE is believed to sustain a larger portion of the human race than any other substance used for food, not even excepting wheat, maize,

or any other cereal. It is also the most easily digested of all the cereals; and

where it is made the principal or staple food and chief support, indigestion and its horrors of mental depression and suicidal tendencies are almost unknown.

The most lighthearted, intelligent, and industrious people on earth are, we believe, the Japa-

nese; and Japanese soldiers on their rations of rice sustained longer marches and suffered less from wounds than the soldiers of any of the nations of Europe with whom they marched to the interior of China

In view of the athletic superiority and wonderful endurance of the Japanese, an inquiry was directed to the Agricultural Department at Washington in order to learn wherein Japanese rice

possesses any qualities that make it more nourishing and sustaining than our domestic article. The reply was that although the Japanese rice was selected by the United States Commissioners as the best adapted for cultivation in this coun-

> try, and is the best in other respects, the chief difference in its superior sustaining power comes from the fact that the Japanese use the rice unpolished, and furnish the polished article to foreign countries only; and that the rice in common use in this

country is, by the process of polishing, deprived of some of its most sustaining qualities.

The rice of commerce in this and other countries is not only stripped of much of its most desirable qualities, but in order to make it attractive to the buyer, it is coated with glucose and talc to produce the pearly appearance.

Thanks to the operation of our pure food laws, those who sell rice in pack-

Rice is more digestible than any other cereal.

The Japanese polish part of their rice-for the foreigners. It is unpolished rice that builds the brawn of the brown man.

Polished rice is deprived of some of its most valuable nutriment. and receives a coating of - well, you'd better wash it off before cooking.



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TERRACED RICE-FIELDS, JAPAN

This fertile region is said to be an old volcanic crater.

ages are obliged to place on the outside the fact of its adulteration; we find

printed on one of the packages containing polished rice the following statement: "This rice is coated with glucose and tale. Remove by washing in cold water."

Tale is a mineral, which, when powdered, is extensively used as a lubricator, and in solid slabs for hearth-stones, etc. It is the essential ingredient of baby powders. And the glucose is made commercially by treating starch with diluted sulphuric acid. But rice is not all sold in packages; in fact, it is usually sold in

bulk, and the people who buy think it is a genuine article because it is so white and pearly.

The instruction on the package to wash it off with cold water (and in some instances the recipe says, Wash four times) is good advice. Persons using such rice should be careful to wash it thoroughly.

Now the Japanese do not use rice subjected to adulteration, nor is it stripped by polishing off its most nourishing portion. And this is why unpolished Japanese rice is unquestionably the most desirable form of rice obtainable.

The greatest care is necessary in selecting rice, as it is very easy for a purchaser to be deceived. Dealers who stand high as to respectability are known to sell polished and adulterated rice as the genuine article, but those who have once obtained and used unpolished Japanese rice can not be deceived.

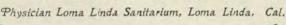


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TRANSPLANTING RICE SHOOTS

A typical scene in the interior of Japan

Symptoms of Autointoxication



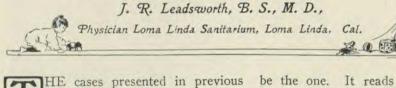
No other condition presents such a variety of symptoms as auto-

Some typical mental symptoms in

intoxication.

an adult.

Symptoms in a child.



numbers of LIFE AND HEALTH, dealing with the serious consequences arising from intestinal poisons, have by no means illustrated the complex manifestations of this disease. In fact, there is no disease in the whole one thousand or more described in medical text-books that presents such a varied and ever-changing group of symptoms. And it seems that this disease affects young and old alike, and is especially frequent among people who stay indoors much of the time. It will be

seen that this includes lawyers, doctors, bankers, teachers, accountants, clerks, etc.

In the child it is seen by the watch-

ful mother that all is not well. She observes that there has been almost a complete change in its disposition. The sparkle in the eye is lacking, and the countenance seems pale and expressionless; the appetite is freakish or lost; complaint may be made of dizziness or headache; the disposition has become peevish or irritable, and it cries upon the slightest provocation. These and other diverse symptoms make the recognition of the condition in a child difficult.

In the adult the group of symptoms does not vary greatly from those seen in the child. But if ever a disease seen by the writer accurately met the specifications outlined in the Good Book as recorded in Deut. 28:66, this seems to be the one. It reads: "And thy life shall hang in doubt before thee; and thou shalt fear day and night, and shalt have none assurance of thy life." A case seen recently will show the application: The first day there was utter despair from the conviction that he was afflicted with tuberculosis of the bowels; that being proved out of the question, next it was some incurable form of kidney disease; then a day or so was spent in fearfulness that there existed a cancer of the stomach. When the fear of the existence of that disease

was eliminated, then it was organic heart trouble, or meningitis, or some equally serious derangement. The constant introspection of the

patient, together with a limited knowledge of various diseases, was sufficient to cover a very wide range of abnormal-The unaccountable part of it is that these patients undergo as much or more suffering from an imaginary disease than is experienced by those having the real conditions. In the morning there was a dread of what might happen during the day. In the evening it was fear that sleep would not come. wakeful hour spent in bed was the occasion for counting the pulse or the respiration, or feeling over the skin for enlarged glands or painful areas.

But the diagnosis is not dependent upon such ever-changing symptoms. Examination of the excretions will show the nature of the trouble.

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The Need of Organized Antituberculosis Work

N all large communities social workers have learned that the control of tuberculosis, at least for the poor and unfortunate, can not be made effective except by concerted effort. The city of Washington, in its Associa-

tion for the Prevention of Tuberculosis, has a well-organized work for the relief of the tuberculous poor of the city.

One might suppose that the capital city, with its broad, shady streets and numerous parks, would be comparatively free from those predisposing causes of tuberculosis which we associate with narrow streets, tall buildings, and overcrowding.

It is true Washington does not have its fourand six-story tenement blocks of ill-ventilated and badly lighted rookeries; but what it contains is bad enough. Its death-rate from tuberculosis ranks among the highest in the country. This is due partly, no doubt, to the high negro present worse conditions.



Photographed for Life and Health

TUBERCULOSIS AND POVERTY

This family was found by the district nurse in a starving condition. The mother, having been deserted by the father of the children, supported them by washing until she was too weak to get out of bed. The little girl near the stove, aged only five, then attempted to prepare food and do the housework. The baby is only six months old. They were huddled together in one room, with no fire, the mother coughing and expectorating, the children sleeping in the same cot with her at night. The mother's one worry, when the children had been taken care of and she sent to the tuberculosis hospital, was for her new stove, which she was buying on instalments, and which she feared she would lose if the payments were not kept up. The poor woman will never need the stove again. The photograph can not convey to the reader the filthy and insanitary condition of this typical home; some of them



Photographed for Life and Health

A SHACK IN THE OUTSKIRTS

This abode was built and largely furnished from driftwood from the river, and odds and ends of trash picked out of the city dump. The wife is tubercular.

contingent in the city, but partly also to the bad-housing conditions which prevail in certain sections, especially in the alleys.

In 1906 the deaths from tuberculosis in the registration area of the United States was 159.4 per hundred thousand; for the city of Washington, 254.1 per



Photographed for Life and Health

A "HOME INDUSTRY"

This woman, an advanced case of pulmonary tuberculosis, sells bread, milk, meat, and other articles of food, which she undoubtedly infects by handling them. There is no law to prevent this very grave source of infection.

hundred thousand. Of the white population, it was 158.9, a little less than the average for the entire country; while of the colored population, it was 463.3 per hundred thousand.

It will be seen from this that tuberculosis is emphatically a disease of the colored race — mowing them down like a machine gun. Undoubtedly the negro race has a peculiar susceptibility to tuberculosis, but this high mortality is at

least partly due to the insanitary conditions under which many of these unfortunate people live.

With some complacency we consider the fact that we, or rather our fathers, gave this race their freedom. But a study of their manner of life under its worst conditions will suggest the query whether in freeing the negro we have conferred on him a real benefit, and whether the country, which has sacrificed thousands of lives and millions of dollars to give the negro his freedom, should not do more than it is now doing to aid him in his unequal struggle with poverty, ignorance, and disease. We feel



Photographed for Life and Health

A VERITABLE PEST-HOUSE

In the innocent-looking house on the right, six cases of tuberculosis have developed within a year. The little boy is an advanced case, having taken the disease from his grandmother, who also is far advanced. An elderly man rented a room, and contracted the disease within a few months. The last victim was a young woman, who, when she rented the room, was apparently in excellent health. There have been two funerals from tuberculosis from this dwelling within the year.

a responsibility for the African negro republic of Liberia, for which we or our fathers were partly responsible, and which is proving to be a failure. Should we not feel a responsibility for the conditions which have resulted from the freeing of an untutored race, and gently nurture that race, as we are doing the Filipino and other island dependents?

At any rate, so far as Washington is

concerned, the tuberculosis problem is to be a burning question, which will not be solved until better living conditions are vouchsafed for the negro and white settlers in the smaller streets and alleys.

The conditions met in many parts of the city is a mute appeal to those who are inventing ways to dispose of their means.

There is a work to be done for both whites and negroes, a work that means

not charity, but selfprotection; for every one of these districts of the very poor is a breedingplace for tuberculosis.

In Washington the Association for the Prevention of Tuberculosis is working by means of visiting nurses, consumptive camps, a sanatorium, a tuberculosis hospital, and dispensaries, and by means of lectures and other educational methods, to stamp out the disease, and has the co-operation of the Associated Charities when relief of families is necessary. This work has been very much crippled this last year for want of sufficient funds.



Photographed for Life and Health

A TUBERCULOSIS BREEDING-PLACE

This house, once a stable, is occupied by the lowest type of colored people. There are six children in the family, two of them having tuberculosis. Altogether there are four in the family with tuberculosis, and one died from the disease just previous to the taking of this photograph. The custom prevails of renting sleeping space on the floor for ten cents a week, and at times there are twelve or fifteen persons huddled in this one room with these consumptives. No sunlight enters the room except from one two-by-three window. The dirt is simply indescribable. The photograph can not adequately show it.



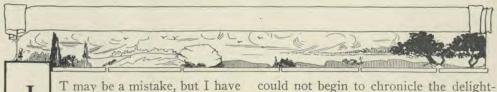
Photographed for Life and Health

ANOTHER SHACK ON THE DUMP

Abundant opportunity for fresh air, but little reaches the inside of the house. The owner is a dealer in junk. Every member of his family has tuberculosis. Doubtless the work, handling over the cast-off articles on the dump, contributes something to the prevalence of the disease in this family.

Garden Reveries

R. O. Eastman



come to look at it this way: Gardening as an occupation; for either pleasure or profit, is delightfully inspiring; gardening for health is like any other medicine; it leaves a bad taste in the mouth. So when I thought about writing a series of articles on "gardening for health," I could not bring myself to it, and finally I decided that I would not. I will simply write a series of "garden reveries," painting, as faithfully as I can, though doubtless in more or less of a sketchy fashion, some of the bright vistas which this occupation so constantly lays open, both to the eye and to the imagination. Thus I plan, not to prescribe, but to inspire. I hope that I may bring some to see gardening as I see it, that they may experience the awakening of the desire which I believe exists, though sometimes dormant, in almost every heart - a desire to come in close touch with the wonderful, growing things of nature.

This introduction has two objects. One is to state the plan and the purpose of the series, which I have partly done in the preceding paragraph; the other is to incite others to join me in my garden adventures.

For doubtless there are some thousands among the readers of Life and Health who ought to have gardens, but who have none. If half of these would join me this year by spading or plowing up a garden plot, and tending it decently till harvest-time, all the pens in Christendom—and all the writers—

could not begin to chronicle the delightful experiences this company would enjoy. There are none so rich and few so poor that they can not take part; there are none too well, and few, again, too sick. There is scarcely a home, even in the heart of the largest city, which can not enjoy somewhere its garden plot. The vacant lots in the large cities of the nation would feed an army if properly worked. And what a pleasure, when the mellow days of spring merge into the warmer days of summer, to watch the leaves and petals drink in the air and sunshine, to breathe in the summer air. fragrant with the breath of the garden, most of all, perhaps, to look about on the growing things and to know that they are yours.

The greatest thing that God ever did for his Son was to make him a Creator. Perhaps it was a greater thing to make him a Redeemer - who can say? - yet it was the love for that which he had created which caused him to redeem. In the tilling of the soil, whether on spreading acres or on a tiny garden plot, man engages in his noblest, God-given occupation - the first occupation ever given to him, and the one in which he works hand in hand with the Creator himself. I do not decry or deprecate any other honest profession or livelihood when I say that God made us farmers first of all. This would be a hard world without the matress-maker, and its path a weary one but for the shoemaker; we need miners and merchants; yet from the least of these to the greatest, there comes to

each every little while a vision of green hills and golden fields. We are all farmers at heart. The trouble is that so few of us ever find ourselves.

May is a good month to start gardening; April, better; the first of the year, the best of all. That is what I did. First draw your garden plan — measure your space, figure out what you want to plant, how and where, and with a pencil and paper map out your garden just as you intend to plant it. No need for artistic ability here. If you understand it yourself, that is all that is necessary.

Do this now. Plan to plant in rows, not in beds. Drop a postal to two or three good seed-supply houses, and get their catalogues. Most of these contain some good instructions for the planting and culture of different kinds of vegetables. Spend an evening looking these over; decide thoroughly upon your needs, and then order your seeds.

It is too late now to do much planting indoors. You can buy your cabbage plants and tomato plants from the stores or truck-gardeners when you need them. Begin to plant outdoors at the proper time, which may be determined from your catalogues, from the experience of your neighbors, or from your own judgment. Learn to consult your judgment, and to rely on it whenever possible.

Don't plant by signs. Year before last, when I was planting my garden, my next-door neighbor raised his hands in horror, and said, "You'll never get nothin' offen that garden. 'Tain't the

right time to plant corn now, anyway. I alwus plant mine by the moon." I laughed, and told him I always planted mine by the sun. That year I had the best garden I ever had in my life. My neighbor's didn't amount to a row of crooked pins. So don't go by signs.

Neither is it advisable to rely implicitly on all the advice you are given. Advice is something most people are overstocked with. Some of it is good — some isn't.

If you have a large garden plot, have it plowed. Don't attempt to spade it if it is more than forty feet square. It doesn't pay. Once I thought it did, but I have changed my mind. Better use your energy to more effect behind the wheel hoe a few weeks later.

When you plant the beets and carrots and other seeds that take a longer time to come up, throw a few radish seeds in with them. These will come up in a few days, and mark the rows for hoeing. Remember, the more you hoe, the more you grow.

These are just a few hints, mainly for amateurs like myself who want to get started right away on their garden. If you haven't been planning a garden, there is no time to waste. Get out and clear up that vacant lot. Get the boys and girls busy building bonfires. Get out with the robins in the morning once or twice, or tackle the rake and spade after you get home from the shop or office, or from school. If you don't get the fever within the first week, you might as well quit; but don't worry, you will.





Moderate Drinking

I HAVE been all my life what is sometimes called a moderate drinker; that is to say, I have used beer and wine on occasion, not habitually, and I have never experienced any ill effects in my own person from either.

I have recognized the fact that alcoholic drinks have a tendency to cheer people up and make them jolly and noisy; but the question of the expediency of that kind of elevation has gained on me as the years have gone on. It seems to me that the recent researches in physiology and medicine tend very strongly to show that the moderate drinking of alcohol is inexpedient.

As a result of experience it is a fact that men who are to be exposed to cold or heat or hardship of any sort are not prepared or braced for such encounters by any form of alcohol.

You know that it was considered essential that a sailor in the merchant marine or in the navy, should be braced for his arduous work by grog every day; that was really and simply considered a necessity. Now, grog has been abolished in our navy absolutely, and is no longer served in well-conducted ships of the merchant marine; and the result is a demonstration that that rough, hard life was not really helped by alcohol, but hindered. No captain of an ocean liner ever supports himself now against the terrible exposures of the bridge by means of alcohol. He will take hot tea or coffee, or hot lemonade, as I have seen many of them do, but he never takes alcohol to stimulate himself when exposed to terrible weather.

It is so in regard to most intellectual labors. It was not expected that anybody encountering the labors of the Prime Minister of England, in his office every night and during the long hours of the day, could do the work without being supported by one or two bottles of port a day; and many famous men have lived through that sort of life under those conditions. That view is now abandoned. It is well known that alcohol, even if moderately used, does not quicken the action of the mind or enable one to support mental labors.

The Time Reaction

We have had a great deal of German investigation and some American investigation in psychological laboratories in that direction, and the results are perfectly plain, and they are all one. For instance, a clerk has as his principal function the addition of figures, in long columns or short. It is demonstrated that when the clerk drinks a moderate amount of wine or beer, he can not add as well the next day as if he had had no alcohol the day before. That has been proved by actual experiment in a very large number of cases. It is established as a psychological fact, the result of experiment.

There is what is called the time reaction; that is, the interval that elapses, for example, between your hearing a pistol shot or seeing a flash of light and putting your muscles in motion to touch a given spot on the table.

¹ From an address delivered before the Massachusetts No-License Conference by President Eliot of Harvard University.

That is time reaction. Now it is demonstrated that alcohol, even in the most moderate quantity, affects, unfavorably that time reaction; that is, slows the whole nervous action of the man who takes it, and that this effect is injurious.

I had occasion to know about the time reaction of a famous pugilist whose habitual residence was not far from this spot. He was expecting to fight in a city at some distance from Boston. The appointment was made, but he had been on a succession of sprees; his trainer could not control him: he was under the influence of alcohol a greater part of the time. He was brought to Cambridge, and his time reaction was tested. It was slow. Now, this man had always been famous for the quickness of his time reaction. A pugilist has need to have a very short time reaction. He must see by the motion of his opponent's fist just where he is going to strike, and put his own arm in the way quickly. A slow reaction is fatal to a pugilist or a fencer or a runner

Lowers Intellectual Power

The effect of alcohol on the time reaction of the human being has been studied carefully, tested in thousands of cases, and there is no question about the ill effects of alcohol, even in very moderate doses, on the time reaction. That means that alcohol diminishes the efficiency of the working man in most instances, makes him incapable of doing his best in the work of the day. So I say that the recent progress of scientific experimentation has satisfied me that even the moderate use of alcohol is objectionable; that the habitual use of alcohol in any form is lowering to the intellectual and nervous power. Now, if a man is leading an intellectual life, if he is engaged in an action which interests him keenly, stirs him, impels him to the use of his mind. then he will inevitably feel the deteriorating effect, of this drug.

I was brought up as a youth and as a young man, as a student and teacher of chemistry, to respect exact science. I was taught to believe in nothing so much as the open mind, and I felt that exact observation and just inference were the foundation of that kind of knowledge which should determine the conduct. And so I have tried all my life to keep an open mind, particularly on burning questions, and I suppose that is the reason why, as I have grown older and have seen more, I have changed my view about license and no-license. I feel that much has been proved showing that it is physically and mentally and morally for the advantage of a population as a whole to go without alcoholics as a rule.

Personal Liberty

But then, I was brought up in my youth, in church and school and college, to believe in human liberty as the only condition for developing human virtue or anything in the human being that deserves the name of virtue, a self-sustaining, self-controlling principle. Isn't it a great interference with liberty, with the liberty that God gives man, to undertake to prevent people who want alcoholic drink from getting it? I have somewhat changed my mind about that since Cambridge first tried to establish no-license.

What is the justification of interference with that liberty? There are a good many questions concerning which we must ask that question—the justification for interference with liberty. I found that justification in the experience of Cambridge under a no-license system. It seemed to me that the collective good, by excluding saloons from Cambridge, justified the abridgment of the individual liberty, particularly when that liberty was a liberty to use for pleasure something that was unwholesome.

I have found in that fact the justification for interference with personal liberty to that extent — the exclusion of the saloon. I was asked just now at this table whether I would go further, and say that I would advocate a complete exclusion from Cambridge of liquor in all forms. I have not got that far yet—perhaps I shall.

Community Versus Individual

But I just said that we have been obliged to consider interference with individual rights in many directions of late. The reason is that this massing of population in small areas, crowding, driving together in an unwholesome manner, has brought a large number of new problems

into society. Nature herself is showing us that in many ways we can not pit ourselves against natural evils on the individualism principle. For example, we in eastern Massachusetts have been much vexed with the brown-tailed moth. But we can not destroy the brown-tailed moth or prevent its ravages if every man and woman who owns a lot of land shall be at liberty to let the brown-tailed moth alone. That is impossible. Nature is teaching us that collectivism must sometimes override individualism.— School Physiology Journal.

Positive Living

We can not always decide what things shall come to us in life, but we can assert what effect we will permit them to have upon us. We can face poverty without permitting it to harden us; we can meet trial and sorrow, and remain calm and unworried; and we can stand bravely when we do not see the way to walk. We can . . . remain simple, strong, sincere, and unruffled despite any environment. Thus we may conquer adverse conditions by making them powerless to harm us when we are unable to change them.

If we were for a single day to seek to find good points in the acts of those around us, to let their weaknesses and failings fade into nothingness in the shadow of our charity, to emphasize their best, to recognize it, to appeal to it, to call it forth and develop it, life would seem very different indeed to ourselves and to them. A smile, a word of sympathy, a touch of human kindness, a hand-clasp of fellowship, an unexpected bit of tenderness, courtesy, or consideration will accomplish wonders. . . . It has a cheering, transforming power that no amount of criticism or reproof can accomplish in changing others. The best way to take the sting from one's own sorrow is in forgetting it in ministering to another; lightening the burden of some one else makes our own rest more lightly on our shoulders. - The Circle.





Conducted by G. A. Hare, M. S., M. D., Fresno, California

[The attention of our readers is called to the following cases because they represent two distinct and apparently opposite classes of patients, so numerous that they may be seen daily in the office of every lung specialist.]

To Cure a Bad Cough

You want a quick cure for a bad cough. Let us see how we can get it.

You are a well-developed young man, with a rounded physique, but flattened chest. You are about ten pounds overweight. You say you have led an easy life, never had to work, but have made a record in school as an athlete. "Smoke some." How much? - "About ten or twelve cigarettes a day." You say the taste for strong drink is gaining on you, and that you have indulged pretty freely at times. You usually go to bed about eleven or twelve o'clock, except the three or four nights a week which you spend out for "social recreation." You have been troubled with a bad cough for six months, and had a similar experience one year ago.

You say you find the night air bad for your cough, so you open your windows only about two inches,—just enough for fresh air. You have always been a large eater; have been told that raw eggs are good for such a cough, so in addition to three or four good meals each day, you take six raw eggs between meals, and a glass of malted milk on going to bed. Of late you have been feeling bilious, have a bad taste in the mouth, and you have a heavy coat on the tongue, are troubled with a dull

headache, and think your liver is a little torpid. You say that two years ago you slept for several months in the same room with a young man who had a very bad cough, and afterward died of consumption. And you think it is time some scientist should find a sure cure for consumption,—"something that will knock the germ out quick." You have never been afraid of consumption because there has never been a case in your family.

A careful examination of your lungs convinces me that there will be at least one case in less than a year unless you change your present pace. You can escape consumption and regain your lost health only by a radical change in your method of living. You have a fine physique, but your flesh is flabby, and your low muscular tone gives evidence that you have missed the blessing of regular exercise that is associated with hard work.

Cigarettes, wine, liquor, overfeeding, and social dissipation have sent your vital resistance so far down that any disease germ that might chance to tackle you would find you an easy victim. You must face about and begin to climb, and you had better begin right now. Throw your cigarettes into that large wastebasket, cancel your engagement for to-

night, and be in bed at nine o'clock, with the windows wide open. Never mind the wind, but throw a sheet over the back of a chair to break the direct draft. You can not get too much fresh air.

Your coated tongue and dull headache are no evidence of liver trouble, but they give good evidence that you are overeating. Every cell in your body is being smothered and choked with the residue of unused food. Your liver is not torpid. You have worked it so long overtime that it is discouraged.

When you omit your cigarettes, wine, liquor, raw eggs, malted milk, and about one third of what you eat at your regular meals, your liver will return to its work as vigorously as if it had been on a vacation. Your headaches will vanish, and your mouth will once more permit you to enjoy the pleasing flavors of wholesome food. What medicine should you take? - None! Sleep eight to ten hours every night. Accustom yourself to a cold morning bath, with vigorous rubbing. You will find a splendid tonic in light exercise in the open air .- work of almost any sort, or walking, riding, or climbing. It must be taken with enthusiasm, but must not be violent, and must stop short of any fatigue. A year of right living will restore your health, and make a new man of you.

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A Fading Blossom You wish to know what you can take to make you strong. Let us study

your case a little. You have not been real well for a year or more; have lost a little in weight, and do not seem to pick up; tire out easily; and your work, which used to be a pleasure to you, seems to drag and become drudgery. You are thin in flesh, have but little blood, are easily chilled, feet and hands cold all the time, and you are growing very nervous, and worry over little

things. You work in an office ten hours a day without sunshine, you have been coughing by spells for the past three months, and at present are having a little fever every afternoon. Your appetite is very poor. You have tried a restricted diet, with the hope that your appetite would get better; but instead of improving, it has grown worse, and you have lost four pounds in weight. You want to know what to take? There are some excellent things for you to take, and I will give you a prescription, which, if followed, will lift you right out of your trouble. But for fear you will not appreciate the need of following the prescription thoroughly, it is my duty to speak plainly.

The first thing you are to take is a hopeful, cheerful view of life. Take it in large doses, and repeat the dose as often as the effect begins to wear off. Do not worry about things you can help - help them, and don't worry. Do not worry about things you can not help it does not pay. Worry kills; hard work doesn't. With your insufficient diet, finikin appetite, impure air, and depressed spirits, you are on the starvation route. Your final destination will be tuberculosis. Change cars; take a country express, get out of your musty office, take to the open air, and expand your lungs in the sunny atmosphere of good health. Take good food and plenty of it .- all you can digest, - including cream, milk, and eggs. The open air, health-inspiring surroundings, and a hopeful mind will do wonders for your appetite. Work but little; sleep all you can, - at least ten hours,- and stay in bed twelve hours a day for the first month. Keep your windows wide open all night. By following this prescription you can easily gain ten pounds in five weeks, but you must follow it for at least six months or a year. Your strength will improve, your cough will disappear; the millions of new redblood corpuscles in your veins, and the cheerful expression of your rejuvenated features, will make you again able to enjoy your own company, and life will once more seem worth living. You can't afford to lose your salary for a year? Well, you can afford it after you learn that it pays better to *live* on four dollars a week than to die on two hundred dollars a month.

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A Mouth
Breather

Ethel has suffered from recurring attacks of earache for several years.

Of late she has grown a little hard of hearing. She nearly always snores at night, and of late, when she falls asleep, she awakes suddenly, apparently frightened, and as if she were choking. On examination, I find her nostrils are both nearly closed by a mass of glandlike tissue, called adenoids, which are growing in the upper part of the pharynx and in the opening of the nostrils. The nostrils are so fully closed by these growths that she is compelled to sleep with her mouth open. Breathing with the mouth open causes the throat to become dry, and gives rise to the sensation of choking. Her unnatural breathing is already giving a distorted shape to the chest. You notice that the breastbone stands out prominently. This peculiar form of chest is caused by mouth breathing, and is known as chicken breast.

Mouth breathing caused by adenoid growths is very common among children, and can only be cured by having these growths removed by a surgical operation.

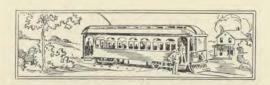
When these growths have been removed, the attacks of earache will probably disappear. But her lost hearing should be restored at once. This can nearly always be secured by a few treatments from a good specialist. Such cases as these can not be cured by home treatment, but they should not be neglected — proper treatment, given promptly, will restore good hearing — left to themselves they usually grow quite deaf.

Of course the general health must receive good care. Give this child an outdoor life, and see that the windows of her sleeping room are always open. She should have an abundant supply of nourishing food; at the same time she must be carefully guarded against overfeeding.

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Spring biliousness, my Spring friend, is nature's penalty Biliousness for your winter transgressions. It is simply the result of retaining in your body the material that you should have thrown out. Therefore take in less and eliminate more. Eat less food. If you suffer from bilious attacks, you should eat only sufficient to maintain a proper body weight, and should diminish your food till this point is reached. This can be determined only by weighing yourself occasionally. Butter, fats, and sugar should be taken sparingly. Fruits may be used freely. You will probably derive great benefit from the free use of lemons.









Cooking Lessons—No. 5

George E. Cornforth .

Healthful Desserts

paradoxical, because desserts and indigestion seem to go together. But this is not because desserts need be unwholesome. We will describe some which are, we believe, more wholesome than the dishes commonly served for this purpose, and which will leave no bad after effects, provided they are eaten as a part of the meal and not after a full meal. most wholesome and the most natural desserts are those which are furnished us by nature, and which require no preparation. They are nuts and fruits, either fresh, dried, or cooked. Desserts which are rich in fats, sweets, and spices are not wholesome.

The simplest desserts are prepared

HE title of this lesson may sound from grains and fruits. An example paradoxical, because desserts is—

Pressed Fruit Pudding

Completely cover the bottom of a pudding pan with slices of bread. Cover the bread with hot stewed blueberries, sweetened, using enough of the berries to moisten the bread well. Put a layer of bread on top of the berries. Then cover this with hot berries. Put a pan on top of the pudding with a weight on it to press the pudding. When cold, cut in squares, and serve with sweetened cream, whipped cream, or a sweet sauce.

Desserts prepared with gelatin make another variety of simple, wholesome desserts. For these we use vegetable gelatin, which makes a much more tender jelly than animal gelatin, and has nothing either in taste or in consistency to remind one of hoofs and horns.



Photograph, Saunders, Melrose, Mass.



SNOW PUDDING; CAKE

Snow Pudding

I cup sugar

1 cup lemon juice

3 eggs, whites

dounce vegetable gelatin

Put the gelatin to soak in hot, not boiling, water. After it has soaked about an hour, drain off the water by turning the gelatin into a colander. Put some fresh, hot water on the gelatin. Allow it to soak one-half hour, then drain, and put on hot water again. When this has stood a few minutes, drain off the water, and cook the gelatin in one cup of boiling water till it is dissolved, then strain it into the mixed sugar and lemon juice. Allow it to cool a little, until it is nearly ready to "set," then pour it into the three beaten whites, beating them as the gelatin is poured in, and continue beating till the mixture is again nearly ready to "set." Pour into molds wet with cold water.

Serve with cream, custard sauce, or raisin sauce.

Spanish Cream

3 cups milk, or ½ cup cream and 2½ cups milk

3 eggs, yolks beaten with 2 tablespoonfuls of sugar; whites, beaten with 3 tablespoonfuls sugar

1 ounce vegetable gelatin

Soak, wash, and drain the gelatin according to the directions given in the recipe

for Lemon Snow Pudding.

Heat the milk and cream in a double boiler. Add the drained gelatin, and cook till it is entirely dissolved. Strain it through a fine strainer. Put it into the double boiler again. Add some of this hot mixture to the beaten yolks and sugar. Then add the yolks to the hot milk, and cook a minute or two. Pour this hot mixture into the beaten whites and sugar, beating continuously, and beat till the mixture

has cooled somewhat. Then pour it into molds wet with cold water.

When cold, serve with cream or custard sauce.

Cream Rice Pudding

2 quarts milk

d cup rice, scant

I cup sugar

2 eggs

1 teaspoonful salt

1 package raisins, if desired

Wash the rice thoroughly, and cook it in the milk in a double boiler until tender; then add the salt, sugar, and beaten eggs. Then add the raisins, if desired, or lemon or vanilla flavoring, or a little shredded cocoanut. Pour into a pudding pan. Set the pan in a pan of hot water and bake until set. This should be a soft cream or custard when done. Do not bake too long.

Chopped nuts may be sprinkled over each individual dish when the pudding is served.

Stewed Fruit Pudding

§ quart peeled, quartered, and cored apples

d pound seeded raisins

4 pound figs

t cup seeded dates

I tablespoonful molasses

d cup hot water

d cup sugar

t teaspoonful vanilla

1 teaspoonful salt

11 cups zwieback crumbs

Chop the fruit, then mix all the ingredients well together. Put into a pudding dish, cover, and steam three hours. Serve with —

Raspberry Sauce

Rub one can of raspberries through a colander or strainer fine enough to remove the seeds. Sweeten if necessary, and thicken with corn-starch to the consistency of pudding sauce. Serve the pudding hot, with the hot sauce poured over it.

Coffee Date Pudding

a quart water

d cup dry cereal coffee

d cup sugar

d ounce vegetable gelatin

Steep the coffee in the water twenty minutes. Strain through cheese-cloth. Add water to make three fourths of a quart, to make up for what has evaporated. Meanwhile, soak, wash, and drain the gelatin according to the directions given in the preceding recipe. Then boil it in the liquid coffee until it is dissolved. Strain through cheese-cloth. Add the sugar. Pour into molds wet with cold water; then drop into the molds a few pieces of walnut and seeded dates cut in small pieces. When cold, serve with sweetened cream flavored with vanilla.

Lemon Pie With Granola Crust

Crust: to \$\frac{1}{4}\$ cup of granola add sufficient milk or cream to moisten it slightly. Turn it immediately into a pie tin, and with the back of a spoon spread and press it evenly over the bottom and sides of the tin. Bake until dry.

Filling: Juice and grated rind of I large lemon, 5 eggs (the whites of four for frosting), I cup of sugar, 2 heaping tablespoonfuls of flour, 2\frac{1}{2} cups of water, \frac{1}{2} teaspoonful of salt.

Beat together the four yolks and one

whole egg, the sugar, flour, lemon juice and rind, and salt. Add the boiling water. Cook in a double boiler until thick. Pour into the baked crust.

Meringue with the whites beaten with 3 tablespoonfuls of sugar. This will make one very large or two small pies.

Pie Crust

2 cups sifted pastry flour † teaspoonful salt † cup cold cooking oil

d cup cold water

Mix the flour and salt. Add the oil, but do not mix it until a dough is formed. Mix the flour and oil lightly together with a spoon, not with the hands. The least mixing makes the best pie crust. Then add the water, and mix only enough to blend the ingredients. Roll out without kneading, rather, pat the dough into shape.

Another way of using sour cream is in making —

Raisin Pie

I pint sour cream

11 cups finely chopped raisins

1 cup sugar

1 teaspoonful salt

2 eggs

1 teaspoonful vanilla

Mix the ingredients, beating the eggs well before adding them, pour into a pie tin lined with crust, and bake until set.



Photograph, Saunders, Melrose, Mass.



Treatments for Common Diseases—No.

W. A. George, M. D.

Superintendent Nashville (Tenn.) Sanitarium

means of relieving pain and bringing about various changes

in the body. When applied to the whole surface of the body, as in the hot full bath or hot vapor bath, the blood is brought in large quantities to the surface, and the action of the skin is greatly increased; at the same time, the amount of blood in the internal organs is decreased. Thus, if some internal organ is congested and causing pain, this general hot treatment will, at least

for a time, relieve the congestion and pain in whole or in part. The pulse rate is much increased, and the blood circulates so much more rapidly that the waste materials, or poisons, which have accumulated in the body, are rapidly carried off, and all parts of the living machine are in better condition.

Few homes are prepared for giving the general hot treatments just mentioned; and if they were, there are many

OIST heat is a most valuable conditions where it is not best, or at least not necessary, to use these more vigorous treatments. We can often

> The hot full bath: Relieves internal congestion. Hastens elimination of wastes. The fomentation:

Nothing equals it for local effect. General directions for applica-

.Uses of the fomentation:

To relieve pain.

To increase local circulation.

To relieve distress in stomach and abdomen.

To relieve rheumatism, stiffness, and swelling of joints.

To induce sleep.

To relieve pain and favor resolution in pneumonia.

Alternate hot and cold applications: Valuable tonic or stimulant effect.

Valuable in improving local circulation.

apply moist heat to some part of the body or over some organ, with the best results. For this purpose nothing equals the hot fomentation.

For giving fomentations properly, one should have at least three fomentation cloths about a yard square, made by cutting up a halfwool and half-cotton blanket. Some vessel, such as an ordinary galvanized pail or a dish pan

large enough to hold three gallons, is filled half-full of boiling or nearly boiling water, and put in some convenient place. If not too far from the patient, it may be kept hot by placing it on the kitchen stove while the treatment is being given. In applying a fomentation, two of the cloths are always used, one being folded inside the other. The outer cloth is always kept as dry as possible, while the inner one is wrung out of the hot water.

Before wetting the inner cloth, it is folded to a certain width,- the width which the fomentation is to be when

ready to apply, - and the ends are then grasped with the hands. The center is lowered into the hot water just as far as possible without burning the hands, and the ends are twisted in opposite directions until the cloth forms a kink at the center, when, by pulling the ends apart, the water is wrung out. By holding one end down near the edge of the pail, one may avoid spilling any of the water. The cloth should be wrung as dry as it is possible to wring it by this method,

and as quickly as possible. It is now shaken out quickly to the original folded width, and laid across the center of the dry cloth, which has been spread out full size on a table or in some convenient

place. The ends of the wet cloth are now folded in to make it the desired length, and the dry cloth folded over it, first from the sides, and then the ends. It is now ready to apply. The under surface, with only one thickness of the dry cloth, is placed on the bare skin of

the patient. For applying to the different parts of the body, the fomentation cloths are folded in various ways. Two forms - the short, wide form, and the long, narrow form - will be enough to illustrate the different ways of folding.

In the short, wide form, the inner

cloth is prepared by folding one edge over one foot in width, and the other edge in the same way, making it one

foot wide and three thicknesses of the cloth. When this is wrung out of the hot water and placed on the dry cloth, the ends are folded in, so as to leave it from fifteen to eighteen inches long, and then the dry cloth is folded over it as already described. This is the most convenient form to use in giving fomentations to the abdomen, chest, chest and throat, lower part of back, shoulder, hip, around the knee, or any part of the limb.

TION CLOTH In the long, narrow form, the inner cloth may be folded to a foot wide, as the one just described, and then folded over again, making it only six inches wide. When this is placed on the dry cloth, the ends are not

folded in, unless it is desired to make it shorter. The dry cloth is folded over, leaving only one thickness underneath. This is the form to use in giving fomentations to the spine, and should be applied from the back of the head to the lower part of the spine.



WRINGING THE FOMENTA-

THE FOMENTATION READY TO APPLY

When applied to the body, the fomentation, which should be so hot that the patient will not be able to bear it at first, may be raised, and the hand rubbed over the skin once or twice, after which the fomentation should be replaced. Shortly the skin will bear a very hot application; but should it still be unbearable, it may be raised again; or should it burn at some one point, that part may be raised for a moment. As soon as it can be borne, it should be pressed down snugly to the skin, and allowed to remain for three or four minutes, or until it is no longer uncomfortably hot. It should then be changed. This may be done by preparing another fomentation if one has four cloths, or, if only three, by wringing out the third, and placing it quickly in



APPLYING FOMENTATIONS OVER THE STOMACH AND ABDOMEN

the place of the other inner cloth without removing the outer cloth from the body. In giving fomentations to young children great care should be taken not to burn them. When the fomentation is ready to apply, the nurse should always first test it by holding it against her own face for a full half minute.

In giving fomentations three applications are usually made, requiring about fifteen minutes for the whole treatment. After the last application the skin should be sponged off quickly with a towel wet in cool water, and then carefully dried with a dry, warm towel. When this treatment is properly applied, the skin under the fomentation will often remain red for several hours.

Fomentations are usually given to relieve pain or for their quieting, sedative effect, but they may be used fo their

general effect in increasing or decreasing the circulation of the blood in any part of the body. Fomentations to the stomach and bowels are almost certain to relieve any ordinary pain or distress in that region, and may be repeated as often as desired. When applied to a joint in case of rheumatism, they relieve the stiffness, pain, and swelling. Applied to the spine just before bedtime, they will often give a good night's sleep to one suffering with insomnia. Applied to the chest every three hours in pneumonia, they not only relieve pain, but aid greatly in bringing the lungs back to their normal condition.

As a tonic, or stimulating treatment, alternate hot and cold applications are



APPLYING FOMENTATIONS TO THE SPINE of great value. Hot and cold to the spine is given by first applying a fomentation, and then, when the second fomentation is all ready, removing the first and quickly rubbing a smooth piece of ice up and down the spine three or four times, drying quickly with a towel, and applying the next fomentation. The ice is used after each fomentation. In giving hot and cold to the stomach or liver, it is perhaps better to apply a cloth wrung out of ice-water to the part for a few seconds after each fomentation, instead of the ice. Hot and cold applications are of great value in improving the circulation of any part.



Our Dietetic Education

N a very large measure our methods of feeding are archaic. We eat much the same food as our forefathers, it is cooked in much the same way, and in many instances we commit the same errors. This comes about because we pick up our methods of feeding at our parents' table, and few have any idea why it is that they eat certain kinds of food under certain conditions. As a matter of fact, we are all prone to eat what we like rather than what is good for us, and as a rule there is an utter disregard for food values.

Surely, in these days when so much attention is given to other hygienic subjects, the time has arrived when the knowledge of food values, from both a nutritive and an economic point of view, should be regarded as one of the conditions of elementary education. Haphazard methods of gaining knowledge are

never good, and do not make for progress. There can be little doubt that as a nation we feed badly. . . .

It is futile to attempt to induce parents to alter the methods they have employed for years. The proper place for such instruction is in our elementary schools, which are beginning to be regarded as places where the young may be founded in knowledge which shall equip them in the life struggle, and not solely as a means to help them to rise in life.

Such knowledge of food and feeding should be a great benefit to the individual and the nation from the point of view of both economy and physical development. It would be far better to teach children what to eat and why they eat it than to cook dishes they will never taste — A. H. Gerrard, M. D., M. R. C. S. etc., in the (London) Lancet.

Dr. Wiley Should Be Retained

I T is to be hoped that the rumors from Washington to the effect that Dr. Wiley, chief of the Bureau of Chemistry of Agriculture, is about to retire, are untrue; for the country could ill afford to lose his services at this time. He has unfortunately made many enemies, more than there was any necessity of making, and his enemies are bringing every possible influence to bear upon his superiors to force his resignation, or at least to limit his authority.

In his fight for pure food and pure drink, it was inevitable that he should antagonize powerful interests, not only with the dishonest manufacturer and wilful adulterator, but many also who use preservatives, believing them harmless. Among the latter are many of integrity, who would be ready and willing to change their methods if they could be convinced that they are wrong, but who are averse to being coerced by the big stick unsupported by sound argument.

In the discussion of the use of preservatives, Dr. Wiley's conclusions have at times been hasty, and the "poisonsquad" experiments, upon which these conclusions were based, were somewhat lacking in scientific accuracy. This is particularly unfortunate, since it is on the results of these experiments that the argument is based; and where the financial interests affected are so great, none but the most convincing evidence can overcome them.

If the benzoates, sulphites, formaldehyde, and other preservatives are injurious in the quantities used, they should of course be forbidden; and in any case the users of foods containing them should know what they are getting; but the mere assertion that they are harmful in their action in minute quantities is not sufficient, and Dr. Wiley has been unwise in insisting on the prohibition before he proved his case.

But this is only a small part of the pure-food crusade, and the immense good Dr. Wiley has done and is doing should not be nullified by his mistaken view in one direction. The country is under a debt of gratitude to him for what he has accomplished, and it would be nothing short of a calamity were his services to be lost merely because he occasionally falls short of perfection.— Editorial, Medical Record.

The School Garden

THE school garden is the best form of industrial work the school can undertake. Farm boys live in the outdoor air; schoolchildren are crowded within buildings that are usually but poorly ventilated. Garden work takes the school outdoors, where health returns to many a child that is breaking down while bent over a desk. The manual training work that replaces many farm handicrafts is practised within doors, and is often so stereotyped as to fail of affording a free development equivalent to that of old days. It is less easy to prescribe by rule just what to do in a garden; nature's variety confronts the little gardeners with problems not prescribed in manuals.

Then, too, gardening at school leads directly to gardening at home, where, at

least, a child may plant what he pleases, make multitudinous mistakes, and in mending them win back his birthright to learn by unfettered practise, and to gain by free initiative the power to plan and to execute large works in later life.

If a boy finds out in a home garden that neglect brings but a crop of weeds, while faithful, thoughtful care has borne fruit in a bounteous harvest for his fellow next door, he may well have learned a lesson making him worth far more to a future employer than could have been the result of a year's additional drill in arithmetic. It seems reasonable that the best means of replacing the lost farm life should be to take the children to the soil and train them to raise the flowers and vegetables that throve in the gardens of their great-grandparents.— Talisman.



bstracts

In this department, articles written for the profession, which contain matter of interest to Life and Health readers, are given in abbreviated form. practicable, the words of the author are given, but often the passage is abbreviated, or else paraphrased in popular language. Technical matters and portions of articles having no popular interest are omitted.

Lengthening Human Life

T has long been known that there is no iron law of mortality, but that mortality depends on the hygienic state of the community. Baines, in

a recent paper in the Journal of the Royal

Statistical Society, has calculated that the average duration of life in India is only twenty-three years for males, and twenty-four years for females, or less than half the life span in the advanced countries of Europe. The estimates of Finkelnburg show that in Europe human life has probably doubled in the last three hundred fifty years.

More recent and more reliable figures show that life is lengthening to-day more rapidly than ever. If we take the life tables for different periods for England, France, Prussia, Denmark, Sweden, and Massachusetts, we find that human life lengthened during the seventeenth and eighteenth centuries at the rate of four years a century; that during the first three-quarters of the nineteenth century it lengthened at the rate of about nine years a century; that at

present it is lengthening in Europe generally at the rate of seventeen years a century, and in Prussia (which is perhaps the home of preventive medicine) at the rate of twenty-seven years a cen-

In India the average duration of life is less than half the life span of advanced European countries, and shows no improvement. In Europe the average duration of life has doubled within three

hundred fifty years, and life is now lengthening more rapidly than ever.

In Prussia (the home of preventive medicine) life is lengthening at the remarkable rate of twentyseven years a century.

The poor have a much higher mortality than the well-to-do, and insanitary districts always show a much higher death-rate than sanitary districts.

A fall in the death-rate always promptly follows sanitation.

tury. For this country the rate can only be judged from the statistics for Massachusetts, which show that life is lengthening by about fourteen years a century, or approximately half of the Prussian rate. These rates may not continue in the future, but the opinion of our best authorities on longevity, such as Ray Lankester and

Metchnikoff, is that there is still great room for improvement, especially after middle life. Hitherto almost all the improvement has applied to ages before fifty, and only the most recent figures show any tendency toward improvement beyond that age. It is significant that backward India - in spite of the enormous room for improvement - shows during twenty years no rate of improvement whatever.

The statistics of insured lives show

that the insured poor, as represented by the Industrial companies, have a mortality from fifty to eighty per cent higher than the insured rich or well-to-do, as represented in the ordinary insurance companies. The insanitary districts of Glasgow and Paris show a mortality more than double that of the sanitary districts, while cities in general show a much higher mortality than the open country. A fall of the death-rate always promptly follows sanitation. Colonel Gorgas cut the death-rate in Havana in two, bringing it down to between twenty and twenty-four per thousand. The New York death-rate responded at once to Colonel Waring's clean streets. and that of Rochester to Dr. Goler's milk crusade. And now it is announced that the death-rate of New York is 16.5, the lowest on record - a result, in all human probability, due to the hygienic work of Dr. Darlington, the efficient health officer; Mr. Nathan Straus, the milk reformer; and the public agitation for health, prosecuted by the New York Times, the Journal, and other media, allied with the health work of the Committee of One Hundred on National Health, the tuberculosis association and committees, and other organizations.

These and other facts show that human life is long or short according to the hygienic conditions under which it is lived, that human life can be prolonged as these hygienic conditions are improved, and that there is still enormous room for improvement.

Life in America could, by the adoption of hygienic reforms already known and entirely practicable, be lengthened by over one third, that is, over fifteen years. This calculation has been made very conservatively, and is probably several years inside the truth.—Irving Fisher, before Association of Life Insurance Presidents.

The Passing of Overfeeding in Tuberculosis

[JP to within a comparatively recent period, forced feeding was regarded as perhaps the most important element of the therapeutic tripod in tuberculosis; and even to-day many practitioners regard it as a triumph of good management if they get two quarts of milk and half a dozen raw eggs into a stomach which is already laboring with the disposition of three or four hearty meat meals a day. The laity, always slow to unlearn unhygienic errors, continue without exception to overfeed the phthisical, and resent as opposed to logic the most modern teaching that a surfeit of protein weakens the patient, and favors the progress of the disease.

Overfeeding rests upon fallacious theories, and in practise is productive of great harm. It is plain that one can not stuff the alimentary canal with great quantities of putrescible proteins without danger of absorption of the poisonous products of intestinal putrefaction. As a matter of fact, the fever is often increased by the eating of great quantities of meat or of eggs, and sometimes it seems to be caused by that alone. The digestion is also taxed to the utmost, intestinal disorders are frequent, and congestion of the liver may be pronounced. Another very real danger of overfeeding is kidney disease, gall-stone, and stone in the kidney, diabetes, and various skin disorders. Excessive nourishment, especially in form of meat, is apt to give rise to a whole series of disturbances.

Fortunately, the evils of overfeeding in tuberculosis are now recognized by most physicians. The patient is no longer told to eat all he can, and a little more. If one is of normal weight and holding his own, there is no need of a more generous diet. If he is overweight, the diet should be decreased. If he is underweight and eating a full diet, nothing is gained by increasing the diet. The causes of loss of weight must be looked for elsewhere. If there is loss of appetite with indigestion, the appetite must be stimulated, but with the increase of food there should not be an increase of proteins. The evil of the past has been a protein surfeit.—Medical Record.

Acne, or Pimples

THIS troublesome condition, which is so frequent in adolescence and may persist for years, should always be taken seriously. The family physician too frequently dismisses the young patient with some recommendation or treatment that is very likely to prove ineffectual.

It is the purpose of this article to urge, in the beginning of such troubles, a careful investigation of the patient's digestion, general health, and habits. Lack of cleanliness, or improper hygiene of the face, is frequently the cause of the development of blackheads and acne.

The boy and girl in their teens are careless as to the movements of the bowels. Constipation is the bane of America, and its beginning is generally traceable to gross neglect during this period of The young child is carefully watched by its mother. The boy and girl of fifteen are not so watched, and whether attending schools, or hastening to stores or factories, think they have not time to attend to this call of nature directly after breakfast, the physiological time for a bowel movement. They go to bed late, and dislike to arise in the morning until the very last moment, and then have not time to attend to this function.

They also, because of this lack of time, swallow their breakfast almost without chewing. This is especially true with mushy cereals. Consequently oatmeal, in gummy, sticky, gelatinous masses, the

manner in which it is mostly eaten, although considered one of the most nutritious of foods, becomes the most frequent single cause of indigestion. Thin, well-cooked oatmeal and oatmeal gruels are excellent nutriments. Oatmeal boluses are pernicious.

The enormous consumption of sweets, candies, ice-cream soda, and the frequent drinking of soda-fountain products is another and increasingly frequent cause of the indigestion that predisposes to acne. Any indigestion, which includes loss of appetite, perverted appetite, constipation, and abnormal looseness of the bowels, should be corrected. Even if there is no actual apparent indigestion, sugars, spices, tea and coffee, greasy fried foods, and hot breads, pancakes, oatmeal, and impure sirups should be removed from the diet.

Some patients with acne, especially girls, suffer from denutrition from overactivity, mental or physical. The parents are largely to blame for this. They stimulate and push the young girl beyond her strength. Proud of her acquirements. they wish her to excel. Then the girl is stimulated by the never-ending school competition. And to cap the climax of the mental activity, she is urged to take a course in physical culture. The manner in which it is carried out is often the last straw to break down the physical vigor of a girl who is working up to the limit of her strength. Too many hours of mental work and too severe "physical culture" are the cause of many a permanent breakdown; and many a troublesome acne is an indicator of both nervous strain and physical debility.

Frequently, however, the reverse occurs, and the flabby girl or boy, who is unwilling to take sufficient outdoor exercise, develops acne, and should be stimulated to greater activity.

Acne can never be cured unless the boy or girl thoroughly cleanses the face before going to bed. The oily secretions of the day have accumulated dust, which dries the secretions, and blocks the channels. Blackheads, pimples, and pustules are the result. A patient who has profuse oily secretions should not use hot or cold water on the face. To remove the dust use pure cold-cream. A lump is taken in each hand, and rubbed gently over the skin. The face is then wiped with a soft towel, and washed with lukewarm water without soap. Prevent profuse secretion by bathing the face once or twice a week with dilute alcohol or bay rum, or other astringent solution.

It is not the purpose of this article to delineate the local treatment, but to urge that more effort be made to prevent the complete development of the disease, which, while not in itself a disturber of the general health, is a cause of acute mental suffering.— Journal of the American Medical Association.

Tobacco and Alcohol on the Young Man

A T the age of puberty, and later during the period of adolescence, is the time when boys take on the alcohol and tobacco habits. There are a great many seasoned drinkers, and a few persons who claim to have made a study of the effects of alcohol on the tissues, who contend that a moderate amout of alcohol not only does no harm, but is actually beneficial.

In the case of adults, such a statement, unqualified by the exclusion of a very large percentage of the population who show certain deviation more or less marked from a fairly normal standard of health, is not true. A failure to recognize wide-spread departure from nor-

mal conditions of health and the tendency toward intensification of abnormal deviations, is a source of much misunderstanding.

In the matter of the use of alcohol, there are probably none who make the contention that it is good for, or harmless, when taken by growing children. By all odds the concensus of opinion is that alcohol and tobacco are tissue poisons, acting more especially on the more delicate and highly organized nervous structures.—Frederick C. Horsford, M. D. (Asst. Phys. N. J. State Hospital), in Journal of the Medical Society of New Jersey, article "Prevention of Mental Disease."



THE MEDICAL FORVM



Fresh Air in the Treatment of Disease

HE February issue of Archives of Pediatrics contains two articles on the above subject,—one by Edwin E. Graham, M. D., Professor of Diseases of Children in the Jefferson Medical College, Philadelphia; the other by William P. Northrup, M. D., of New York.

These articles, embodying the results of a somewhat extended experience, bear an unqualified testimony to the value of fresh air in the treatment of children.

Dr. Graham noticed repeatedly that his hospital patients, though having the same food and care, had a much higher mortality rate than his private patients. Being convinced finally that the so-called "hospitalism" was nothing but the lack of fresh air, he ordered the children, in the month of January, placed in the fire-escapes for two hours a day. The children were protected against cold and wind. The mortality lessened immediately.

"In the following two or three years, during my service, in January, February, and March of each year, I had the children for a number of hours each day, unless it was raining or snowing, carried down to the large open space, facing the hospital buildings, and kept in small hammocks. The infants were bundled up in blankets, their heads well covered, and their eyes, nose, and mouth covered with a gauze veil. They did remarkably well, so well, in fact, that instead of my infants dying, most of them began to gain in weight and health, and the deaths were almost entirely among infants under three months of age, whose condition was distinctly bad upon admission to the hospital."

He does not find that the ordinary

winter weather is too severe for the children.

Dr. Northrup believes that the term fresh air is too indefinite, some authors speaking of fresh air, and then recommending exclusion of drafts, blankets in the windows, etc. He believes fresh air should be understood to mean open, flowing air — uninclosed atmospheric air. He refers to the experience of the New York health department with the tuberculous insane,— that when they were out in the open air to sleep, they slept without need of the usual sleeping mixture. He has observed the same in children.

"From being restless, dusky, and even delirious, they become quiet, of good color, and given over to sleep. They often sleep quietly for several consecutive hours. Next it is noted that they eat their food with greater relish; finally, that recovery is hastened."

These remarks he applies particularly to the acutely sick —" dopy" from toxemia. Pneumonia furnishes the best examples. He does not hesitate to put patients with pneumonia, scarlet fever, and even bronchitis, with marked cough, outdoors in all sorts of weather. With measles, he has not had much experience. Dressing and washing is done indoors, and in all cases patients and nurses are made comfortable with wraps. He states, as his own conviction, resulting from his experience, that —

"open-air treatment has killed no one, has injured no one, has helped every one, and has determined a cure in a few."

Dr. Jacobi, discussing these papers,

referred to rickets as a comparatively new disease in this country, generally believed to be due to bad food. Dr. Jacobi believes that—

"it is more often due to bad air than bad food. This is proved by the northern Russians and Swedes, who have rachitis [rickets] in their best families. Their winters are eight or nine months long, and their babies are not removed from their close quarters."

Dr. Adams was surprised at the readiness with which even the ignorant will carry out this treatment. He visited a sick baby,—in a room ten by twelve feet,

"with the usual stove, cat, and dog, and coal-oil lamp,—with a temperature of 106°, and evidently in a dying condition. I suggested to them that the child would die if kept where it was, but that it might possibly be saved if the mother would take it up-stairs, wrap it up well, and sit by the open window with it all night... Three or four days afterward I inquired about the child, and was told that they could not get the mother away from the window, and that the baby was living and doing well."

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Danger of Tuberculosis in Cows as Viewed in America and Scotland

FORDYCE, in the Edinburgh Medical Journal, in an article on "The Trend of American Pediatrics" (treatment of children's diseases), gives the opinion of prominent Americans on the milk supply of New York City, as follows:—

"The risk of transmitting tuberculosis from the milk of cows to man is very slight unless the disease in the cow is in advanced form or is present in the udder. Even this slight risk is considerably lessened when such milk is mixed, as it generally is, with the milk of healthy cows before it is sold. We believe that this danger has been greatly overestimated in the public mind, and that it can be best met by the systematic inspection and condemnation of cows revealing tuberculosis on physical examination."

On this Dr. Fordyce comments: -

"The note of skepticism regarding bovine tuberculosis infection through milk is noticeable throughout the country among the most of the medical profession, and is somewhat strangely in contrast with the scrupulous care taken for the provision of puremilk supply for infant use."

He does not think such an attitude toward the milk supply would be safe in Scotland, and he believes that—

"it can not for a moment be gainsaid that nothing has so far emanated from America which could lead us in the slightest degree to minimize the danger to infants in this country of tuberculosis infection through cow's milk."

In saying this, Fordyce recognizes the American pediatrists as in the foremost rank,

"Jacobi, Rotch, Holt, and other pioneers in pediatric work in America have done such work in the past as to place America in the forefront of the nations as regards this branch of medicine. Her independent position has been most worthily gained, and the American school of pediatrics is an established fact."

With all due respect to our American brethren, we believe it to be the part of wisdom for parents to give the baby rather than the cow the benefit of the doubt.

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Nerve Strain in Schoolchildren

D R. LOUIS W. FLANDERS read a paper before the New Hampshire State Medical Association in 1907, on "Nerve Strain of Schoolchildren." This paper was printed in the Boston Medical and Surgical Journal, in February, 1909, with the statement that two years had passed since the writing of the paper, and the writer was still firmer in the conviction that something must be done to relieve the nerve strain of the student.

Dr. Flanders finds the modern child under a good heritage, with increased knowledge on the part of medical men, more stringent enforcement of the sanitary laws, and better education of the parents as regards the health of the child.

"But unfortunately, with all this improvement of the child's physical condition there is coming to be a constantly increasing demand upon his intellectual capacity, so that we are in danger of losing all we have gained by substituting in the place of former coarser ills the more insidious derangements which result from an overtaxed nervous system."

Eye troubles, headache, nervousness, fretfulness, lassitude, poor appetite, and disturbed sleep are becoming more common among the little ones.

"To all outward appearances these children are well nourished, but a closer inspection will reveal that the muscles lack the wiry hardness of forty years ago. It is a case of the development of brain at the expense of brawn."

He does not find that all children succumb to the grind. Nearly all seem to endure the additional burdens without apparent injury.

"But the proportion of neurasthenics is constantly increasing, and it is a grave question whether, if the present pace is continued, we may not have a generation of nervous invalids ahead of us."

According to Dr. Flanders the principal causes of nervousness in children are the following:—

The early age at which children are started in school.

The increase of work forced on the pupil by overzealous educators.

The effort to force students of various capacities through an inelastic course which necessarily brings great hardships upon pupils who may be dull in certain subjects.

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Knowledge Versus Manners

A WRITER in the New York State Journal of Medicine takes issue with the proposition that it is manners that make the physician. We are in hearty accord with what he says in this passage:—

"The clanking, silver-trimmed harness, or the limusine, the rose in the buttonhole, the patent leather ties, the elegant and imposing manner in the sick-room, with the well-timed and flattering allusions, may be

all delightful and helpful and good, but God help the patient if they be at the expense of the scientific medical essentials, if the patient be really sick."

That is excellent, but what are the "scientific medical essentials"? What is the uniform practise of the leading men in the profession in any one disease?

Take for instance, the important matter of the treatment of the eye, of which we have in this same issue of the *State Journal* the testimony of one of the best-known oculists in the profession. Dr. Gould says:—

"Ophthalmology, 'long pointed to with pride' as the perfected example, a true, realized ideal of medical science, accurate and mathematic in diagnosis and treatment,—this hosanned ophthalmology does not exist. The claim is arrant nonsense. So far as refraction is concerned it is the most inaccurate of all unsciences, a most ridiculous farce."

He says much more to the same effect, showing that there is absolutely no uniformity in the treatment of such a simple matter as "migraine," and this among the eminent of the profession. Say, doctor, where shall we apply for that "knowledge" of which you speak? Who has it?

Ridicule may be cast on the idea that the "there" with which the doctor flicked the powder on the patient's tongue accomplished more than the powder. Perhaps "the powder was not much good, or the patient was not much sick." But do you believe, doctor, that the homeopath and the eclectic cure just such cases as you do, and by entirely different remedies? The supposition may be made that your patients were sick, and that those of the other doctors only imagined their ills; but the supporting evidence is lacking. Men of the right personality, in all schools cure, and I doubt that it is by a great diversity of methods. It is the same "manner of the doctor" which, in each case, inspires the patient, and sets to work his defensive forces, and is an important healing factor.

The curative powers are in the body itself, doctor. You will remember Dr. Osler's words in his lecture, "Medicine in the Nineteenth Century."

"After all, faith is the great lever of life. Without it a man can do nothing; with it, even with a fragment, as a grain of mustard seed, all things are possible to him. Faith in us doctors, faith in our drugs and methods, is the great stock in trade of the profession. In one pan of the balance, put all the pharmacopæias of the world, . . . in the other put the simple faith with which . . . the children of men have swallowed the mixtures these works describe, and the bulky tomes will kick the beam."

No doubt an earnest conviction that one's method is right has a marked influence on the patient; and to that extent, it must be admitted that manners — the manners born of assurance and self-confidence — exert their influence.

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Foot Deformity and Its Results

D R. NATHANIEL ALLISON, a lecturer on surgery of the limbs in a St. Louis college, has a paper in a recent number of the Boston *Medical and Surgical Journal*, discussing the disease anterior metatarsalgia, characterized by pain and tenderness of the front part of the foot, especially on standing.

Dr. Allison says it is not to be wondered at that so many suffer pain and disability in this portion of the foot, "considering the impossible footwear used by the majority of women." "For many generations it has been the custom among shoe-wearing races to tightly splint and bandage the foot from early childhood, in a shoe, thus converting the foot into a veritable hoof. Along with this maltreatment of the human foot there is development of vanity and mental weakness, which makes almost every one desire to have a small, narrow, and inefficient foot."

He speaks in no complimentary terms of —

"the mental aberration which causes us to recognize as a point of beauty a foot that is small to the extent of being absolutely out of proportion."

Among the prominent predisposing causes of weak and inefficient feet, he says that the shoe occupies a place in the first rank. Women suffer twice as frequently as men, especially those who represent the so-called better class of society. This, reduced to its lowest terms, means that—

"as a rule men wear more sensible shoes than women, and that those who make their livelihood by brawn instead of brain find it necessary to wear a shoe that does not cramp the foot. The pointed narrow shoe which does not allow the anterior part of the foot to be used as a muscular apparatus, particularly if this shoe has an elevated heel, is the most potent factor in the development of the weak, calloused, and deformed anterior foot."

Then we have these predisposing causes forming a "vicious circle:" the more the individual does not use the foot, the more unfit for use it becomes; and the more unfit it becomes, the less inclined he is to use it.



The Medical Missionary At Works



Healing as a Part of Gospel Work

A. Allen John, M. D.

HOSE who have witnessed the death-chamber scenes know something of the anxiety and anguish manifested when disease threatens the life of a loved one. The occasion is one of serious reflection and self-examination on the part of the family; hence the importance of exerting an influence which will be beneficial physically and spiritually; and those who are qualified to meet these conditions have opportunities which others not thus qualified do not enjoy.

Christianity is unique in that it is solicitous for the welfare of the entire being, and that it delivers from all the ills of mortality. This being the genius of our religion, it seems strange that so little attention is given by Christians to medical missionary work, and a proper preparation to perform such service.

The key-note of Christianity was struck by the gospel prophet, ages before its blessed realizations were experienced. Ethics and dogma, with unwarranted distinctions and oppressive exactions enforced by legislation, had alienated the people from Jehovah, and estranged them from the prudent counsels of a loving Father, when Jesus stood up, formally announcing his Messiahship, and the scope of his gracious work, by reading: "The Spirit of the Lord is upon me, because he hath anointed me to preach the gospel to the poor; he hath sent me to heal the broken-hearted, to

preach deliverance to the captives, and recovering of sight to the blind, to set at liberty them that are bruised, to preach the acceptable year of the Lord." The Great Physician, who was bruised for our iniquities," and "touched with the feelings of our infirmities," and who "healeth our diseases," shared our humanity that we might share his divinity.

The narrative following his sermon on the mount, corroborates our premises concerning the real scope and nature of gospel work,-the healing of spirit, soul, and body. Hear the poor leper, "Lord, if thou wilt, thou canst make me clean." The reply came, "I will: be thou clean;" and with that healing touch his leprosy was cleansed. Next comes the centurion's servant, sick of palsy, (only a servant! Was it worth while?) was healed at once by his master's faith! No such faith in Israel! Then, Peter's fevered mother-in-law was touched, and the fever left her; and she arose and ministered unto them.

Pause, gospel worker, medical missionary, as alone you seem to labor; think what effect such achievements would have on the unsaved, disease-stricken people where your labor. Real diseases, real healing, and real salvation! He "healed all that were sick: that it might be fulfilled which was spoken by Esaias the prophet, saying, Himself took our infirmities, and bare our sicknesses."

John, in prison, heard of this medical

missionary, and sent the inquiry: "Art thou he that should come? or do we look for another? Jesus answered and said unto them. Go and show John again those things which ve do hear and see: the blind receive their sight, and the lame walk, the lepers are cleansed, the deaf hear, the dead are raised up, and the poor have the gospel preached to them." These were the proofs which Tesus gave of his Messiahship. Then to his apostles he said: "Into whatsoever city ve enter, and they receive you, eat such things as are set before you; and heal the sick that are therein, and say unto them. The kingdom of God is come nigh unto you." The foregoing seems to justify the conclusion that healing the sick was, and ever should be, an important factor in gospel work.

Which is greater, to say, "Thy sins be forgiven thee; or to say, Arise, and take up thy bed, and walk?" Saving power and healing power are the same; both are manifestations of creative power. Therefore, with those who are in touch with God, there should be no difficulty as to methods, means, or results.

In the enumeration of spiritual gifts, which God set in the church, one of the most important is the gift of healing, The Lord is working in so many ways that we are unable to comprehend them all. We can not doubt his power, and we have no right to discriminate as to methods. The prayer of faith brings healing; so, also, air, light, heat, cold, electricity, water, herbs, and other remedies have healing properties. means are all manifestations of the creative, life-giving power of God. have their place; all are at our disposal; from them we may choose as conditions seem to justify; but whatever the means, the healing power is from above.

The world is divided as to healing methods. One class discards all material remedies, ignoring the fact that God gives them healing virtues. This is not faith, and certainly does not honor the Creator, or cause his works to praise him. Another class have found, by careful research, the healing virtues of medicines and physical remedies, but eliminate faith and the Creator from all their works. This is not scientific or reasonable. Others are familiar with all these methods and means, and use them intelligently in relieving sickness, and in leading men to glorify God for healing them. All these healing methods are divine, and should be used in faith. God's way and his will should be the motto of every worker. And the intelligent Christian worker, nurse, or physician, by avoiding extremes, will find an open door and blessed service, which will result in the healing of soul and body among many who are without hope.

We know too little of God's healing power, which is so manifest everywhere: and we are too ready to discriminate as to the particular means by which healing should be sought. There has been a great awakening in numerous places; and a glorious, balanced work is going forward throughout the world, which, however, is off-set by fanaticism, infidelity. and ignorance. It is ours to go forward with the banner of healing, until the gospel shall have accomplished its work; and when pestilence shall walk in darkness, and destruction shall waste at noonday, we may realize the saving, healing, creative power in ourselves, as we labor for the perishing, and eternity dawns upon a benighted world. "I was sick. and ye visited me," "enter thou into the joy of thy Lord."

Cuautla, Mexico.

Medical Missionary Work in Java

J. E. Julton

HE writer accompanied Miss Nordstrom, one of our Sydney Sanitarium nurses, in one of her rounds among the villages of Java where she was giving treatments. We left the Java Health Retreat, our beautiful mountain rest home at Soember Wekas, just after dinner one day, and rode on little Arabian ponies to the villages.

As we passed through a village where our workers had given treatments before, we noticed the hearty greeting accorded by the native villagers. As a rule, in Java the natives never speak to a passing traveler, in fact, they do not seem to understand you when you greet them—it is such an unusual thing for the Europeans to do such a thing. We are glad that our workers are breaking through these customs, and that the people so long in sin and darkness are yet responsive to that mighty conqueror, love.

How quickly the heathen can measure our religion! You may preach to them about Jesus, the Saviour of mankind, telling them he loved all men, that he loved all races of whatsoever color, and that he was no respecter of persons; but if they see a barrier built up between the missionary and themselves, the missionary treating them as though they belonged to a lower planet, all this preaching will avail little. How few missionaries to-day take the Master's place in loving, heart-to-heart ministrations.

Passing by corn fields, over beautiful terraced hills, cultivated to the very tops, and through luxuriant valleys, we soon come to a village where the second treatment is to be given to a sick man.

We find him improved, and thankful

for our coming. Here, perhaps for the first time for centuries, a Christian prayer is offered. How our hearts long to see the name of God known and reverenced among these heathen.

The next village was entered to treat a poor blind man who also had been treated once before. He was cordial in his greetings, and told how much he had been benefited. We thought of leaving him to go to more needy cases, but he would not have it so. remarked that the water was hot, and that he wanted more fomentations. His spine was giving him some trouble, so a fomentation was applied to his back, just below the neck. We had difficulty in making ourselves understood; for some reason he thought that the fomentation should start at the top of his head, perhaps thinking that to be more systematic, and so he removed it to that place, the nurse yielding to his whim. He allowed the next fomentation to remain where the first was placed, but every succeeding one was pushed a little farther down until at last he wanted one just above his knees. He hugged each fomentation to him with such evident satisfaction, seeming to think that there was real virtue being received; and we have no doubt that this was

At the door we counted eighty persons who were lookers-on, while on a small hill near by were many others. We asked if they knew of God. The answer was, "No, we know him not." We long to be able to tell in their own language the wonderful truths for this time. As we are about to leave, others apply for help. We think of the time when Jesus ministered to the people,

and long for more of his grace and power. But as far as was in the power of the nurse, none were turned away without some offer of help.

Other villages were visited, and difficult cases treated. Some seem almost helpless, having gone so long without attention. But they were left in the care of the Great Physician to await his will. While we were attending a chief who had been sick for a long time, a thunder-storm came up and the rain fell in torrents. Fortunately we were under shelter. Our horses were brought into the house with us, so that they and the saddles would be kept dry for us.

It is a common thing in this country for people, horses, cows, goats, and fowls, all to have the shelter of one roof. The little pony belonging to the mission has not had his house completed at this writing, but the gardener who keeps up the grounds at the Retreat takes him home every night, and gives him shelter with himself in the house.

One sick man, feeble and emaciated with months of disease, came to the Retreat a few days ago asking for medical aid. While massaging his feet and the calves of his legs, the nurse discovered a long needle buried in the fleshy portion of each leg. These, the patient explained, a native doctor had inserted some three years before to cure his malarial fever, as they were warranted to prevent any further attacks.

Our journey homeward was completed about eight o'clock at night. We were thankful to have had this pleasurable experience. As we saw what is being done for the poor people, we felt to denominate it gospel work of the highest order. After seeing what is to be done for these many millions, we pray that the "Lord of the harvest will send forth laborers into his harvest."



CHIEF BUSINESS STREET, SOURABAYA, JAVA



Unsigned articles are by the editor

As We See, So We Are

VERY person has two natures,—the one ideal, and the other real. Whether one can always see this double nature in his fellows, he can at least realize it in himself. In a sense, we are all hypocrites. None of us would willingly have published, in all their nakedness, the secret thoughts of his heart. As we may make them over, as we may polish them up, as we may idealize them and think they ought to be, we are willing the world should inspect them.

Each consciousness is a battle-field of the forces of good and evil. The victories are numerous and varied. The decisive battles are infrequent.

Few are so good that there is not lurking in the heart a smoldering fire of corruption and iniquity, ready on sufficient provocation to burst forth into fierce flame. Many tinder-boxes are not recognized as such because the spark has not touched their contents.

Paul, who was one of the profoundest thinkers on this line, says of himself: "I keep under my body, and bring it into subjection: lest that by any means, when I have preached to others, I myself should be a castaway." In another place he says: "When I would do good, evil is present with me. For I delight in the law of God after the inward man: but I see another law in my members, . . . bringing me into captivity to the law of sin which is in my members."

There is a Christian philosophy that

attempts to place all such experiences before conversion, but every person who will honestly examine himself will realize that, though he may be able to say, with the apostle, "I can do all things through Christ which strengtheneth me," he still has that within himself which he may call "the body," or "the flesh," or "sin in my members," according to his fancy, which must be "kept under" constantly, else it will soon assert itself, be on top, and lead to all manner of excesses. Even the saint on the pillar, who prides himself that he has died to all the temptations of the world, the flesh, and the devil, is veritably the victim of pride, which is the first of the catalogue of sins mentioned by Solomon.

While it may be literally said, "There is none righteous, no, not one," it is also true that there are few so evil that they have no good qualities, or at least good aspirations and possibilities. A practical illustration of this truth is the juvenile court, where, by kindness, hundreds of young offenders have been turned to lives of truth and honor.

The most hardened criminal has a soft spot somewhere, which an enlightened, loving sympathy might touch. This bundle of erratic, sinful humanity, working on a philosophy of life that breeds selfishness and hatred and crime, still has a vulnerable place, which may one day be pierced by the arrow of fervent love.

Between these two extremes lies the

great mass of mankind, all passing for more than they are worth; all desirous of being taken for gold, when they are tinsel.

In the matter of social relations, pretty compliments and well wishes take the place of sincerity. Truth, if it is told, is told in such a way that it conveys an untrue meaning to the bearer. Invitations are given that are meaningless, and the excuses given for declining them are polite falsehoods. We lie to each other in order to cover up our hypocrisy. You say you do not do such things? Beware lest you make yourself out the more confirmed a hypocrite, in that you are trying to deceive yourself! Now, down in our hearts, we deplore this thing, do we not? and wish in our very souls we were more true.

I might continue with business, with politics, with every phase of life, and show it to be a mass of falsities, of shams, of hypocrisies, but the inner consciousness of the reader will do this. We are a people with two natures, struggling for the supremacy, and this struggle is life! - that is, at least, what we know of life. Each one can, in his own soul, see the struggle which is there taking place, and yet he is a spectator wearing glasses colored by his own experiences, so that he is not competent to form an absolutely correct and unbiased judgment as to the nature and the significance of the victories. When we look at others, we can judge still less. We can not see the battles. We occasionally see a result of some of the battles, and from these results we form judgments as to the progress of the struggle, which judgments are defective because we are not acquainted with all the facts, but doubly defective because of the color of the spectacles through which we view things.

Some, failing to see man as a battleground, where good and evil are struggling for the supremacy, seeing some of the results of the victory of evil, say, "That man is bad," "This man is corrupt," "That woman is false," "That child is wicked." Quick to see and prone to remember those instances when evil is victorious, and failing to see the victories of good (these do not appear so clearly at the surface), the general impression is apt to be formed that mankind in general is evil, and only evil.

The habit is formed of distrusting neighbors and friends. Every statement is taken cum granum salis; the mind becomes suspicious and cynical, and the lines of the face soon form accordingly. This is the evolution of the cynic, the recluse, the hater of his kind. Of no use to his fellows, his life embittered, he sees in each act of friend or foe, additional evidence in support of his philosophy of pessimism, and he goes down to his unhonored and unloved grave, an excrescence, despising and despised, and the world breathes easier with the riddance.

Such is the result of facility in seeing evil. May God have mercy on the person who has a tendency to look under the little shams and hypocrisies and see there the darker side of life. Such a proneness, such a tendency, naturally causes an evil transformation in the character of the unfortunate observer. "By beholding, we become changed."

One of the best prescriptions for this mental blight (I can not call it anything else, and it ends in moral blight), is the one given by the apostle Paul:—

"Whatsoever things are true,
Whatsoever things are honest,
Whatsoever things are just,
Whatsoever things are pure,
Whatsoever things are lovely,
Whatsoever things are of good report;
If there be any virtue, . . .
If there be any praise,
THINK ON THESE THINGS."

There are sunny lives that refuse to see the darkness. As they look around them, they perceive, not the victories of evil, but the triumphs of good. They try not to pierce the little shams and seemings of life, saying, "If it is a sham, it is that person's ideal - what he would like to be if he could, and what he will be if I but give him the loving help that he needs." Such a person is unsuspicious. Some one does something to him that would rouse all the ire of a sensitive person, but still he trusts, saying to himself that no harm was meant; and, strange to say, the "hardened" are melted by that touch of trust and love. The summer sun causes even the arctic tundra to blossom with tropic luxuriance. The summer sun of love will cause the cold and seemingly barren soul of the downtrodden and mistreated - the downcast victim of bad heredity and worse environment - to blossom forth with beauty and fragrance.

How about the one who trusts? Does he not have a "hard time"? Is he not constantly imposed upon by the unscrupulous? Does his trusting not bring him into many difficulties that he could avoid if he would only use a little more "worldly wisdom"? So one might think; but that is not the way it works. There is no life so happy, so free from care, as the trustful life; and the best of it all is that such a person's character develops in accordance with the beautiful life he pictures in others. We all long for the ideal life. Such a trusting one approximates more closely to that ideal than any others on this earth.

As we each like to be trusted for more than we are worth, and as we try our best to come up to the expectations of those who trust in us, can we not realize that our neighbor has the same feeling, and *trust* him, taking him for all that he seems to be, and for all that he wants us to take him for?

Always Positive, Sometimes Accurate

I N 'an address delivered before the Conference of Sanitary Officers of the State of New York, Dr. Pryor made use of the significant expression, "so-called education of the public by those who are always positive, and sometimes accurate." (Italics supplied.)

An examination of the writings of a large number of those who have felt called upon during the last three or four centuries, to teach their fellows how to live healthfully, indicates that the italicized words in the preceding quotation are most happily chosen.

I suppose there is no man more positive that he knows what he is talking about than the average writer on health topics. He always speaks ex cathedra, as it were.

Sometimes he is a physician, sometimes he is a man with no medical education, who, through following a certain routine, has regained his health, and now confidently asserts that all men should adopt his regimen; sometimes he is a man whose brain works freely in deductive lines, and his scheme is the result of a beautiful theory built up on a very imperfect knowledge of physiology. Sometimes he is a compiler, who has selected what he considers the best from a number of other health works, and worked it up into a "shotgun prescription" including, perhaps, the diet restrictions of one, the meat restriction and fasting of another, the careful mastication of another, the exercise of another, and the autosuggestion of another.

These teachers—if we may except Eustace Miles—have one thing in common, that is, positiveness. The assurance with which the various directions are given is only equaled by their diversity and mutual antagonism.

As to accuracy? Well, they recommend everything under the sun, from a heavy-meat dietary, or one consisting entirely of meat, to strict vegetarianism; from a large, liberal diet to a small, plain menu; from abundance of cereals to restriction of cereals; from raw food to overcooked food; from one meal to four or five meals a day; from heavy athletic

work to almost no exercise; from frequent and repeated bathing to no baths at all; from a sunny climate to one of clouds.

Inasmuch as there is such a diversity among those who positively *know* whereof they speak, what shall we poor unsophisticated mortals accept as truth?
Perhaps we shall not go far amiss if we
keep in the middle of the stream, and
avoid the rocks on both sides.

One consolation we have: the human race still lives, notwithstanding all this diverse instruction — possibly because it has been perverse enough not to heed it.

The Third Interim Report of the Royal Commission on Human and Animal Tuberculosis

T HIS commission appointed in 1901 after the pronouncement of Koch, made its First Interim Report in 1904, warning against any relaxation of precautions regarding animal tuberculosis. In 1907 the Second Interim Report appeared, expressing the conviction that humans, especially infants, can be infected with cattle tuberculosis, and that such infection usually takes place through cow's milk.

The Third Interim Report is dated 1909. In this the Royal Commission reports the series of experiments conducted on cows which contracted the disease in the natural way. None of the cows under observation showed any symptoms of disease of the udder during life, and in all, after slaughtering, the udder was carefully examined for tuberculous lesions and tubercle bacilli. No tuberculosis was found except in the case of one cow, in which the trouble was of such a character that it could not

be detected during life. The milk of these cows contained tubercle bacilli whether drawn in the usual way or by means of a catheter.

Knowing that milk, as it reaches the consumer, is almost always contaminated by "dirt" from the cows and cow shed, these men performed experiments to determine the infectiousness of the feces of cows suffering from tuberculosis, and it was found that these discharges are much more dangerous in the matter of transmitting infection than discharges from the air-passages. Even in cows with slight tuberculous lesions, bacilli were discharged with the dejecta, while cows evidently tuberculous discharged "large numbers of living virulent bacilli."

This is in harmony with the findings of Dr. S. Schroeder in "The Unsuspected and Dangerously Tuberculous Cow," as reported in a recent bulletin of the Department of Agriculture.



Bacterial Food Poisoning [giving the cause, symptoms, and treatment of so-called ptomaine poisoning], by Prof. Dr. A. Dieudonne, Munich; translated and edited, with additions, by Dr. Charles Frederick Bolduan, bacteriologist Research Laboratory, Department of Health, New York City. Cloth, 128 pages, \$1. E. B. Treat and Company, New York City.

During the past quarter of a century, there has been a large number of outbreaks of intoxication which were definitely traced to certain articles of food eaten in common by the victims. These accidents have been carefully investigated by scientists all over the world, with the results which have been detailed in this book.

The book will be of particular value to physicians as it will help to locate definitely the cause of many obscure attacks of acute indigestion and other disorders resulting from food poisoning.

Though written in technical language, it can not but be of inestimable value to the housewife, the cook, and the steward, in warning against many unsuspected sources of poisoning.

Some of the topics considered are: Diseased meat; decayed meat; sausage poisoning; poisoning through fish and shell-fish; poisoning through cheese; poisoning through ice-cream and puddings; potato poisoning; poisoning through canned goods; metallic poisons; bibliography.

The American translation of the work has been brought thoroughly up to date, and contains an account of an outbreak of ptomaine poisoning that occurred in New York during January of this year.

Hygiene of the Lung in Health and Disease, by Prof. Dr. Leopold von Schrotter; sixteen illustrations; 135 pages; \$1; Rebman Company, New York City.

There are many books specializing on diet and the like, but there are comparatively few on respiratory hygiene.

The ground has been quite successfully covered by the writer of this little work, who has attempted to avoid technical detail, and to give just that which will be of some practical value to the lay reader.

The work contains one section on the

anatomy and physiology of the respiratory system, one on the care of the healthy lung (including instructions in ventilation, heating, lighting, care of sleeping-rooms, plumbing, sanitation, clothing, exercise, bathing, school hygiene, and industrial hygiene) and a section on diseases of the lungs and their treatment.

The work is evidently written for European readers, and devotes much space to industrial hygiene. Still it contains a valuable fund of information for the average American reader.

If English equivalents had been given in place of the metric system, and if the hygiene directions had been epitomized and gathered together for ready reference, it would have added to the value of the book for the busy American reader.

The Vivisection Question, by Albert Leffingwell, M. D. 267 pages, cloth. The Vivisection Reform Society, 532 Monadnock Block, Chicago.

Is it justifiable to experiment on living animals? This is a question on which there is great diversity of opinion.

Some deny that any good has ever come from animal experiment; and a few go so far as to say that even if good accrues to humanity from animal experiment, the practise is unjustifiable for the reason that "our little brothers" in feathers and fur have immortal souls, etc., etc. To be consistent, they should include all animal life as possessing souls, and never destroy any of the chance inhabitants of their heads.

At the other extreme are those who, for a love of so-called science, are utterly lacking in regard for an animal's suffering, and knowingly inflict the most excruciating agony on numbers of animals to ascertain some fact, which, after all, may be of little or no practical value.

Probably the great majority of people, including most animal experimenters, stand between these extremes.

Dr. Leffingwell admits that animal experiment has been a distinct benefit. He concedes the right of man to cause pain to animals, if thereby there is a prospect of some tangible good to humanity. He does not object to the use of animal experiment

for demonstration purposes, provided the animal is properly anesthetized so that it is not caused to suffer pain. He does believe there should be such regulation of vivisection that there will be less opportunity for inhuman abuses to occur under the name of animal experiment. His plea is for laws restricting the infliction of pain when no good can be accomplished, and the repetition of painful experiments for mere demonstration purposes.

The book contains a fund of information which the extremists on both sides would do well to consider.

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Books Received

Cosmetic Surgery: The Correction of Featural Imperfections, by Charles C. Miller, M. D.; second edition, enlarged; including the description of numerous operations for improving the appearance of the face. 160 pages; 96 illustrations. Prepaid, \$1.50. Published by the author, 70 State St., Chicago.

The Cure of Rupture by Paraffin Injections, by Charles C. Miller, M. D.; comprising a description of a method of treatment destined to occupy an important place as a cure for rupture owing to the extreme simplicity of the technic and its advantages from an economic standpoint. Prepaid, \$1. Published by the author, 70 State St., Chicago.

The Truth About Appendicitis and Blood Poisoning, by Charles C. Miller, M. D.; an explanation in simple language of appendicitis and germ infections; intended to make clear to the general reader the truth about these important conditions, and to give to the public the knowledge needed to enable them to understand the true attitude of the surgeon. Prepaid, \$1. Oak Publishing Co., o Wendell St., Chicago,

The Deadly Sausage.— Two colored boys were recently taken violently ill in the city of Washington after eating some "pure country sausage." One died, and the coroner pronounced it ptomain poisoning.

Chicago Milk Law.— The new law requires that all milk other than from cows which have passed the tuberculin test shall be Pasteurized. Evidently the Chicago people are going to eliminate cattle tuberculosis from the problem.

Anti-Tuberculosis Campaign in Albany.— The committee on the prevention of tuberculosis has arranged with the managers of large industrial establishments to give short talks on tuberculosis to the employees during the noon hour. The managers of the establishments seemed very ready to cooperate, and expressed great interest in the work. Within a year, by this plan, practically every workman will be well informed regarding tuberculosis.

Massachusetts Playground Law.—"Every city and town in the commonwealth, having a population of more than ten thousand, accepting the provisions of this act, shall, after the first day of July, in the year nineteen hundred ten, provide and maintain at least one public playground conveniently located, and of suitable size and equipment, for the recreation and physical education of the minors of such city or town, and at least one other playground for every additional twenty thousand of its population."

The Work of the Audubon Societies.— The National Association of Audubon Societies, with an existence of four years, has accomplished much for the protection of wild birds and animals, especially such as are valuable to agriculture and forestry. Laws have been enacted where before there were none, and to-day, through the educational work of the Audubon societies there is a growing sentiment favoring the conservation of animal life.

Tuberculous Cattle in New York State.—For animals slaughtered under the supervision of the State, the State pays eighty per cent of the value of the animal if the tuberculosis is localized, and fifty per cent of its value if it is generalized. It is a misdemeanor to use spurious tuberculin, or for a man to sell a tubercular cow to another except for immediate slaughter, unless the sale is accompanied by a statement signed by both parties showing a knowledge of the disease.

Worse Than the Earthquake.—The world has naturally been startled by the terrific earthquake that cost so many lives and so much property in Italy and Sicily; and probably none who were not present in the stricken territory can form any adequate idea of the frightful damage wrought. It should be a matter of some concern to us that a greater loss of life and of wealth occurs in this country every year, from tuberculosis, than occurred as a result of the earthquake. And yet tuberculosis is preventable.



The Rat a Nuisance.—The rat destroys annually, in England, property to the value of forty million dollars. This, in addition to the fact that he is the culprit responsible for the spread of plague. Better kill him!

Fatal Poisoning by Wild Parsnips.— Two young Staten Island laborers went to the woods at the noon hour, and a few hours later their bodies were found a few feet apart. Examination of the stomach contents showed that death was due to wild parsnips, which they had eaten.

A Martyr to Medical Science.— Dr. Parkinson, a young physician of much promise chosen a member of the Commission for the Investigation of Plague in India, was, while carrying on his laboratory researches, accidentally infected with the plague germ, and succumbed to the pneumonic form of the disease.

No Smoking in the Subways.— The sanitary code of the city of New York makes it a misdemeanor for any person smoking or carrying a lighted cigar, cigarette, or pipe to enter a subway, and prohibits the smoking or carrying of lighted cigars, cigarettes, or pipes on the platforms of the stations or steps leading to them.

Preservatives in Hamburger Steak.— Chicago food inspectors constantly find preservatives in Hamburger steak sent to the laboratory for examination. The natural inference is that partly decomposed meat is ground up for this purpose, the addition of sulphite "sweetening" the product and giving it a rich red color suggestive of freshness.

Temperature in Infant Feeding.— An investigator, as the result of observation and experiment, states that gastric juice digests proteid more rapidly at 36° to 38° C. than at other temperatures. This is the temperature of mother's milk. He finds that of two hundred observed cases of bottle-fed babies, only forty were fed the milk at this temperature, the others taking it at a higher temperature. He asserts that the usual method of regulating the temperature by the sensation (applying the bottle to the hand, cheek, or eyelid) is unreliable.

Tuberculosis in Children.— At the conference on tuberculosis recently held in London, the chairman stated that ninety per cent of crippled children owe their condition to this disease. Of 1,056 children attending the London schools for defective children, it was stated that four hundred eighty were suffering from tuberculosis, most frequently of the joints.

Leprosy in Hawaii.—Leprosy is gaining ground in our island possessions, notwithstanding the most earnest efforts to control the disease. During the past forty years, patients have been sent to the leper settlement at the rate of one hundred forty-six cases a year—nearly three a week. Formerly the disease attacked scarcely any but natives, but now it is making headway among the foreigners, especially among the Portuguese and Japanese.

International Congress on Alcoholism.—The Twelfth International Congress on Alcoholism will assemble in South Kensington, London, July 18-24, 1909. The British committee cordially invite all who are interested in the study of the alcohol problem throughout the world to attend this congress. The membership fees will be, for residents in foreign countries, five shillings. The official program will be forwarded on application to the National Temperance League, 34 Paternoster Row, London, E. C.

Is Meat Inspection a Safeguard? - A recent consignment containing six hundred fifty-four cases of ox tongues, ox kidneys, ox livers, ox tails, tripe, lamb sweetbreads, lamb livers, lamb plucks, and calves' tongues, after being examined by the health officer of the port of London, was found to contain five hundred eighty-nine diseased livers and one hundred thirty-four diseased lungs. All the boxes bore a label stating they had been examined in the United There were also three hundred frozen pig carcasses on this ship; fifteen of them were thawed, and found to be lacking the lymphatic glands, and one other showed tuberculosis. The fact that the lymphatic glands had been removed was considered evidence that they had shown signs of disease when examined in the United States.

The examinations in the United States being much more rigid for exported goods, what must be the condition in the slaughter-houses when the meat is for home consumption! Then, too, there are many smaller slaughter-houses which are free from inspection.

Washington Has High Death-Rate.— The city of Washington has the fourth highest death-rate of American cities, so we are told by the report just issued by the bureau of the census. In the order named, Denver, New Orleans, Newark, Washington, Cincinnati, Baltimore, and Jersey City have the largest death-rate for cities of over one hundred thousand inhabitants. Some of the smaller cities, like San Antonio and Colorado Springs, have astounding death-rates, from the fact that so many consumptives go there and die.

Medical Advertising Censored.— The methods of an autocratic government are not necessarily all bad. A censorship for medical advertising has been organized in Russia. No "safe remedies for ladies," no exaggerated claims or frauds, no names suggesting the disease, as "eczematin," will be permitted. The professional cards of doctors, dentists, midwives, druggists, masseurs, and the advertisements of health resorts, and mineral waters will be carefully scrutinized. Say! why can't we take the hint?

Victims of Meat Poisoning.— One hundred sixty persons who partook of a banquet in an Indiana town suffered severe poisoning, four of them with probable fatal effect, the poisoning being traced to the meat which had been served. The victims began falling, one by one, to the floor. Residents of the town were stricken in their homes, or fell writhing where they walked or stood in the streets. Every available physician was summoned, and the most rigorous treatment was given throughout the night. This is only one of many cases of meat poisoning reported in recent years.

Children Unnecessarily Blind.— The New York Association for the Blind, after careful investigation, announces that "one quarter of all the blind children in all the blind schools in this country are unnecessarily blind." The infection which causes blindness, is, in a large proportion of cases, transmitted to the child from the mother at the time of birth, and proper treatment of the eyes at that time (by a suitable solution of silver salts) is a sure preventive. The cause of blindness is often the germ of one of the venereal diseases, which the innocent and unsuspecting mother may have contracted from a father with a past "history."

Rest and Recreation for the Doctors.— The doctors of Lawrence, Mass., and vicinity are preparing to set aside one afternoon of each week for recreation and study. On this afternoon all doctor's offices will be closed, except one or two kept open for emergency calls. This plan has already been put in practise in one or two large cities.

The Cat a Pest Preventive.— Professor Koch some time ago recommended the keeping of cats as a preventive of bubonic plague. The Japanese made a comparison of the distribution of cats in plague-infected districts and in healthy districts. It was found that where the disease is the most prevalent there are no cats. It is reported that the Japanese have ordered fifty thousand cats from Chicago!

New Zealand Patent Medicine Law.— January I there went into effect a law providing that in case of any misrepresentation of the ingredients or of the effects which may follow the use of any (patent) medicine or appliance for the relief of any human ailment, both the proprietor of the medicine and the printer, publisher, and proprietor of the paper carrying the advertisement may be subjected to a heavy fine.

The Death Penalty .- During the past year Chicago had a homicide (murder) every other day (195 during the year), and not a single legal execution. Perhaps if they should make homicide a more serious matter and clean out some of their festering sore spots by drastic police-court work, there would be a lessening of the tendency to take human life with little or no provocation. Only recently France abolished the death sentence, with the result that murders became so much more frequent that President Fallieres has gone back to the use of the guillotine for murderers, saying that if the people must have blood they can have it.

Eddyism in Germany.- A laborer paid a prayer-healer sixty marks for the treatment of his wife and child. The treatment was a failure, and the laborer attempted to recover his fee in the lower court, but lost his suit. Appealing to the higher court, he was awarded the sixty marks, with interest, the judge in his decision stating that the contract which the complainant had made with the prayer-healer was against good morals. While the judge recognized the right of an individual to believe in some power of special divine grace for the healing of the sick, he denied the right to lay claim to such a healing power in connection with the exercise of a trade for making money based on such healing power,

Human Typhoid Carriers.—Recent European observations demonstrate that about one thirtieth of all patients who recover from typhoid fever continue to discharge typhoid germs for indefinite periods. Now that this source of the disease is known, numbers of obscure cases of the disease are being traced definitely to this source. A typhoid carrier, as cook, or baker, or dealer in fruits, or in many other ways, may infect food and spread the disease. Until some method is perfected by which these carriers can be disinfected, it will not be possible completely to control the disease.

Cars and Consumption.—The New York Interurban Railway Company has undertaken to keep its railway cars in a sanitary condition, in order to avoid transmitting disease. The thick matting has been replaced by hard maple strips three quarters of an inch square and the same distance apart. The floors of the subway and elevated cars are sprinkled every night with dilute carbolic acid, and are then swept clean, after which the dust is carefully wiped off with cheese-cloth. At least once

a week the floors are scrubbed with a soft soap containing a strong solution of alkali. This is only a part of the work this progressive company is doing for its patrons.

Typhoid "Carrier" Cured by Vaccine.— A typhoid "carrier," unsuccessfully treated for several weeks, was finally injected with a vaccine prepared from a culture of typhoid germs passed by her, and was cured.

A New Antivivisection Danger.— Laws regulating animal experiment are not strict enough to satisfy some of the good people who oppose all animal experiment. One friend of the guinea-pigs has sent out a circular letter—so it is said—warning physicians and surgeons that she will pray for their death if they do not cease animal experiment. She decided first to begin by praying for the death of the famous physiologist Sterling, but afterward concluded to leave it to God which monster should go first. If the good sister lives long enough, she will have the pleasure of knowing that all those whose death she is praying for are laid in their graves.

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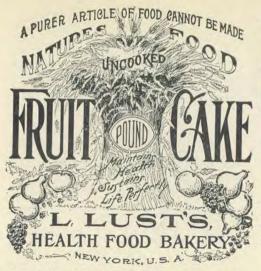
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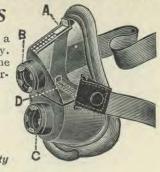
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