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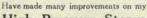
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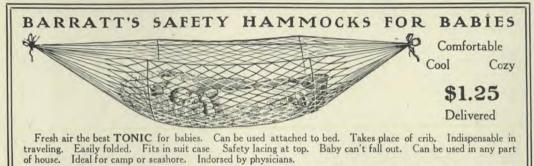
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## JULY ANNOUNCEMENT

Our cover cartoon strikes at a custom which is as vicious as it is deep-rooted. On the same subject we have given in the center pages a model fourth of July ordinance, surrounded by clippings of newspaper heads telling of successful sane Fourths in many cities. We have commented editorially on the foolishness of this time-honored custom of showing our patriotism by killing children and burning buildings. This is followed by an editorial on a still more timehonored and deeply rooted folly which it is our earnest duty to help ' eradicate.

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In "Civic Festivals in God's Great Out-of-Doors," Mr. James draws a forcible contrast between the ordinary civic festivals, with their tawdry, their show, their catchpenny schemes, their traps for the unwary, and the festivals now held by some Western cities, which are so conducted as to be educational and uplifting, as well as recreational and entertaining.

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Is there any guaranty whatever to the consumer in the words "U. S. Inspected and Passed?" There are grave charges by those in a position to know the facts, that these words are by no means a guaranty of the wholesomeness of meat products. See the article "Lax Inspection of Meat Worse Than Loss of a 'Titanic.'"

#### 泛 泛 泛

Dr. Olsen, who has been giving our readers a number of articles on the prevention of consumption, in this issue considers the cure of the disease. After all our work of prevention, we have not yet succeeded in stamping it out; in fact, we have only made a beginning. There is and will be for a long time to come an immense work to do in the way of curing curable cases of tuberculosis.

#### 泛 泛 泛

In "What to Do for That Headache" Dr. Kress wisely tells the reader what not to do, for almost invariably one with headache is tempted to take some short-cut method of relief, which not only does not remedy the real difficulty but creates others. The doctor then proceeds to give some valuable remedies for headache, which, though not so prompt perhaps, are reliable and safe.

#### The Next Issue

"Playtime in God's Great Out-of-Doors," George Wharton James. "Where We Fail in the Antituberculosis Fight," A. B. Olsen, M. D.

- "The Law of Activity," William J. Cromie.
- "The Ealing Garden Suburb," G. H. Heald, M. D.

"More Consumption Cure Frauds," Arthur J. Cramp, M. D.

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Entered as second-class matter June 24, 1904, at the post-office at Washington, D. C., under the Act of Congress of March 3, 1879.

TERMS: \$1 a year; 10 cents a copy. Special rates to agents.

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THE AFTERMATH OF THE NOISY FOURTH

A youth paying the penalty that too often attaches to the so-called "old-fashioned" fourth of July. It is the same old story. The powder failed to explode, he approaches to examine, and — bang! Thousands have had similar experiences and yet we are slow to learn. What an emphatic argument in favor of a same, sensible Fourth!



Published Monthly

GEORGE HENRY HEALD, M. D., EDITOR

Washington, D. C.

#### THE FLY IS OUR WORST ENEMY IN SUMMER!

The Fly Is Filthy. Born in filth, he feeds on filth, crawls in filth, and then with filth sticking to his feet, legs, and body, he feeds and walks—if you let him—on and in your food!

Would it not disgust you to see a fly feed in a foul-smelling garbage-can, or something worse, and then fly to your dining-room and wipe his feet on the sugar, tangle his legs in the soft butter, and take a bath in the milk?

Notice for a while the flies that come to your kitchen, and you will see that most if not all of them come from such filth to the food on your table.

#### 慌 派 派

The Fly Is Dangerous. Filth is not the worst thing that flies carry. Swarming about open sewers, drains, privies, etc., which contain millions of germs that have passed through the bodies of sick people, flies pick up on their fuzzy bodies germs of typhoid fever, summer diarrhea, tuberculosis, and other diseases.

The next station on the fly's journey is some person's food supply; and thinking a fair exchange is no robbery, he leaves a few of the choicest disease germs in exchange for the food he takes.

#### 派 派 派

You Can Prevent His Breeding. Flies breed by preference in horse manure, but they will breed in almost any kind of filth, garbage, old rags, and the like. The fly lays about one hundred twenty eggs at a time. These become maggots in a few hours, and in about a week they burrow down and enter the

inactive pupa stage, from which they emerge in about another week in the form of flies.

#### 低 張 張

How to Prevent Breeding. If you have a stable, do not allow manure to accumulate. The manure should be removed twice a day to a closed pit or bin inaccessible to the flies, and should be removed from this twice a week. Do not tolerate manure piles.

Green vitriol, one pound in a gallon of water (cost, I cent), applied once a day, will kill the maggots in the manure of a one-horse stable. Thirty cents a month is not much to pay for one efficient fly-killer. The green vitriol makes the manure more valuable as a fertilizer.

If the old-fashioned dug outhouse is used, it should be thoroughly treated at frequent intervals with chlorid of lime.

Garbage-cans should be closely covered, or, better, should have a fly-trap attached to the cover in such a way that all flies flying upward from the garbage will be sure to enter the trap. Such traps are sold at the warehouse stores.

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Have Your House Thoroughly Screened if there are any flies around, and with all you can do to prevent it there will probably be some; at least screen the kitchen and dining-room. Be sure in any case to keep foods in a flyproof receptacle.

Sick-rooms should be screened, both for the comfort of the patient and because flies will carry disease germs from the patient to the food.

# LAX INSPECTION OF MEAT WORSE THAN LOSS OF A "TITANIC"

Mrs. Crane Tells Committee Americans Consume Products Which Can Not Be Sold in Foreign Markets



UCH are the head-lines of the Washington Times in a recent issue. Beginning with the eighth of May, for a number of days the question of diseased meats passed by the United States Department of Agriculture

inspectors for consumption by Americans was a live issue in the dailies, on account of the Congressional investigation before the Moss Committee.

For several years the Rev. Caroline Bartlett Crane, of Kalamazoo, Mich., has been studying slaughter-house operations in various places, and she emphatically asserts that although the standards for inspection of animals and carcasses prior to 1906 were too low, they have been "so lowered since as to render insignificant the unquestioned improvements in packing-house sanitation wrought as a result of the needed law;" and that the "American people consume meats from diseased animals unwarrantedly passed for food in this country," "meat food products which by official instructions were not certified for foreign trade because European countries have refused to accept them."

Mrs. Crane is a public-spirited woman, working for the people as against the "interests." She brought this question to the attention of the American Public Health Association in Richmond in 1909. She is no novice. Dr. Wiley has spoken of her as being the greatest authority on meats in the country. She is the wife of a prominent Western physician who cooperates with her, and aids her in the scientific aspect of her work. As a result of her charges, Representative John M. Nelson introduced a resolution calling for an investigation by the committee on expenditures in the Department of Agriculture (see page 394 this issue). To put it mildly, the disclosures that have come to light as a result of the investigation have been horrifying.

Mrs. Crane herself was on the witnessstand for four days. She charges the federal meat inspection service with gross laxness in the discharge of its duties. She asserts that regulations are not lived up to, that packers are widely advertising antemorten inspections, and the inspection service is reporting these inspections, when in fact there is no antemorten inspection worthy of the name. "Looking over animals as they pass in a bunch with several abreast, it is ridiculous to say there can be antemorten inspection," says Mrs. Crane.

She asserts that the department rules are very severe about diseases which do not occur, and are very light about diseases which do occur.

She accuses Secretary Wilson of appointing on the federal commission of investigation men whose opinions he knew beforehand - a case of loaded dice. Again she charges progressive lowering of the meat-inspection standards by means of "secret regulations." What do you think of modifying the regulation regarding tapeworm meat so that meat is passed provided that it does not contain more than a limited number of tapeworm cysts? What do you think of a rule that consigns carcasses having skin lesions of hog cholera, to the "cutting room;" that is, to be made into sausage?

The fact is the packers and the de-

partment men believe in the dictum that a little diseased meat is all right for the people, the aim being to exclude that which is shockingly bad.

There is every evidence that the honest inspectors, trying to insist that the public shall have absolutely clean products, have been overruled by "men higher up." O, how familiar that expression is in connection with the Alaska coal steal, the multimillion dollar revenue steal of the sugar trust, and similar scandals! The men who want to give the common people a square deal are "not wanted" by "the men higher up." That is why Dr. Wiley, with all his dogged determination to die on the job, finally yielded, as he saw the hopelessness of continuing to work against the collusion of the "interests" and the "higher-ups."

Our meat-packing is a scandal. Do we export meat? — O, yes! but it is selected. Of some five hundred livers in one lot only forty (doubtless the "cream") were, according to the testimony of one inspector, considered good enough for export. The rest were reserved for home consumption.

When "The Jungle" brought to the attention of the public the horrors of the meat-packing business, people sickened and some for a time ate no meat. The government inspection metaphorically said, "We'll be good hereafter if you give us another chance." And the packers did the same. There has been a show of making the packing-houses more sanitary, and there have been laws and regulations; but the present investigations make it appear that the whole thing is a blind, that there is no real conviction in the Department of Agriculture that the people (except those in Europe and other foreign countries) are entitled to sound, healthy meat. But the people soon forgot - how soon they forget! and soon again were eating meat as ravenously as ever, with the thought, if they

thought at all, that "*perhaps* the meat I get is not diseased."

It reminds me of an occurrence of my younger days. We were sitting around the dinner-table and a superb leg of mutton was brought on. As our host was carving, the conversation flowed lightly on the topics of the day. Suddenly the knife plunged into a cavity and a quantity of creamy pus oozed or spurted out. The knife dropped from the limp hand of the carver, and the waiter was called to take away the joint of meat. Soon a young lady, the most susceptible, excused herself and left the dining-room, she was shortly followed by others, for though no one had eaten, the appetite of each seemed more than satisfied. The leg of mutton eventually went to the garbagebarrel, for no one would touch it. Moreover, that family were practically vegetarians for about a week, then they forgot,- as we all do,- and were again eating meat as freely as ever.

Had Uncle Sam's inspection methods detected the abscess in that particular leg of mutton, the offending piece would probably have been cut out, the rest of the leg sent out for consumption, and the consumers would have been none the wiser. What a magic in the words "U. S. Inspected and Passed!" How potent those words as a protection against disease! With how much more gusto one can eat when the meat bears the national label!

But between you and me, that national label does not mean just what the Bureau of Animal Industry people and the packers would have us believe. That national label is, by means of one or another hook or crook, caused to cover a multitude of sins.

Inspectors who have wanted to do the fair thing for the people have resigned because their efforts to enforce sanitary conditions were countermanded by those higher up. In the celebrated East St. Louis case of several years ago, the inspector made very grave complaints. The department proceeded to investigate, but refused to have newspaper men present at the investigation, so the complaining inspector rightly refused to testify in the investigation.

For those of us who are not dependent on meat this exposure has only a secondary interest comparable to the exposure of the Alaska frauds; but to the man who thinks he must have a juicy beefsteak or a piece of roast, the exposure ought to have an intense personal interest.

To us the investigation enforces the Biblical expression, "Put not your trust in princes, nor in the son of man," and especially when they are in a position where easy money can be made by playing on the soft pedal while the common people are being exploited.

The Survey has suggested that this investigation "may prove to be a more formidable arraignment of the federal Department of Agriculture than the pure food imbroglio, which culminated in Dr. Wiley's retirement from the Bureau of Chemistry, because he could fight better for the public health outside than in."

To us this incident proves the validity of two propositions: --

1. Meat is not by any means a clean, wholesome, or safe food for human consumption.

2. The Department of Agriculture is not an appropriate department for that part of the Bureau of Animal Industry which has the duty of safeguarding the people from juggled and unwholesome foods.

The department has never been enthusiastic over the rights of the people. A health bureau in some other department, so arrayed that there could not be any hindrances of the inspection and food laws by men higher up, and having control of all the government activities that have to do with the health of the people, would be a desideratum. The Owen Bill now before Congress provides for such a bureau.

#### THE CHARGES AGAINST THE DEPARTMENT

[In order that the readers may understand that we are not exaggerating the charges made against the administration of one of the federal departments, we give the charges made by Representative Nelson in H. Res. 512, calling for an investigation of these charges.— ED.]

THE Secretary of Agriculture and the chief of the Bureau of Animal Industry, A. D. Melvin, D. V. S., by published regulations and other means, have specifically authorized nullifications of both the letter and intent of the Meat Inspection Act, contrary to the public health, and in the interests of the meat packers.

The authorized nullifications are such that, even under faithful performance by inspectors of their prescribed duties, the federal stamp "U. S. Inspected and Passed" can not safely be taken as a guarantee that the meats and meat food products are, in accord with the requirements of the Meat Inspection Act. "sound, healthful, wholesome, and fit for human food" [italics ours].

Beef and pork packing establishments have been guilty of grave violations of both the federal meat inspection law and the department regulations.

The department has had full cognizance of these grave violations of the federal law and of the published regulations as shown in official communications to federal inspectors in charge deprecating the violations, and it is evident from the text of official communications to inspectors in charge that no prosecution nor threats of prosecution were made nor effective measures taken to prevent the continuance of such violations of law, and on the contrary several weeks subsequent to the privately circulated instructions by the chief of the Bureau of Animal Industry concerning some of the above violations of law, the Secretary of Agriculture and the solicitor of the department, Mr. George P. McCabe, who passes upon questions of prosecution, made public statements to the effect that there had been no violations of the law by the packers.

Notwithstanding the department's health

standards for animals and carcasses passed for human food prior to the law of nineteen hundred and six were much too low for prevalent dangerous diseases, they have been so lowered by the department since the passage of the new law as to render insignificant the unquestioned improvements in packing-house sanitation wrought as the result of the new law.

A gross deception of the people with regard to the standards and thoroughness of the inspection has been systematically practised by the officials of the Department of Agriculture and by the packers themselves.

A lowering of inspection standards and practises has been accomplished by officially printed regulations, and furthermore by orders to inspectors in charge, which orders are specifically stated to be intended only for "persons in the service of the Bureau of Animal Industry and to proprietors of establishments [the packers] at which the federal meat inspection is conducted," and on which so-called "service announcements" is the caution that they are "not intended for the public," and employees are warned against " giving or showing copies to outsiders," the warning being accompanied with a threat that employees who shall show or give "copies to other persons or to the press . . . will be severely dealt with."

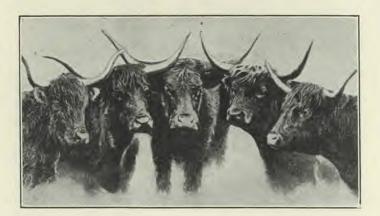
A lowering of standards and practises of inspection has been brought about by the direct and demonstrable influence of packers and of the American Meat Packers' Association.

The meat packers have taken steps toward influencing not only federal meat inspection standards, but influencing also the education and training of inspectors who are to enforce them, by offering to give the land and the endowment for a school of veterinary science and meat inspection at the University of Illinois.

Federal meat inspection, contrary to the expressed assertions of the Department of Agriculture, gives better inspection and a safer guarantee for export than for home-consumed meats and meat food products, with the effect that the *American people consume not only* meats from diseased animals unwarrantably passed for food in this country, but also meats and meat food products which by official instructions are not certified for foreign trade, because European countries have refused to accept them [italics ours].

The Department of Agriculture, in addition to the permanent annual appropriation of three million dollars, /is now asking for one million dollars for the microscopic inspection of a part of the pork product, the reason assigned being that "several deaths have resulted from eating such products which contained trichinæ," and that the Swiss minister is now seeking reparation on account of the deaths and serious illness of several citizens of Switzerland."

The Department of Agriculture, in its administration of the meat inspection law and the packing establishments in their evasion and violation of the law and the regulations, have not only committed grave offenses endangering the health of consumers of packing-house products, but have injured the faith and confidence of foreign countries in the packers' products, and by this short-sighted policy and by other acts have greatly injured not only their own foreign trade but also the agricultural interests of the country in large measure dependent upon it [italics ours].





T San Francisco recently on a very warm day, I noticed a robust-appearing man with a flushed face step up to a soda-fountain and ask for headache powders. He was handed a package, and was about to start on his way when he turned and inquired, "How many is it necessary to take at a time?" The boy at the fountain replied, "One is enough," and told him how to take it.

Knowing the contents of the package and being aware of the dangerous nature of the drug it contained, I naturally took some interest in this rather common occurrence.

Not one out of one hundred who take these headache powders knows anything of their contents; they do not know they are dealing with dangerous drugs which many physicians refuse to prescribe, or prescribe only after a careful study of the patient's physical condition. It is not uncommon for those who make use of these powders, in case the headache does not disappear in a few minutes after taking the medicine, to take another

dose, or perhaps a double dose, in order to be certain of results. There is no doubt that many sudden deaths from heart failure are due to the use of headache remedies. It is never safe to cure a headache with headache remedies that are guaranteed to stop the pain instantly.

The drugs usually employed for this purpose are derivatives of coal-tar known as acetanilid, antipyrin, and phenacetin.

Acetanilid, the one most commonly used, was discovered by a German physician about the year 1887. In experimenting upon cases of fever, he found that he was able with it to reduce the temperature, and that pain disap-



On a very warm day I noticed a robust-appearing man with a flushed face step up to a sodafountain and ask for headache powders.

peared as by magic. He made known his discovery to the medical profession, and recommended its use in medicine. Doctors naturally welcomed it as a valuable r e m e d y, and for several vears it was freely prescribed by them. The results were, however, not all that was hoped for. While it did what was claimed for it. it did more. In many cases serious symptoms followed the administration of even the ordinary dose, and in some instances it

#### GENERAL ARTICLES



Sudden death from heart failure - due to headache powders.

produced sudden death. At their medical meetings and through the medical journals, the physicians began to make

known to one an- ! other these unexpected results. This led the medical profession to regard the drug with suspicion, and to employ it only after being certain of their patients' physical condition. But as it was a "sure cure" for headache, which is such a common ailment, unprincipled men saw in its sale a means of financial gain, and began to put it up in various forms and to advertise it freely. The immediate results obtained by its use have made it a popular remedy,

and acetanilid is now sold at almost every soda-fountain.

One lesson all should learn is that it



It is not safe to swallow everything that relieves pain

is not safe to swallow everything that relieves pain; in fact, the chances are that it is always unsafe to do so. It is unphysiological and unnatural to get such immediate results. Pain in the head is unpleasant and undesirable, and it is perfectly proper to make use of every legitimate means to ease it. It must be borne in mind, however, that the pain is not the real trouble we should feel desirous of getting rid of. It is merely a symptom, which may be removed and the real trouble still remain, or perhaps be left in an aggravated form. I once heard of an Irishman, who, having swallowed a potato-bug by accident, and feeling some alarm, went to a drug store to learn what was good for potato-bugs,— of course he meant what was bad for them. The druggist in-

formed him that Paris green was usually employed to get rid of potato-bugs; whereupon the man said "Give me a half-pound of it." There can be no doubt that the halfpound of Paris green would have been a sure cure for the potato-bug he swallowed, but what about the Irishman? And yet intelligent men and women reason in much the same way in regard to headaches as did this ignorant Irishman.

It is possible to kill a mosquito on a man's forehead with a club, and there is no doubt that acetanilid will effectively destroy headache, but there is the possibility of its killing the one taking it.

Acetanilid is a heart depressant. After a dose is taken, the heart is weakened, the pulse is less strong, and in some cases is almost imperceptible. Acetanilid also paralyzes, and lowers the blood pressure. One whose heart has been stimulated and whose blood pressure has been increased by the use of tobacco, tea, coffee, by uric acid, etc., may by taking a dose of acetanilid, depress the heart, lower the blood pressure in the brain, and temporarily relieve headache. But the sensible thing would be to discard tobacco, tea, coffee, and other things responsible for the high blood pressure and the consequent headache. Much headache would disappear by merely discontinuing the use of tea, coffee, etc. One whose headache is due to other causes, whose heart is weak and blood pressure low, can not



A half-pound of Paris green would have been a sure cure for the potato-bug he swallowed — but what about the Irishman?

with any degree of safety take acetanilid in any form or quantity. It is in these cases that death usually results from its use.

In order to counteract the depressing influence of acetanilid. caffein has been added to many of these headache cures containing acetanilid. Caffein is itself a poison but it acts as a heart stimulant. A heart that is almost worn out can not be benefited by stimulants. Both drugs are therefore dangerous to use in such cases. Experiment has shown that caffein added to acetanilid renders it even more dangerous.

An English professor of medicine placed his

sole reliance upon a certain drug because it gave such apparent results in his practise. He never failed to recommend its employment as a remedy to his classes. But while on a visit to France, being called to treat a Frenchman, he prescribed his favorite drug, and the Frenchman suddenly died. The doctor could not explain just why, but his confidence in the drug was lessened to such an extent that in recommending it to his students afterward, he always added the caution. "Remember that

It is possible to kill a mosquito on a man's

forehead with a club.

while it cures the Englishman, it will kill the Frenchman."

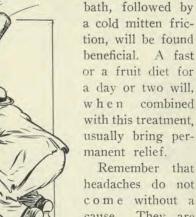
This is practically what acetanilid does. While it cures the headache, and the one with a strong heart may survive, it may kill another patient having the same symptoms, but a weak heart. It will be seen that it is dangerous to place such a drug in the hands of the people, or to

recommend it as a universal remedy for headache, as is done by manufacturers.

So far we have learned what not to do to get rid of headaches. We shall now consider some simple and safe remedial agencies that may be employed. In the treatment of any headache, the first duty is to ascertain its significance. Is it merely a stomach-ache in the head, due to overeating, to improper mastication,

or to improperly combining the foods? If so, wash out the stomach and the colon, or take a purgative. Do everything possible to clean up the alimentary canal and thus remove the exciting causes, and then ever after avoid the causes. If the headache is due to hyperemia of the brain and increased pressure. do everything possible to draw the blood away from the brain. A hot foot-bath, with cold compresses to the head and around the neck, will give relief. A towel wrung out of hot water and then folded and placed over the face, with only the nose exposed, and cold compresses to the top of the head, and an ice bag at the base of the brain, will also afford relief. A hot enema is helpful, especially if the increased blood pressure is due to the absorption of poisons from the colon, resulting from the decay of foods.

If a bilious headache exists, the hot enema, followed by hot fomentations over the liver and stomach, and a hot



c o m e without a cause. They are nature's dangersignals, calling attention to certain causes that need to be removed. To tear down the signals without removing the causes, is suicidal. And

vet multitudes are doing this. As long as the causes remain, men and women, to feel at all comfortable, find it necessarv to be under the nerve-benumbing and heart-depressing influence of alcohol or some other drug, as acetanilid, most of the time. While under its influence they may feel better, and imagine they have peace, when no peace exists. The path of transgression always leads to destruction, even though by the use of some drug we render ourselves unconscious of it. The sensible thing to do is to ascertain the significance of the headache, and then cease to do evil and learn to do well.

# THECURE OF CONSUMPTION

E must bear in mind that consumption in a large number of cases, when treated in the early stages, is emphatically a curable disease. The German saying, "Every one has at one time or another a touch of tuberculosis," is justified by the revelations of the post-mortem room. Sir Clifford Allbutt says, "Probably most of us here have had tuberculosis and recovered from it."

#### Tuberculosis Dispensaries

One of the most valuable agencies in combating tuberculosis and in curing the disease, is the tuberculosis dispensary. Associated with such a dispensary are a corps of health visitors who go from house to house, visiting the homes of the people, under the direction of the doctor in charge of the dispensary. Free treatment is given at the dispensary to those who require it, and an excellent opportunity is afforded for giving private instruction to the people concerning the elements of domestic and personal hygiene, and the importance of providing an abundance of fresh air as well as an abundance of nutritious food. Wherever there is evidence of decline, a falling weight, a persistent cold or cough, a rise of temperature, a hectic flush of the face, or similar symptoms, a careful investigation should be made, and the suspected

patient encouraged to visit the dispensary and have an interview with the physician in charge. The Edinburgh tuberculosis dispensary has already accomplished a large amount of good, and the dispensary more recently established in Marylebone (London) is also doing a great deal of good. We should like to see such dispensaries multiplied throughout the land, so that every district will have the advantages of its own dispensary. We consider a well-equipped dispensary one of the most effective means of fighting consumption. We might add that educational work in the way of lectures, practical demonstrations, lantern lectures, etc., are carried on in connection with these dispensaries, and thus a vast amount of popular teaching with regard to the principles of sanitation and hygiene is provided.

#### Sanatorium Treatment

But it is obvious that there are many consumptives who require a systematic course of open-air treatment. Fresh air is certainly the purest and most efficient stimulant, and, when combined with good feeding and carefully graded exercise, it affords the best and most reliable treatment for consumption.

It seems to us that greater care should be exercised in selecting cases for sanatorium treatment. To accomplish this, we ought to have two classes of sanatoria: First, those for the treatment of the hopeful, early cases; and second, those for the care of the less hopeful, late cases. We believe that still greater success would have been obtained from sanatorium treatment in the past if some such classification of the cases had been carried out.

Sanatorium treatment to be successful

must be systematic also, and a proper régime must be inaugurated and carried o u t punctually and faithfully. Too often there is a laxity in dealing with sanatorium patients, which militates seriously against the efficiency of the treatment, and means the loss of many lives that might otherwise be saved.

We believe that at the present

time we have but four thousand sanatorium beds available for the treatment of consumptives, a number that is very small considering that there are among us several hundred thousand patients suffering from tubercular disease.<sup>1</sup> We should like to see our sanatoria multiplied, as well as the tubercular dispensaries; for we hold that they are a very necessary adjunct in the campaign against consumption.

#### Post-Sanatorium Treatment

At the present time very little attention is given to the care of consumptive patients on their return home from the sanatoria. Even though the sanatorium treatment has been a marked success, and the patient has been placed on the highroad to recovery, permanent good results often depend upon the character of the after-treatment. Such patients still require a generous diet, an abundance of fresh air, free ventilation, and last, but by no means of least importance, a suitable form of labor. Here is a fertile field for the attention of our health authori-

ties, as well as for our voluntary health societies. Such patients ought to be under medical supervision and be seen periodically by health visitors until the recovery is complete, and there is no longer any trace of the disease. If this were done in the case of all the patients on leaving our sanatoria, we believe that far more satisfactory results

would be secured than are obtained by present methods.

#### Open-Air Schools for Children

Within recent years we have seen a few open-air schools for children, a very important step in the right direction, and one which is bound to bring splendid results; but, like our tuberculosis dispensaries and sanatoria, these open-air schools will have to be multiplied manyfold before they will be able to accommodate all the children who require such advantages. As we have already stated, of all individuals children are most sus-



<sup>&</sup>lt;sup>1</sup> This has reference to England, but it has equal application in this country.

ceptible, and this is particularly true of the children of tubercular parents.

A properly conducted open-air school is in reality a special sanatorium for children. The children should be divided into three grades: First, those of tuberculous parentage, children who are perhaps frail, feeble, and delicate, and yet who manifest no positive signs of tuberculous disease; second, children who have already contracted consumption, but are still in the incipient stage, and for whom there are ample hopes of recovery; and third, children in whom the disease has become deep-seated. The last-named class should not be allowed to associate with either the first or the second class.

#### The Home Treatment

Much might be said about the home treatment of tuberculosis. There is the sleeping-veranda, the garden hut, shelter, or tent, as well as the open window; and there is the provision of a separate room with good ventilation for the patient when it is impossible to sleep out. Then there is the problem of separate linen, individual dishes, the treatment of the sputum, etc. We think it is always a grave mistake to allow children to come into daily contact with consumptive patients under any conditions. We are aware that this will oftentimes mean the placing of the children in suitable sanatoria or homes, where they can be properly cared for, and thus escape the danger of infection.

Then there is the question of nutrition. In many cases the patient is too poor to provide the nutritious diet required in order to give anything like a chance for recovery. All these problems demand assiduous attention, and the supervision of a physician as well as the assistance of the public, either through the rates [taxes] or by voluntary contributions.

#### ECUADOR

#### (Concluded from page 418)

twenty miles, and once about thirty miles in a day. Often the whole trip was through desert, without water or inhabitant. Sometimes clouds would shut off the direct rays of the sun, but owing to our geographical position [almost directly under the sun, being practically on the equator], that would not cool the air in these lowlands.

The people could not understand how we could make such journeys on foot; they do not try to. One man said we were surely walking representatives of our magazine, *Salud y Vida* (in English, Life and Health). Nearly all the food in this country is so filled, and then refilled, with grease, that we had to carry a small kerosene stove with us to cook our own rice,—rice, bread, and bananas for one meal; bread, bananas, and rice the following meal; and the next time, bread, rice, and bananas. "Variety is the spice of life." During that trip I gained in weight.

#### CONSUMPTION CURE FRAUDS

Arthur J. Cramp, M. D.



OR every ailment there is a specific; for every disease there is some drug that will cure it!

Such is the belief of most people who have never made a study of disease and its treatment, and of some, unfortunately, who have. Not that it is thought that the individual "cures" have been found in every instance, or indeed, even in most instances; but that there are such specifics if only the medical profession was wise enough to find them, is an opinion held by the majority.

Centuries of ignorance regarding, the cause of disease and as long a period of blind, unreasoning faith in the efficacy of drugs and simples, are responsible for this wide-spread and unfortunate superstition.

And on this error is built the whole superstructure of quackery. It is a fact, as patent as it is basic, that should the public once reach a true realization of not only the possibilities of drugs but of their limitations, the quack and the medical charlatan would disappear for want of a clientele. But so long as the old superstition holds that for every ill there is a drug that will remove it, so long will the suffering be swindled and the helpless humbugged.

#### Consumptives Easy Prey

We do not realize how deeply this fallacy is grounded until we are brought face to face with some deadly ailment in ourselves or our loved ones. With possibly one exception, it is doubtful, if there is any form of sickness that inspires the same degree of terror as that produced by pulmonary tuberculosis consumption. Certainly there are few diseases that lend themselves more profitably to the quack and impostor. And the reason is not far to seek.

The consumptive goes to his family physician; and what does he learn? — That it is useless for him to expect drugs to cure him, and that he must map out his life anew. Carefully and at no small sacrifice of comfort and convenience, he must, perforce, aid nature in the long, up-hill struggle against the invasion of the deadly bacillus. Rest, regular and carefully graded exercise, plain but wholesome food, outdoor living both day and night, the judicious use of certain drugs under careful supervision, the avoidance of excitement, and the giving



Here are five testimonials, with the photographs of the poor victims that wrote them, used by the exploiters of a "consumption cure." In every case, the person testifying has died of consumption.

Improving in Every Way. On Feb. 22nd we received the following report from Mr. Clarence G. Newhouse, No. 175 Argyle St., Keyser, W. Va.: "I have used Lung-Germine six weeks and am taking 15-drop doses three times daily. I sleep better, have a better appetite, night sweats are not so severe, breathing is easier, I am stronger and pains in sides and shoulderblades are getting better Please send me some addressed envelopes."

#### Death of Young Man

Clarence Newhouse, a young man, living with his parents, Mr. and Mrs. J. W. Newhouse, on Argyle street, died Tuesday. -Wednesday the burial took place in Queens Point cemetery.

Young Newhouse had formerly been an employee of the B. & O. Company in the car repair shops, but eighteen months ago was compelled to give up the work as consumption made an inroad on his constitution.

On the left is a testimonial that appeared in the Lung Germine Monthly Bulletin. On the right is a news item that appeared a year later in a local newspaper. The Lung Germine Company says that it prints testimonials from only those who are beginning the "treatment." There's a reason!

up of many apparently harmless pleasures,— all these requirements seem hard and cruel to the consumptive who has not yet reached the place where he is bed-ridden. And yet it is the best that science and truth have to offer.

Suppose, on the other hand, he goes to the quack; what is he offered? - A promise of a sure and certain cure to be effected in a miraculously short time, by taking a "specially prepared treatment," the secret of which only Dr. Quack knows! Only one thing is necessary for the "cure"money! And to clinch the preposterous claims, the impostor produces sheaves of apparently genuine testimonials from consumptives who claim to have been cured. Is it any wonder that the sufferer parts with his five, ten, or fifteen dollars for the "treatment" that is to restore him to health, and — the tragedy of it! — at the same time abandons the distasteful but vitally important dietetic

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Three testimonials used by the J. Lawrence Hill "consumption cure" concern. Frank Wachter died of consumption three months after writing his testimonial; the company was still using it two years later. Otto Bruce's testimonial was still being used nearly two years after the poor fellow had succumbed to tuberculosis. The Hill concern was still advertising the fact that Miss Ida Schultz was "cured" a year or more after she was in her grave — a victim of consumption. and hygienic routine laid out for him by his physician?

And herein lies the viciousness of the "consumption cure." If the patient's purse were the only thing that suffered, the fraud might be forgiven, but the blind reliance on a worthless drug means death.

#### Testimonials

The persuasive power of testimonials is so enormous and plays so important a part in this unholy traffic that it deserves some attention. The question is often asked. Are the thousands of testimonials that the exploiters of cures for tuberculosis publish, genuine or fraudu-

lent? Occasionally they are fraudulent: usually they are genuine. An investigation of hundreds of testimonials in the past two or three years has demonstrated that most of them are genuine, and that all of them are worthless.

Probably in no other disease does the patient's sense of well-being depend so largely on his mental attitude as it does in consumption. A n y change in treatment, or in the one giving the treatment, is likely to result in a temporary improvement in the patient's symptoms. This characteristic was scientifically demon strated by the French Mathieu, physician when he gave his tuberculous patients to understand that he had discovered a new and wonderful remedy for their disease, a serum of marvelous efficacy. To carry out the deception further, the patients were given hypodermic injections of salt-water. The effect of this treatment was to lessen the coughing and

expectoration, and to modify the night sweats and fever. With a cessation of the injections and the wearing off of

OF HEALTH CONTRACT OF STRATT -----STATE OF WISCONSIN err at BALT | MAXIN OF BEATH RECO Tyle I man the m 100 - La to Bloer Single HENTY Bruce m and one helf vrea Germany J. W. Monsted Sagenda Sur Cermany Doneslic mit di vite civitade "additione and tave be me. ----

Here are the death certificates of some of the poor victims who have died of consumption. They have all given testimonials declaring they had been cured.

Hartford' www.autoberger Westenberger

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the novelty, the symptoms returned. Can it be doubted that if these patients had been asked, during the first few days of the treatment, to give their opinion of it. they would have done otherwise than swear by it? Is it any wonder that testimonials are easy to get?

Of course the " consumption cure " faker knows the evanescent character of his victims' supposed improvement, and he is shrewd enough to get his testimonials during that period. Once obtained, however, they become a permanent asset in his business. The patient dies, but the testimonial still lives, a wrecker's beacon to lure others to destruction.

#### Some Specific Cases

How worthless and worse than worthless, dangerous - the testimony of the " consumption cure " seller is, can best be shown by specific The illustracases. tions that accompany this article are photographic reproductions of testimonials (honestly given) for some

widely advertised "cures." They are documentarily genuine; that is to say, they were actually written by the poor victims in good faith. Yet in every instance the person who wrote the testimonial is dead, and he died of consumption! In some cases, while the unfortunates passed away a few weeks or months after writing them, the testimonials were used for years after their death.

#### The Cures Themselves

So much for the bait which those engaged in this disreputable business use to catch their prey. Of the "cures" themselves volumes might be written, although one word truthfully and conservatively describes them — worthless. Some of the shrewder scoundrels who sell these "cures," recommend certain hygienic and dietetic measures as supplemental to their "treatment." These suggestions are never made, nor even hinted at, in the advertisements or "form letters" which these men use to entrap their quarry.

Not until the sufferer has parted with his money does he learn that the "medicine" itself is not all that is necessary for a cure. But not one consumptive in a thousand will pay any heed to hygienic or dietetic rules laid down by a quack. And naturally so. He usually purchases the "cure" so as to escape the inconveniences and restrictions laid down by the family physician; why then should he not rely on the pills and tablets? Moreover, did not the advertisements say that the drugs would cure him?

#### Nature's Creation

Nature's Creation is the name of a "consumption cure" that was originally exploited as a "cure" for "blood poison." As the various campaigns against the white plague aroused public interest in the subject of consumption, the exploiters of this nostrum apparently decided that it would make a better "seller" as a "consumption cure;" at any rate, that is what it is now sold for. The stuff has been advertised by means of testimonials from people who long since died of the very disease that this product is claimed to cure.

When analyzed by the chemists of the American Medical Association, it was reported to be "essentially a solution of potassium iodid [potash] in a weakly alcoholic medium containing vegetable extractives and flavoring matter and small quantities of inorganic salts." Iodid of potash, apparently the main ingredient, is a mineral salt. And yet this preparation has been sold as being "made entirely from vegetable matter;" and when it was sold for "blood poison," the victims were warned not to use the dangerous "potash," but to rely on Nature's Creation !

Recently the exploiters of this nostrum had a disagreement among themselves, with an appeal to the courts. This has given the public insight into a disreputable business. The man who exploited the nostrum declares under oath that it costs only two cents an ounce, or twenty-five cents a bottle, to make the stuff, which sells at five dollars a bottle.



# CIVIC FESTIVALS IN GOD'S CREAT OUT-OF-DOORS

HERE are some civic festive gatherings that do little or no good to any one concerned. These are such gatherings as fancy dress balls, held in closed rooms, where pure air is excluded, and the glare of electric lights takes the place of the light of the sun. I do not believe in horse-races and similar gatherings where gambling is a generally-indulged-in excitement, and to many the chief object of the so-called sport. Personally, I do not favor great showy parades where civic pride, socalled, is the chief aim, and where half the participants and spectators afterward feel called upon to drink, carouse, and indulge their baser passions.

In the Middle Western States it has lately been the custom in the smaller towns to encourage street fairs. I have attended several of these. They are largely made of cheap, tawdry, cheating shows, gambling booths, roundabouts, shooting-galleries, catchpenny, claptrap vaudeville performances, and in some cases definitely immoral devices to entrap the unwary and separate him from his money. Not a single element is elevating, refining, or beneficial, and any community of business men, willing to foist such a show upon their town and country patrons, in the expectation of gleaning a small share of the harvest caused by the unhealthful excitement, is not worthy the support of honest, upright, clean-minded, pure-hearted men and women.

GEORGE WHARTON JAMES

None of these gatherings, festivals, parades, or fairs makes any appeal to me, any more than do the noisy crowds that parade the streets of New York on Newyear's eve. But there are civic festivals that I wish were more common, which bring the people together, out-of-doors, into the pure air and sunshine, in simple, hearty pleasures that benefit all concerned. I would that such festivals might be multiplied, until every city, town, and village in the United States had one that was distinctively its own.

For instance, Greenfield, Mass., has rejuvenated its old-time arts and crafts, and many of its villagers are actively engaged in basket-making, embroidery, lace-work, carpet-weaving, and the score and one things the inhabitants used to do in the olden times. Every year they have a grand exhibition, to which people from Boston and other cities come, to their edification and benefit.

California is especially a land of outof-door civic carnivals, and many of them



A MAY-DAY FESTIVAL Golden Gate Park, San Francisco, Cal.

are conducted on a plan that is beneficial to all concerned. The fresh air and sunshine features are prime items, and the introduction of outsiders to the special work of the community is the commercial and advertising feature of the occasion that commends it to the good sense of those who look at things mainly through financial spectacles.

For instance, Riverside has had its orange carnival. Whether such carnivals are given annually I do not just now recall; but the year I was present, every visitor was met as the trains bearing the excursionists rolled in, and a yellow badge, stamped with a fine, beautiful orange, was pinned upon him. A big, luscious orange was handed to each visitor, and then open-air ceremonies of a pleasing character were held, after which every one who desired was given a drive to an orange orchard, where he might see the orange-trees in bloom, or he was escorted through the packing-houses, where he might see where and how oranges were sorted, wrapped, boxed, and shipped.

At the tables of the hotels orangeade was the drink served at meals, the menus were on orange-colored cards, the crackers for the soup were tiny orange-shaped biscuit, and the fare comprised orange fritters, orange sticks, orange marmalade, orange this, that, and the other, so that everybody could not help but feel that Riverside was indeed a wonderful orange region.

In San Francisco every May-day is made the occasion for a tremendous gathering of men, women, and children in Golden Gate Park. There are parades, speeches, concerts, games, picnics, and a score of healthful, agreeable, pleasing out-of-door attractions. Children have

#### GENERAL ARTICLES



A BEACH CARNIVAL A busy scene at Long Beach, Cal.

swings, May-poles, races, baseball, wading-ponds, teeter-boards, pools for their sailing-boats; and there are equal provisions for the pleasures of men and women.

Several of the seaside resorts have ocean carnivals, where swimming, diving, rowing in wash-tubs, riding on barrels, boat-races, and kindred pleasures of the water are indulged in. As many as one hundred thousand people sometimes gather at these seaside festivals, and if they keep away from the beer saloons and other questionable places, and accept the blessings of the open air, sea, sky, and ocean, which God so freely bestows upon them, they are sure to return to their homes physically, mentally, and possibly morally uplifted by their outing.

At Lodi, in the region where the flaming Tokay grape grows to perfection, a grape carnival is held. Queen Zinfandel is crowned, and holds sway over the festivities. There is a procession of wagon-loads of grapes, the streets are gaily decorated, the whole countryside being present. After pleasing addresses, and a social function, in which the queen is crowned, there is a grape-picking competition, together with various other exhibitions connected with the grape-growing industry. Little or no wine is made in this region, but a great business has recently been built up in unfermented grape-juice, small barrels of which are given away to be drunk at the open-air picnic lunches, in which everybody is expected to take part. Everything is simple, primitive, jolly, and neighborly, and the festival always creates much good feeling and happiness.

Of a somewhat similar character is the Fresno raisin festival. Fresno

#### LIFE AND HEALTH

County grows more raisin grapes and packs and ships more raisins than any similar area in the world. To see how the grapes grow, how they are pruned, how the fruit is picked, dried, sweated, sorted, stemmed, seeded, and packed is a most interesting day's occupation; and all this is provided for at the Fresno festival.

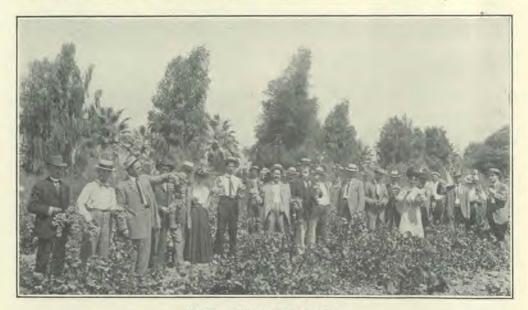
The guests are taken around to the different vinevards, and, as is



WAGONS OF GRAPES The Tokay Carnival at Lodi, Cal., passing under the arch.

after branch, and spread them out on trays, where they are allowed to remain and dry in the sun. Then when the smaller ones are dried so that they are hard, it is observed that the larger ones are still too wet to be packed, so they are dumped all together into large boxes, holding perhaps two or three hundred pounds, and these boxes are stacked one upon another and allowed to remain out in the sun. In this manner the moisture

shown below, are allowed to pick all is extracted from those that still are the grapes they desire. Then they watch too moist, and the boxes being closed, the expert pickers as they cut branch the moisture enters into and softens



GUESTS GATHERING GRAPES Fresno Raisin Carnival, Fresno, Cal.

#### 410

the smaller grapes that have been overdried. Thus the moisture is equalized, until all the grapes have become raisins of about equal moisture. This process is called "sweating." Now the raisins are ready to be sorted. Some are picked out for the finest table use. These are graded into layers of three qualities. Others are stemmed and sold in bulk, while still others are sent to the seeder, where, by specially designed and most ingenious machinery, the seeds are extracted from the raisins, so that the housewife finds them all ready to her hand for cakes, puddings, etc.

All these processes are shown to the visitors, and then, at the different vineyards, tables are spread under the trees, where simple, homely, hearty lunches are partaken of with the utmost good fellowship and friendliness,

In the afternoon there is a raisin-picking competition for boys under sixteen. A certain area is given to each boy, and he is permitted to work as he chooses. Men and women also compete for packing prizes, and there is a box-making contest. There is also an evening parade, and a competition for the making of raisin bread, raisin pies, and other wholesome and tasty raisin dishes, and great fun is caused by the comments of the crowd as the judges and competitors meet. Altogether it gives the people who are engaged in growing raisins an opportunity to meet those who are using them, in a pleasing and fraternal manner, with advantage to all concerned.



GUESTS AT LUNCH Fresno Raisin Carnival.



#### NUTS

#### (Concluded) George E. Cornforth

#### The Filbert or Hazelnut

FOOD VALUE IN CALORIES PER OUNCEPRO.FATCAR.TOTAL18.1172.315.1205.5

The hazelnut grows in a husk, or cup, on a bush belonging to the oak family. The filbert is a cultivated hazelnut. We find frequent mention of the filbert from very early times, in both prose and poetry.

#### The Hickory-Nut

FOOD	VALUE IN	CALORIES PER	OUNCE
PRO.	FAT	CAR.	TOTAL
17.9	177.9	13.2	209.0

The hickory-nut is closely related to the walnut. Its name is a shortened form of the Indian name pohickery. It is a native of North America, exclusively an American nut. The wood of the tree is remarkable for its strength and elasticity. The nut formed a valuable part of the diet of the Indians when this country was first settled. They gathered large quantities of these nuts for winter use, and not only ate them in their natural state, but used them in cooking, often combining them with Indian corn, which is also a native to this continent. By pounding and boiling them they made a preparation called by a name which means " hickory milk." The hickory-nut stands second in richness in fat.

#### The Pecan

FOOD	VALUE IN	CALORIES PER	OUNCE
PRO.	FAT	CAR.	TOTAL
12.8	188.0	15.4	216.2

The pecan is a variety of the hickorynut, which grows in the Mississippi Valley as far north as Ohio, also in Texas. The pecan is the richest of all nuts in fat. It also has the greatest total nutritive value. Its richness in fat may be shown by applying a lighted match to the end of a kernel, when it will light and burn like a candle. It is the tenderest and most digestible of nuts. It contains the three classes of food elements, the carbohydrates, proteins, and fats, in just about the same proportion as they are found in cream. It may be called a vegetable cream.

#### The Pine-Nut

FOOD	VALUE IN	CALORIES PER	OUNCE
PRO.	FAT	CAR.	TOTAL
Pignolia -			
20.2	120 4	80	7777

The pine-nut is the seed of a pine-tree. There are some twelve species of pinetrees which produce seeds large enough to be used for food. The nut-bearing pines grow in California, Arizona, Colorado, New Mexico, Texas, and Lower California. The edible nuts vary in size from that of a small pea to the size of a large peanut. Pine-nuts were formerly gathered in immense quantities by the Indians, to help eke out their often scanty winter store of food. Each nut grows in a thin hard shell. The nuts are smooth and white and have no skin. When raw, they have a piny or mildly pitchy taste; but when lightly roasted, this is changed to a fine flavor, on account of which the nut is becoming very popular. The nuts should be washed, thoroughly dried, and then put into a warm oven where they will dry and lightly roast; or they may be simply dried without roasting. Salt may

#### HEALTHFUL COOKERY



Pistachio-nuts at the left, cashew-nuts in the center, and pine-nuts on the right.

be sprinkled over them when they are put into the oven to dry. The pignolia variety of the pine-nut is the richest of all nuts in protein.

> The Pistachio-Nut FOOD VALUE IN CALORIES PER OUNCE PRO. FAT CAR. TOTAL 25.9 142.5 18.9 187.3

The pistachio-nut is mentioned in Gen. 43: 11 as part of the present sent by Jacob to his son Joseph, and it is still used in Egypt in presents of courtesy. It grows on a small tree that is a native of western Asia and the Levant, and is cultivated in the Mediterranean region. It is now raised in California. The nuts grow in pods, one kernel in each pod, and somewhat resemble beans in size and shape. They are prized by confectioners for their delicate flavor and attractive green color, and are used by them in coloring and flavoring ice-cream.

#### The Walnut

FOOD	VALUE IN	CALORIES PER	OUNCE
PRO.	FAT	CAR.	TOTAL
21.3	170.0	15.1	206.4

The English walnut is a native of Persia, and was probably brought to England by the Romans. The walnut, of which there are many varieties, has long been considered one of the choicest of nuts, and its cultivation has spread from the Himalaya Mountains, Persia, and Armenia westward over Europe, and even to America. The principal varieties of the walnut native to the United States are the black walnut and the butternut. Sugar can be made from the sap of the walnut-tree as from the maple-sap, but it is of inferior quality.

#### The Black Walnut

FOOD	VALUE IN	CALORIES PER	OUNCE
PRO.	FAT	CAR.	TOTAL
32.0	148.6	13.6	194.2

Black walnuts grow wild. The shell is much harder than that of the English walnut, and it is so much trouble to shell them that they are not very commonly used; but they have a peculiar flavor of their own which many people find very enjoyable. They are much richer in protein than the other walnuts.

#### The Butternut

FOOD	VALUE IN	CALORIES PER	OUNCE
PRO.	FAT	CAR.	TOTAL
32.4	161.6	4.0	198.0

The butternut, which also grows wild, is covered with a husk, which it does not shed as do the other nuts of this family. The meat of the butternut is very sweet and tender, but even more difficult to remove from the shell than that of the black walnut. This nut contains the least amount of carbohydrate of all nuts.

The Beechnut

FOOD \	ALUE IN	CALORIES PER	OUNCE
PRO.	FAT	CAR.	TOTAL
25.4	151.5	15.3	192.2

It is only necessary to mention the word to bring back to our readers pleasant memories of hours spent in their younger days out in the woods with the squirrels, gathering this little three-cornered, tender, sweet-flavored nut. This nut has been known for centuries, and is spoken of by early Greek and Roman writers. The beechnut is so small and hard to gather that it is unprofitable for sale, and seldom seen on the market.

#### The Brazil-Nut

FOOD	VALUE IN	CALORIES PER	OUNCE
PRO.	FAT	CAR.	TOTAL
19.7	176.4	8.1	204.2

The Brazil-nut is also called castanea, Para-nut, almendron, and cream-nut. It is the product of one of the largest trees in South America, a tree which grows to a height of from one hundred to one hundred fifty feet. The leaves of the tree are about four feet long, and are broad, smooth, thick, and leathery. The tree bears a hard-shelled, globular fruit six inches long, which contains about two dozen of the three-cornered nuts, or seeds, closely packed together. This nut stands third among all nuts in richness in fats. It is used principally in desserts, salads, and confectionery.

#### The Cashew-Nut

This nut is a newcomer to our markets, and I have not been able to learn its food value. It grows on a small Brazilian tree. The tree bears a pear-shaped fruit, to the apex of which is attached the kidney-shaped nut. The kernel of this nut is eaten, and from the shell is extracted an acrid, inflammable oil used in varnishes. This oil, which lies between the layers of the shell, is poisonous, but is eliminated by roasting.

#### The Acorn

FOOD	VALUE IN	CALORIES PER	OUNCE
PRO.	FAT	CAR.	TOTAL
Fresh -			

5.1 12.4 58.5 76.0 The acorn is the most abundant and least valued of American nuts. It is hardly ever thought of as worth eating. It grows on sixty species of oaks. It was used by the early settlers in this country in fattening swine. The Indians found it a valuable addition to their often scanty food supply, and even today the mission Indians in California depend largely upon it for subsistence. It resembles the chestnut in containing a large proportion of starch and a small proportion of fat.





#### MINISTERING TO A DYING HINDU Mrs. H. R. Leech

NE evening a few weeks ago, Miss Burroway and 1 were called to a high-caste Hindu village to see a patient who we were told had come in on the afternoon train, and was in a dying condition. The native doctors had been to see him, and had advised that we be sent for, as they could do nothing for him. When we reached the village, it was already dark. We found the patient lying on a handful of straw at one side of the street, with no shelter, and only a younger brother to do anything for him. He was delirious, and had spasms, in which he frothed at the mouth. I immediately administered a stimulant.

Then we tried to get the people to let us have a shelter, and some straw to lay him on, as the nights are very cold here at this time of year. But all the people would say was, "He is not of our caste ; why should we do it?" While we were arguing with them, we were joined by an educated Bengali pundant who has studied the Word with us and is much interested. He also tried to persuade the people to give a shelter and a little straw; but not until we had paid three times the usual price for straw did we get it. Then one of the men, a little braver than the rest, offered an open shed that he used on market-day for a shop. We then brought our cart, and tried to get some of them to help us lift him onto it. But no one would touch him. So Miss Burroway and I, with the help of his brother, started to lift him,

when the pundant stepped forward and helped us. This meant a great deal to him, as it was contrary to his caste; and he did it, too, before all his caste brethren.

We took the patient to the shed, made a straw bed, and placed him upon it. While we were administering medicines and giving the brother instructions concerning his care, the bazaar people gathered and demanded that we take him away, as it would defile their building. and they could sell no more goods there. They also said that their children would die. We had no other place to put him, as we were camping out at that time until our house was completed. We could not leave him without shelter, so we tried to persuade them to let him stay; but on no account would they do it. Finally one man, less prejudiced than the others, said: "You've done all you can, and have no other place to put him. Go quickly away and leave him. As none of them will touch him for fear of defilement, they will just leave him there."

But the pundant said: "You better take him away, as it will arouse the whole bazaar, and hinder your work among us."

They even refused to give us water to wash our hands after ministering to him. So we again placed him upon our cart, and brought him home with us.

God surely blessed our care of him, for he began to improve from the first, although for several days his life hung in the balance. Even then some of the (Concluded on page 418)

One Of The Pleasing tory Of this City Desp Day Was Greatly

THE GLORIOI

With Entertain the ac Killed by Dynamite Explosion, During the Middletown safe and saue Fourth gav July was one grand and

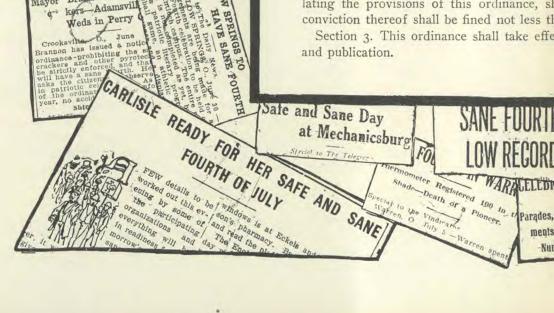
# A Mode

AN ORDINANCE to prohibit the selling control for the purpose of selling or articles for the production of pyrotecl of Wisconsin.

#### THE COMMON COUNCIL OF THE (

Section 1. No person, firm, nor corpo State of Wisconsin, sell, offer for sale, or s custody, or control for the purpose of se toy pistol, squib, rocket, firecracker, roma works, or any articles for the making of py ing in this section contained shall be constr technic displays of fireworks in parks and resolution of the Common Council. Provid tained shall be construed to prohibit the named articles by the wholesale dealers wholesal points outside of said City of .....

Section 2. Any person, for himself or lating the provisions of this ordinance, sl conviction thereof shall be fined not less th Section 3. This ordinance shall take effe and publication.



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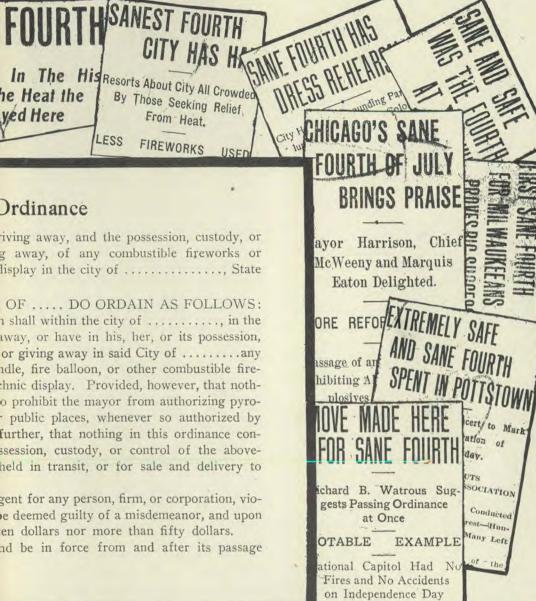
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#### MINISTERING TO A DYING HINDU

(Concluded from page 415)

Hindus came and advised us to send him home, so he would not die in our home, and it be defiled. After ten days' careful nursing, by God's help we were able to send him home practically well.

All this created a great stir in the bazaar. Every day as we went in and

out among the people, they would inquire about the patient. Some were ready to call us gods, while to others, such as the pundant, this experience was an objectlesson, showing the vast difference between the Christian religion and that of the Hindu.

#### ECUADOR

#### W. W. Wheeler



ROTHER JOHN OSBORNE and I left Quito, Oct. 16, 1911, and were on the coast nine weeks, most of the time being spent in taking subscriptions for our Spanish health journal Salud y Vida. We took 295 subscriptions, besides selling nearly six hundred single copies. We also placed some orders for other papers, and for books and Bibles.

At Machala I baptized a brother with whom I held two or three Bible studies a year ago. Another brother came for baptism, but did not arrive till we had left the place. We have other interested ones in that section, and I must spend some time with them during the next dry season. The climate is very malarious, and it was there we both took the malaria last year. Thanks to the Lord, I have not had any fever since our special seasons of prayer last August. On this trip we had mosquito-netting for our beds, and we also took some quinin.

The health journal is making friends for us among people of all beliefs and disbeliefs. Most of these people whom we meet are either fanatics or infidels. One woman would not give her order till assured that the magazine was not filled with Protestant arguments, did not teach the Catholic religion, and was not Masonic. One man said that the health

magazine was excellent and that he would like to have it in his family, but that he would not have his name appear as a subscriber. A priest who would not look at a sample copy last year, afterward read some of last year's numbers, with the result that he signed his name this time as soon as the journal was presented to him.

In one town, which for its size and wealth should have given us twenty subscriptions, we secured only four. In another town Brother Osborne placed orders to the amount of \$14.30 in three and one-half hours. There are few people on the road between towns, and, because of their extreme poverty, it is seldom they can buy anything. Many can not read. Only about fifty per cent of the inhabitants of the whole republic can read.

There are few railroads on the coast, and practically no wagon roads, nearly all traveling being done horseback, muleback, or donkeyback. Because of a severe drought, hundreds of animals died last summer, and a military uprising in the late summer caused a still greater scarcity of horses. The cost of saddlehorses was so great that we did not hire them, but made the trips from town to town on foot, several times walking over

(Concluded on page 402)

# EDITMRAL

## INFLUENCE OF PARENTAL AGE ON CHILDREN

HE science of eugenics has for its purpose the improvement of the human species. The proposition back of the eugenics movement, a proposition well supported by facts, is that heredity is more potent than environment in the determination of permanent race characteristics. On account of the length of time covered by a generation of the human race, investigations in regard to human heredity are necessarily exceedingly slow, but valuable work has been done in the study of heredity in plants and animals, and so far as can be observed these same laws hold good in human heredity.

If we desire to obtain the best results in the raising of horses, or hogs, or chickens, we do not take inferior stock and attempt to build up a good race by good feeding. We begin with good stock, or else we slowly and carefully build up a better race by selection, utilizing the fact, which has been observed for many years, that the hereditary characteristics of this better stock will be transmitted to the next generation. All the wonderful work done by Burbank in the propagating of better fruits and plants has been done by observing the laws of heredity.

Ideally it would be an excellent thing if those of the human race having no bad characteristics, mentally or physically, and the most good characteristics, would rear large families, and if those having undesirable qualities would forego the pleasures of parentage. But such a condition is not likely to occur either voluntarily as the result of selfsacrificing altruism on the part of either class or as a result of laws attempting to

regulate the future human output, except laws to prevent the reproduction of the very bad,<sup>1</sup> such as lunatics, insane, and feeble-minded.

But eugenics has something further to say on the subject of race improvement, namely, that not only the characteristics, good and bad, which a person has inherited, are handed down by him, but the age of the parent has an influence on the future life and efficiency of the child.

There are, in fact, two methods by which the ideals of the eugenist may be attained, each of which has its sphere of usefulness. The first method of improving the race, attempts to select the parents. This method, as we have seen, is one that is not of very general application. The second method makes the best use of present conditions of mating, and attempts to secure with these the most favorable conditions for the production of the young, that is, it attempts to secure from the existing parentage the best possible offspring.

In the *Eugenics Review*, October, 1911, is an article on "The Influence of Parental Age on Offspring," by Robert J. Ewart, M. D., M. Sc., F. R. C. S., D. P. H., which, on account of its technical nature, we can treat only very imperfectly in this article. This study, based on a biometric study of the children of a large number of families, involving between four thousand and six thousand observations, showed that more children are born when parents are from 26 to 30 years of age than at any other

<sup>&</sup>lt;sup>1</sup> I use the word "bad" here in a race sense, not in a moral sense. By bad I mean those characteristics that make for the future deterioration of the race.

periods of life. The periods next approaching in productiveness are from 21 to 25 and from 31 to 35 years. From 21 to 35 the doctor calls the "reproductive plateau," and according to his observations children born during this period are, on the average, more intelligent and more likely to survive.

This seems to be a wise provision or harmony of nature which naturally brings the parentage of the largest proportion of the race at that age when the parent is best able to reproduce good, strong, efficient children. It would seem that children born of parents much younger or much older than these ages, are apt to be inferior and deficient.

Dr. Ewart also finds that children born in January, February, and March are at their eleventh year taller and heavier on the average than those born during any other month of the year, and that those born in July, August, and September are on the average shorter and lighter than those born in any other month of the year. He also finds that the life expectancy of those born from January to June is greater than those born in the latter part of the year. These facts may be due in part to the time of year when the weaning period comes, but there may be also a deeper biological law behind these facts, as Dr. Ewart seems to think.

While Ewart's four thousand to six thousand observations are not sufficient to establish a universal law, and while it is desirable that further observations be made along this line, this study at least points to a possibility; and while parents can not make themselves over, it is possible that they may be able, through this law, to give to their children the best of themselves.



A Work of For nine years the Philanthropy Journal of the American Medical Association, the representative journal of the regular physicians of America, has been issuing a warning against the time-honored method of celebrating Independence day by noisy disorder. It seems strange that the profession which profits most by the wholesale annual holocaust should be the one to lead in the agitation for better methods; and the cynics who believe that no one does anything without a selfish motive will say, in the vernacular, "They have something up their sleeve." The truth is that there is no body of men working so strenuously and so faithfully to make their profession no longer needful as are

the great army of physicians; and almost solely as a result of their activity, or at least their initiative, we are witnessing a betterment of industrial conditions leading to a diminution of preventable diseases and of accidents. This attempt to lessen fourth of July accidents is only a small part of the work that stands to their credit.

For some years the *Journal* was almost like a prophet in the desert crying alone and hearing only his own echo, but later influential dailies and magazines took up the cry, and such organizations as the American Civic Association, and many local bodies, have entered heartily and efficiently into the fight, until now a momentum is established.

## Our National Holiday

IF it seems rather late to utter, in the

July issue, a protest against an insane method of celebrating the national holiday, our excuse is that the topic is more apt to excite interest now than at any other season; and when you, dear reader, see in the casualties around you or reported in the newspapers, the confirmation of what we say regarding the folly of attempting to show patriotism by means of noise, conflagrations, wounds,

and lockiaw, just imagine that you hear us saying, "I told you so," and get busy, if you have not already done so, planning for a sane celebration of the Fourth hereafter. If your town officials have not passed ordinances prohibiting the sale and use of fireworks, it rests with you as a citi-

zen to begin an agitation, and continue it until they yield to the pressure.

Consider these facts. During the nine vears ending in 1911 there were 39,129 deaths and serious injuries reported in the United States as a direct result of our method of showing how much we love our country. And this takes no account of the fire loss, amounting to millions of dollars, caused during the same time by fireworks. The casualties (deaths and serious injuries) year by year, beginning with 1903, are as follows : 4,449, 4,169, 5,176, 5,466, 4,413, 5,623, 5,307, 2,923, and 1,603. The diminishing numbers for the last two years are accounted for by the fact that many cities and towns have learned that there is a better way to celebrate the nation's birthday than by means of gunpowder. The historic pageant has come to stay. It has the advantage of being more dignified, more instructive, more inspiring of true patriotism, and without the dangers to life and limb and property that accompany the time-honored gunpowder method of celebration.

I have before me a large package of clippings from all over the country, which tell the same story,— that this city and that town, in Michigan, in New York, in California, in every part of the

> United States, have adopted the safe - and - sane method of celebrating the Fourth. That is the meaning of the remarkable drop in the number of fourth of July accidents last year. Many municipalities have adopted ordinances forbidding the sale and use of fireworks within

the city limits, and have substituted programs more dignified and more sensible. The secretary of the American Civic Association, who furnished me with these clippings, tells me that the movement for a sane Fourth is now progressing so rapidly that he can no longer keep track of it.

There are, however, cities which are still "reactionary" in this regard, if we may use the word, where the pressure of public sentiment is needed in order to induce the officials to enact a measure providing for the safety of life and property on the Fourth. Such cities and towns, if they do not soon join the procession, will be classed with those that tolerate privies, dug wells, and manure heaps, and they will be deserving of the odium.



## Our National Shame

WHAT we have said regarding the national

holiday is partly (but not by any means wholly) by way of parable. In nine years there were lost, killed, and injured in this country some 40,000 persons. We have awakened to the folly of this destruction, and everywhere prohibitory laws are enacted in order to put a stop to this foolish injury to life and limb. The reason why we have aroused is that there is something tragic, something startling, about the suddenness of these accidents. To-day the little fellow is full of life and enthusiasm, to-morrow he is in the hospital from a gunpowder wound, and in a week he is in the agonies of lockjaw. In nine years there were 875 cases of fourth of July lockjaw,- nearly 100 a year,— every one preventable. There were nearly 200 other fourth of July deaths.

We as a nation have awakened to realize that these deaths and these injuries were preventable, and therefore inexcusable. And the communities that have thought the matter out, have said, "This condition of things must cease."

But let us consider. In nine years 40,000 accidents, including 1,075 deaths, have impressed us by their suddenness. During the same time there were in this country 45,000 deaths accredited directly to the use of liquor,- more than forty to every one from fireworks. But those who die are mostly "old soaks," whom we think of as better off dead. But we do not always realize that these "old soaks" must be replaced by boys. It is the innocent boys that recruit the drunkards' procession, and far better would it be for your boy - for my boy, for any boy-that he die young with lockjaw than that he escape to fall into the clutches of the drink evil, and die of delirium tremens, or even end his days in an inebriate asylum or in the gutter.

If we could see the procession of boys

being fed into the gin-mills as plainly as we see the victims of the firecracker, American motherhood and American fatherhood would rouse in their strength and throttle this drink evil.

## How We

I SAID that 5,000 peo-Are Deluded ple die yearly of liguor in the United States. That is an extremely conservative estimate based on one class of deaths - acute and chronic alcoholism - returned in the mortality report of the Census Bureau, the average of the ten years from 1900 to 1909. It is a notorious fact that friends of the deceased avoid, if possible, a certificate returned "Died of alcoholism." It is pneumonia, or something else. Then of the 13,000 suicides and 4,000 homicides yearly, a very large percentage is caused by drink. Of the 160,-000 tuberculosis deaths and 100,000 pneumonia deaths, a large number is caused or hastened by alcohol. Tuberculosis experts say that the use of alcohol in tuberculosis is a fatal error; and those who know say that when a drinking man comes down with pneumonia, his case is hopeless. So we have a large number of the murders and suicides and deaths from tuberculosis and pneumonia to add to the 5,000 deaths actually charged to liquor. And that is not all. We have no means of estimating the desertions, the divorces, the insanity, the neglected and starving children, and the wrecked homes that result from this evil, though there can be no doubt that they are numerous.

Compared with this showing, where do the 100 deaths and 4,000 severe accidents a year from fireworks appear? And if we arouse as one man to abolish the firecracker, why not abolish liquor? Why not?

Because there are millions of dollars of capital back of this business, which has

bought newspapers and legislatures; and because our governments, local, State, and national, get their revenue from this source. We, the people of the United States, consent to have our government -ours, not the politicians'-run on blood-money; and until we overcome the fear that we can not run a government without the price of wrecked homes and crime, until we get over the notion that we must demoralize our boys in order to obtain money so as to build a navy with which to terrorize other nations .- until we get over this obsession, and until we count life and souls worth more than dollars, we shall remain enthralled by this evil.

We point with pride to our "dry territory." That is one of the most ridiculous farces with which a credulous people has ever gulled itself. There is no dry territory in the United States - not a foot! So long as the federal liquor tax and the interstate commerce law can override State prohibitory laws, just so long shall we have the liquor dealers with us. The per capita consumption of liquor in this country is actually increasing, and the liquor interests intend it shall increase, until every spark of manhood is sapped out of the nation as it was out of Rome in her dotage. Are we, the people, going to permit this? We shall not prevent it by prohibitory laws secured by spasmodic efforts. Every agency that stands for decency must be arrayed in line for a long pull, a strong pull, and a pull together.

## The Point of View

FIFTEEN hundred lives lost on the "Ti-

tanic "— the world electrified, legislators investigating, more stringent maritime laws pending, more care on the part of the steamship companies to prevent disaster, but how about the consumptive deaths, which equal in this country two "Titanic" disasters each week? And

that is only one disease. We need some dramatic experience like the sinking of a " Titanic " to cause us to sense the unnecessary loss of life. Just imagine, if you will, the great Consumption Line, with headquarters on the East side, booking passengers every hour of the twenty-four, and sending off fifteen hundred patients every Monday and every Thursday consigned to the bottom of the Atlantic! Horrible! you say? Well, that is the number of persons who go down to their graves unnecessarily as a result of consumption, and we think little or nothing of it because the cases are scattered here and there. After all, we hardly get over the notion that death by disease is a normal process, though we shudder at death by the bullet or railway accident, or drowning.

While we were anxiously waiting for definite news regarding the "Titanic" disaster during the time the "Carpathia" was reaching New York City, a number equal to the deaths on the "Titanic" died of consumption in this country, and yet no one thinks of that. There is nothing very dramatic in a consumptive's death.

怨

**Report Favors** AFTER four years the Animal Experiment English Royal Commission on Vivisection has rendered a unanimous report. This is significant in view of the fact that the commission had among its membership those who were opposed to animal experiment, and that eighteen of the most able of the antivivisectionists were, given full time to present their views before the commission.

The report calls attention to the fact that animal experiment has done much to give control over human disease, and has also rendered incalculable service to the lower animals in giving us a knowledge of how to combat some of their most

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serious diseases. This advice given by the commission to the public is particularly significant: —

"We desire to state that the harrowing descriptions and illustrations of operations inflicted on animals, which are freely circulated by post, advertisement, or otherwise, are in many cases calculated to mislead the public, so far as they suggest that the animals in question were not under anesthetic. To represent that animals subjected to experiments in this country are wantonly tortured would, in our opinion, be absolutely false."

In regard to the testimony of some of the opponents of animal experiment, they say: —

"After careful consideration of the above cases, we have come to the conclusion that the witnesses have either misapprehended or inaccurately described the facts of the experiments."

It should be noted that since the beginning of the work of this commission, we have through animal experiment gained valuable knowledge, enabling us the better to combat cerebrospinal fever, infantile paralysis, etc., and the brilliant successes in the control of sleeping-sickness in Africa and of typhoid in the army are also to the credit of animal experiment, though these new victories do not seem to have come to the notice of the commission.

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The Antituberculosis Congress the International Congress held in Washington, the question of the relation of human and bovine tuberculosis was prominently discussed in the International Congress held in Rome during April. The Germans in general denied that there is real danger in bovine tuberculosis, and the English held that the bovine disease is an actual menace to human beings.

Dr. Nathan Raw, of England, in a public address maintained that while human infection is largely from human source, there is a large amount of infection of children through the milk of tuberculous cattle. He suggested the possibility that bovine tuberculosis causes in the human body more or less immunity against the human virus, and vice versa. But notwithstanding this, he urged the eradication of tuberculosis in dairy herds.

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Smoking and Boys PERHAPS you have heard the fiction that

smoking does not hurt boys. It is told so confidently and with such evident sincerity that one is almost led to believe it, if he does not happen to have some controverting facts and statistics at hand.

Supt. P. H. Henry, in School and Home for March, 1912, gives some figures taken from his own high school and from fifteen other schools,— a total of eight hundred boys,— which are quite startling.

### RECORDS FROM ONE HIGH SCHOOL

Age	12	13	14	15	16	17
Av. grade non-smokers						
Av. grade smokers	74	73	69	60	70	54
Difference in per cent	17	II	16	12	16	13

#### RECORDS FROM FIFTEEN SCHOOLS

 Age
 12
 13
 14
 15
 16
 17

 Av. grade non-smokers
 87
 91
 88
 85
 89
 86

 Av. grade smokers
 ...
 74
 75
 72
 74
 73
 67

 Difference in per cent
 17
 21
 22
 15
 22
 28

In his letter accompanying these statistics, he says: ---

"It is a very easy matter to find out whether a boy smokes or not, even when he denies it. Toward the close of the day he becomes restless, irritable, cross, anxious, and looks worn and pale. He fails easily in recitation. His mind seems to lose its grasp of things. Allow him to smoke a few cigarettes, and he becomes a different person for a while.

"I have just gone over our records made at the close of the first term, February I, and find that, without a single exception, the cigarette smokers have failed in one or more subjects. In several cases they failed in every study; and two boys, one thirteen and the other fifteen years of age, have been sent to the office frequently for lying and stealing. Two years ago these same boys were absolutely reliable. There is not a trace of this lapse of morals in either parent."



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

## THE INJURY OF TOBACCO

RGUMENTS in favor of tobacco for any physical reasons are baseless. It does not aid digestion, preserve the teeth, nor disinfect; and it is not a remedy for anything. The good it does accomplish can only be mental. It seems to give companionship and something to do when one is bored, keeps away the feeling of hunger when one is hungry, and blunts the edge of hardship and worry. These results are immediate and apparent; the injurious results (after one is accustomed to the poison) are both unapparent and delayed. The popular belief that tobacco stunts the growth is supported by the fact that non-smokers at Yale and Amherst increased more in weight, height, chest girth, and lung capacity than smokers did in the same period.

Athletes know that smoking hurts the wind; it also affects the precision of the eye and A great billiard player who never hand. smoked assures me that he was sure of winning when his opponent was a smoker. A tennis player who smoked at twenty-one found that men whom he had beaten easily could now beat him. Riflemen know that they shoot better without tobacco, and even the average man who does not care to excel is susceptible to the repeated and continued doses of the various tobacco poisons. Just what this effect is we can not be sure, but no physician doubts that smoking may be a factor in almost any disease with which his patient is suffering.

The smoke irritates the mucous membrane of the bronchial tubes, and increases the tendency to catarrh and deafness. Its greatest effects are shown in later life when the vital machinery is beginning to wear.

The chief characteristic of tobacco is its tendency to increase the blood pressure. Its second characteristic is narcotic. It lessens the connection between the nerve-centers and the outside world. These two actions account for all the good and all the bad effects of tobacco. As a narcotic it temporarily abolishes anxiety and discomfort by making the smoker careless about what is happening to him. But, as with all other drugs that in the beginning lessen nerve action, it increases it in the

end. Thus, smoking finally causes apprehension, increased excitability, and muscular unrest. Insomnia is often relieved by smoking, even at the expense of laziness the next day; but excessive smoking causes insomnia.

The cigarette smoker by inhaling gets more harm because the bronchial mucous membrane absorbs the poisons more rapidly. To see how much poison is inhaled one may puff cigarette smoke through a handkerchief, and then after inhaling the same amount of smoke blow it out through another portion of the handkerchief. The difference in discoloration will be very marked. In the second case the stain which is not left on the handkerchief is left on the wind-pipe and the bronchial tubes. Despite the fact that cigarette smoking is the worst form of tobacco addiction, nearly all boys begin the habit of cigarettes.

All business men will tell you that tobacco damages a boy's usefulness for work. The boy not only does not work vigorously, but does not wish to work at all. Tobacco brings such physical results as insomnia, low vitality, and restlessness, and their moral counterparts irritability, lack of concentration, desire to avoid responsibility and to travel in the road of least resistance. The time is at hand when smokers will be barred out from businesses demanding good thought and action.

How is the smoking father to prevent his boy's acquiring the habit? Every man advises his boy not to smoke until he reaches the age when tobacco will not hurt him, though he himself has probably heard from his doctor that there is no such age. For a father to tell a boy not to do what he himself is constantly doing is too absurd to need serious consideration. The smoking father who forbids the boy to smoke virtually drives him to sneak around the corner and experiment on The action of any narcotic is to the sly. break down the sense of moral responsibility. If the father finds that his boy is fibbing to him, is difficult to manage, or does not wish to work, he generally finds that the boy is smoking cigarettes.

The worst feature that smoking has is that it is a social habit. The boy who does not smoke finds himself "out of it;" and when he associates with smokers, his eyes and throat are irritated by the smoke of the others, and he is almost bound to begin smoking as a relief. The social inducements for smoking are much greater than for drinking. It is this fact that makes the smoking habit so difficult to attack. Even if a boy is made thoroughly familiar with the evils of tobacco, he is likely to be seduced by the social side of it.

It was this social side that grounded opium so strongly on China. Smoking opium became their chief social activity. We smoke tobacco as the Chinese did opium —" for company." Hence one must have very strong reasons if he wishes to induce smokers to give up the habit. I wish to do this by showing that tobacco not only prepares for diseases of all kinds, but, as long investigation has shown me, it also prepares for alcoholism and drug taking.

For years I have been dealing with alcoholism and morphinism, keeping careful details in from six to seven thousand cases, and have never seen a case, except occasionally with women, who did not have a history of excessive tobacco. I am prepared to say that tobacco is an unfavorable habit which predisposes to worse habits. The boy always starts smoking before he starts drinking. If he is disposed to drink, that disposition is increased by smoking. The activity of the tobacco makes him feel the need of stimulation. From alcohol he goes to morphin for the same reason. Cigarettes, drinking, and opium are the regular and logical series.

The man predisposed to alcohol will, if he uses tobacco, almost invariably use it to excess, and this excess creates a condition for which the alcohol is the natural remedy. The general experience is that if a man takes a drink when he feels that he has smoked too much, he can start smoking all over again. For this reason the two go together, and the neurotic man often combines the two.

There is in China a flourishing tobacco concern growing rich out of the sale of cigarettes. Up to 1900 the Chinese practically never used tobacco except in pipes; now it is estimated that one half the cigarette consumption in the world is in China. The Chinese have simply substituted the cigarette evil for the opium evil, and they now pay twice as much for tobacco as for opium.

If any one thinks that China has gained by substituting tobacco, I beg leave to differ with him. The opium smoker smokes in private with other smokers, and hence is not offensive to others; he is not endangering non-smokers, and creating a craving in others. I consider cigarette smoking the greatest vice devastating humanity to-day, because it is doing more than any other vice to deteriorate the race.

The more you compare smoking, drinking, and drugging, the more resemblance you see. The moment one ceases to feel the stimulating effect of any of these substances, that moment it becomes a narcotic. The history of the three as a resort in an emergency is the same. At a time when a man feels that he needs his faculties most, he will, if addicted to any of the three, deliberately seek stimulation from it. He does not expect to continue long enough to get the narcotic effect, but he is unable to avoid it.

The inhaler of tobacco gets his effect in the same way that the opium smoker gets it; that is, by rapid absorption by the tissues of the bronchial tubes. The man who smokes opium moderately suffers no more physical harm than the man who inhales tobacco moderately. The excessive cigarette smoker experiences the same mental and physical disturbances when deprived of them that the opium smoker experiences when deprived of opium. The medical treatment necessary to destroy the craving is the same for tobacco and opium. The effect of giving up the habit is the same. A like comparison, item for item, might also be made with alcohol.

Morphin distorts the moral sense. This is a part of the action of the drug. Tobacco produces something of the same moral deterioration. This is shown especially in one particular; smokers are indifferent to the rights of others.

Respectable men in New York City who would not dream of breaking any other law, carry eigars and eigarettes into the subway, despite the fact that it is forbidden and that it is necessary to keep the air there as pure as possible. A man is more annoyed at being forced to consult others' preferences about smoking than about anything else that could arise in social intercourse. The attitude of smokers seems to be, "What right has any one to object to my smoking?" The matter is really on just the opposite basis, "What right has any one to smoke when another objects to it?"

If a man *must* get drunk, we say he shall get drunk where he is a nuisance only to himself and to others of the same mind. If a man feels the need of interlarding his conversation with obscenity and grossness, we say he may not compel us to listen to him. But a smoker may with impunity pollute the air, offend the nostrils, and generally make himself a nuisance to everybody in his vicinity who does not practise his particular vice. Is this not a kind of moral obtuseness? Change your mental attitude and consider.

The action of the narcotic also produces a peculiar cunning and concealment. It develops, when occasion arises, the desire to deceive, and whether occasion arises or not, the desire to shift obligation and evade direct responsibility.

If a man smokes and inhales tobacco excessively, he is narcotizing himself more than if he smokes opium moderately.—*Charles B. Towns, in Century Magazine, March, 1912.* 

## 磐

### Ash Is Life

It is generally admitted among medical men that the great degenerative diseases which usually manifest themselves at about the age of forty have been developing since the age of thirty. The preventive is ash, containing the organic salts, the most important of which are iron, lime, phosphorus, and magnesium.

Not only do nutritional disorders result from mineral starvation, but our skeleton suffers sometimes beyond repair. You might open your eyes if you fed several rabbits on oats, and observed the condition of their health while under the experiment. Oats are poor in lime, and the functions of nutrition are not operative except in the presence of lime. The result is that the blood of the animal saps its bones and teeth.

This weakening of the bones is much more apparent during the period of growth, but even in the fully developed animal the lack of lime in the food is apt to be serious.

One of the important causes of many dental troubles is the lack of lime in our foods. Experiments by Voit in 1880 demonstrated that pigeons fed on a diet poor in lime developed a weakening and a thinning of the skull even to the extent of perforation.

It is easy to bring about a condition in young dogs resembling rickets by feeding them on meat and fat alone. By the addition of lime in the form of calcium carbonate to such a diet the animals recover.

From this it is quite evident that we can not consider our diet to be safe simply because we eat sufficient proteins, carbohydrates, and fats. It is important to see that the necessary minerals are there.

Dr. Mitchell points out the fact that nerve twitching accompanies lime starvation, not only in the laboratory, but on the field and in the dining-room.

Caged rats fed on corn and distilled water show "nerves," and later convulsions. The horse fed on hay will be steady, sturdy, and dependable; if changed to a diet of oats, which is poor in lime, he will become lively and nervous.

A nerve robbed of its lime will quiver and twitch. A muscle robbed of its lime will become flabby and shaky.

Chickens that are not fed with lime in the shape of bone-dust or cracked oyster shells, will lay soft-shelled eggs, and die early. Bread, cake, crackers, cookies, and pie contain practically no lime. The flour is whitened at the expense of its mineral salts, which are largely removed in the process of milling. White flour symbolizes the white monument of the churchyard.

What has been said here about lime is but one of the notes of warning. Potassium, iron, magnesium, silicon, sulphur, phosphorus, and sodium, each has its important part to play in the economy of diet.— Alfred W. McCann, National Food Magazine, January, 1912.

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#### The Use of Hot Irrigations in Burns

It is now more than fifty years since Passavant established the fact that the continuous warm-water bath is the ideal remedy in the treatment of extensive burns, and fifty years since Hebra first practised the method.

The continuous warm-water bath gives almost instantaneous and complete relief from the excruciating pain of extensive burns. In the warm water the wound is constantly kept clean, the water penetrates the burnt tissues, in consequence of which they remain moist and soft. Without this immersion the cuticle which has been destroyed allows exposed tissues to harden and form an impenetrable cover over the deeper parts. Immersed in water, tissues which have become gangrenous can not dry up but remain moist, and for this reason the wound is constantly kept clean. There is no accumulation of pus, no crusting of dry secretion, and, what is most essential, the patient has not to suffer the painful procedure of a change of dressing.

How painful it is for any one who knows the wonderful soothing effect of the bath in cases of burns to see the routine treatment by dressing.

All who have had experience with it will admit that the warm bath is the most reliable means of applying antiseptic principles in cases of extensive burns.— Achilles Rose, M. D., New York, in the Medical Times, January, 1912.

## 烂

#### Relaxation and Sleep

SLEEP takes place only in a state of muscular relaxation, and never when there is any muscular tension. Muscular relaxation not only accompanies sleep, but always precedes it, and the greatest depth of sleep is reached when the amount of muscular relaxation is greatest. Experiments with the capillary electrometer, by which it was possible to measure the degree of muscular relaxation, fully confirmed this view.—Isado H. Coriat, Boston. From a paper read before the American Psychopathological Association, Baltimore, March IO, 1911.



## THE NUTRITIVE REQUIREMENT

HIS question was the subject of animated discussion at the last annual meeting of the British Medical Association. Prof. Russel H. Chittenden, of Yale, opened the subject by reading a paper in which he presented the following line of argument: —

"Observations have been made in many countries as to what man is accustomed to eat, and we are told that the habits of man in this respect must indicate his requirements. But physiologists may well query why there is any necessary relation between the actual nutritive needs of man and his habits. Are we to accept the dietary habits as the standard, or may we by physiological methods arrive more exactly at the physiological needs of the body, and thus, by economizing the energy usually spent in taking care of an excess of food, increase the physical and mental efficiency of the race?

"We have been told that for ordinary work a man needs food containing 118 grams protein and having a fuel value of 3,000 calories, and for hard work 145 grams protein and 4,500 calories; and that these are the limits below which it is not safe to venture. Our investigations have shown that the carbohydrate requirement varies with the amount of work done, but that the nitrogen requirement is constant for the individual. An increase in the consumption of protein is immediately followed by increased excretion of nitrogen. The body does not store up nitrogen. If the usual amount is consumed, a large part of it is waste, and there is the possibility of trouble from the elimination of the excess.

"We are told that this extra protein is needed in order to stimulate metabolism; but why stimulate merely to burn up excess material? The fact that protein is a stimulant suggests that it may be deleterious in excess. While carbohydrate splits up into carbon dioxid and water, protein always leaves, in breaking up, certain nitrogenous waste products, and it may be reasonably expected that bad results will follow its excessive use.

"My experiments, which were conducted for reasonably long periods on men under various conditions, show that the Atwater standard is not the lower limit of safe nutrition, but is far more than is necessary to maintain weight and vigor. Moreover, we have many examples of persons who, not as a matter of economic necessity, have lived years on a low protein diet with apparent benefit.

" My experience shows that one can live in equilibrium and health on 12-100 gram nitrogen, or 34 gram protein to the kilo of weight. A man weighing 70 kilos will find 60 grams of protein sufficient, with a reasonable margin of safety. This is only half the Voit standard, and is still further below the Atwater standard.

"The question is asked, What will result if this low ration is continued for years? One man in my laboratory has maintained good health on the low protein regimen for seven years, and many persons habitually partake of a low protein ration with good results.

"In a late series of experiments it has been determined that on the lower diets the power of the intestine to utilize the food is definitely increased.

"We must remember that there are many other things necessary to good nutrition besides nitrogen. The restriction to a monotonous diet is likely to be followed by a dearth of some of the elements which would be supplied in a more varied diet."

Dr. Chalmers Watson, of Edinburgh, agreed with Professor Chittenden that the nitrogen standard is too high. He believed that too much attention has been paid to the amount of nitrogen and the caloric value. He had improved the nutrition of patients by decreasing the amount of food, and giving simpler and more digestible food. He found,

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however, that the diet must be applied to the individual case. He believed the important consideration to be not so much the amount of nitrogen, but the nature of the protein. He exhibited a chart showing an increased consumption of meat in Scotland in fifty years, of from less than three pounds up to fifty pounds per capita. He then showed photographic views exhibiting diminished nutrition in meat-fed rats as compared with rats fed on bread and milk. The same effects were shown in the offspring of the two classes. He reported that the mortality was much greater among the meat-fed animals. He believed with Dr. Chittenden that a restriction of the nitrogen intake to below the present usage, would make for increased resistance. Some slides that were exhibited showed a catarrhal condition of the mucous membranes of animals fed on meat, as contrasted with the normal mucous membranes of animals fed on bread and milk.

Lieutenant-Colonel Melville, R. A. M. C., London, said in substance: —

"In experiments we are unable to reproduce natural conditions. In order to have approximate results, we must have an enormous series of experiments. It is undoubtedly true that when food is well-selected and eaten at regular intervals, one can live on a low protein diet; but the Voit standard was laid down for working men who can not regulate the quality of food and the time of meals. The medical officers in the army are adopting a low protein ration for the men, but the reduction in nitrogen in the rough-and-tumble life of working men would probably [?] be dangerous. The body protein is selected from the food. If the right kind of protein could be given, a smaller quantity would suffice; but with a promiscuous lot of protein, more is required."

Dr. Robert Hutchison, of London, said :--

"We should be sure of our ground before making a startling innovation into established customs. Dr. Chittenden has proved that it is possible to live healthfully on a smaller allowance of protein, but it has not been proved that a large consumption of protein is harm-

ful. There is no proof that the amount usually used is harmful. There is no evidence that arterial degenerations are due to an excess of protein. It has not been proved that one can safely live permanently on a low diet. The only advantage in the low standard is the economic advantage."

Dr. William Russell, of Edinburgh, expressed himself as an earnest follower of Dr. Chittenden. Years ago he had found it necessary to lessen the protein allowance of his patients, and he was glad to welcome Dr. Chittenden's work on physiological economy in nutrition. He knew of no work comparable with that of Dr. Chittenden, and was amazed that it had not met with a more hearty reception. There are people who believe they must eat a large quantity of protein in order to maintain their strength.

"It is these people who become our patients," said the doctor, " and we find that they have been exceeding their powers of assimilation." He said he was amazed to hear Dr. Hutchison's assertion that there is no evidence of harm from free indulgence in proteins, and commented: "Such indulgence has a marked effect upon those whom Professor Hutchison called ' weaklings.' We as medical men have to do with weaklings. Every neurasthenic benefits by cutting down his diet."

To the question, "Has Chittenden's standard been accepted by scientists?" Dr. Russell replied, "I believe it will be the twentieth-century standard."

Dr. Alexander Haig, of London, agreed with Dr. Chittenden as to the importance of a careful study of dietetics, and that it is a mistake to accept the habits of mankind as an indication of what man needs. He believed the old standard of 120 grams of protein to be too high, and Dr. Chittenden's too low. His experience had led him to adopt a standard of about 90 grams of protein per day, varying with the weight of the patient. Part of the good resulting from a lowered protein intake was due to the lessened quantity of uric acid.

Dr. E. P. Cathcart, of Glasgow, believed that quality of protein is even more important than quantity. There is no direct evidence that one form of protein can be changed into another. In a feeding experiment, dogs are nourished on a smaller quantity of dog flesh than of any other kind of flesh. Ninety per cent of the protein is excreted, the system holding back only what it can utilize. For this reason a rather high protein intake is necessary.

Dr. Woods Hutchinson, of New York, said that Dr. Chittenden's work has served to confirm the old idea of a high protein requirement(!). The body needs a large variety of protein in order to select what it requires. We now know that a large share of the nitrogen in the feces has been through the body and excreted. Nature rejects what she can not use. The nations which have been most liberal in their diet have excelled in height, weight, chest expansion, and efficiency. Japanese coolies increase their efficiency by adopting a European diet. Meat is not by any means the most important cause of gout.

Dr. Haddon next gave his experience favoring a low-protein dietary.

Dr. A. B. Olsen, of Caterham (England) Sanitarium, read a carefully prepared paper recounting the experience of sanitariums, and showing that they have greater success in dealing with patients on a low-protein than on a highprotein dietary.

Dr. Chittenden closed the discussion by expressing the hope that physicians would come to the study of this subject with open minds, remembering that often the dictum of ages has been set aside by new discoveries.

We commend this suggestion to students of dietetics. Dr. Chittenden has not taken up the consideration of this subject hastily. It was after a complete demonstration in the case of one man that a splendid efficiency can be maintained on a surprisingly low ration.



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The House-Fly — Disease Carrier, an account of its dangerous activities and of the means of destroying it, by L. O. Howard, Ph. D., chief of the United States Bureau of Entomology, author of "Mosquitoes," etc. With 4 illustrations from diagrams and microphotographs. Cloth, large 12mo, \$1.60 net; post-paid, \$1.75. Frederick A. Stokes Company, New York.

The author, who carried on much of the campaign against the malarial mosquito and who has saved farmers millions of dollars by discoveries regarding other insect pests, gives in this book complete information concerning the fly.

After carefully describing the common house-fly, which he has rightly christened the typhoid fly, he proves his case against it as a carrier of disease, discusses in a practical manner the various remedies and preventive measures. He considers screening, fly-traps, and various poisons, repellents, and the treatment of breeding-places. Attention is directed to the possibility of action by communities, and suggestions are made as to organization, publicity, interesting the children, and the work of boards of health.

Dr. Howard, who as an expert and practical entomologist has raised his bureau to a position second to none in the world, has in this volume given us a book of great value in the campaign against the fly.

This book should be in the hands of health officers, town councilmen, civic improvement clubs, and all who are looking for better sanitary conditions.

Home Nurse's Handbook of Practical Nursing, a manual for use in home nursing classes, in Young Women's Christian Associations, in schools for girls and young women, and a working text-book for mothers, "practical" nurses, trained attendants, and all who have the responsibility of the home care of the sick. By Charlotte A. Aikens, author of "Hospital Management," "Hospital Training-School Methods," "Primary Studies for Nurses," "Clinical Studies for Nurses." Cloth, 276 pages, illustrated;

\$1.50 net. W. B. Saunders Company, Philadelphia and London.

As its name implies, this volume deals with home nursing as distinct from the more elaborate hospital nursing. Years of experience in hospital work, where she was compelled to

witness the results of ignorance of hygiene on the part of mothers, suggested to the author the great need of such a text-book as this which she has designed as a guide to the girl or woman who desires to fit herself to guard the health of her own family, or to render intelligent assistance to the physician.

A so-called education which fails to prepare a girl for the duties of motherhood is such only in name. The author in this textbook has made a commendable attempt to supply this lack, in the hope that the book might be adopted as a text-book for suitable classes of girls.

It is the intention that the instruction shall be given by a physician or trained nurse, though any intelligent person by means of the book alone, with its excellent illustrations and clear text, would with care obtain a very good proficiency in home nursing.

The book assumes that the students have had previous instruction in the elements of physiology and hygiene, and that they have equivalent to six grades of school work.

Food and the Principles of Dietetics, by Robert Hutchison, M. D., Edinburgh, F. R. C. P. Third edition, revised and enlarged, with three colored plates and thirty-four illustrations; 600 pages; 16s net (in England). Published by Edward Arnold, London, 1911.

Dr. Hutchison has thoroughly revised this work, and has added a new chapter on "Some Dietetic 'Cures' and Systems." The author has been rather hostile to vegetarianism, very largely, we think, because he adheres to the validity of the high-protein requirement of the older physiologists. At the last meeting of the British Medical Association it was quite apparent that he failed to be convinced by the evidence put forth by Professor Chittenden in favor of a low-protein requirement.

There is a significant statement in Dr. Hutchison's new chapter on page 555, where he is discussing the merits of certain dietetic systems. He says: "The reader may have noticed that vegetarianism, the purin-free diet, Dr. Hare's system, and to some extent, the exclusive protein diet are all recommended by their supporters in very much the same class of disorders, and it may seem strange that systems so opposed should be capable of curing identical diseases. In these circumstances one naturally looks for some peculiarity common to all the system, and to some extent the exclusive procontradiction. I would venture to suggest that this may be found in the fact that they all tend to promote a more complete oxidation of the proteins." Now if Professor Chittenden proves to be in the right, and he has strong arguments in his favor, how much more rational to limit the protein to a quantity easily oxidized than to apply some more roundabout device!

Dr. Hutchison, though his general proposition is that most men consume what is best for them, and though he touches the soft pedal on the evils of some of man's indulgences, admits that wine has a retarding effect upon digestion. On gastric digestion, he says, "Wines exert a retarding effect out of all proportion to the amount of alcohol they contain." While he admits that alcohol may be burned in the body with the production of energy, he is not prepared to class it as a food in the ordinary sense; and he recognizes that even when used in quantities "insufficient to produce any of the outward and visible signs of intoxication," it may yet "end by playing havoc with the tissues." In general, the book is a valuable cyclopedia and compendium of facts regarding the composition, the nutritive value, and the digestibility of various foods.

There are at the end of the book a number of valuable chapters on the "Principles of Feeding in Infancy and Childhood," "Principles of Feeding in Disease," and "Artificial and Predigested Food and Artificial Feeding."

## **Greyfriars Bobby**, by Eleanor Atkinson. Price, \$1.20 net. Harper & Brothers, New York.

What "Black Beauty" has done for horsedom, "Greyfriars Bobby" should and will do for dogdom. Though classed as fiction, it is the true story of a Skye terrier that for fourteen years refused all offers of a home, and remained loyal to the grave of his departed friend. At the urgent request of Baroness Burdett-Coutts the little dog was given a burial in the cemetery where he had for so long kept faithful watch over the remains of his chosen master; and a monument was there erected to his memory. As the baroness said: "Bobby does not need a monument, but I think we need one of him that future generations may never forget what the love of a dog may mean to himself and us." Few can read the book without tears, and no one can read it without becoming affectionately attached to Bobby, and more sympathetic toward dogs in general.

Some of the philosophy is well worth reproducing. For instance: —

"Very, very early in life a dog learns that life is not so simple a matter to his master as it is to himself. There are times when he reads trouble, which he can not help nor understand, in the man's eye and voice. Then he can only look his love and loyalty, wistfully, as if he felt his own shortcoming in the matter of speech. And if the trouble is so great that the master forgets to eat his dinner, forgets also the needs of his faithful little friend, it is the dog's dear privilege to bear neglect and hunger without complaint."

We have only one criticism: for the sake of the young we might almost wish that the descriptive matter, the historical and geographical allusions, the Scotch dialect, and some of the figures of speech had been omitted. To an older person these all add to the charm of the book. To children, the ones most susceptible of permanent change of attitude toward the dumb creatures, they must make the reading more difficult, and consequently less attractive.

Simple Italian Cookery, by Antonia Isola. Price, 50 cents net. Harper & Brothers, New York.

Compiled by an American who has been much in Italy, this book brings to the American housewife, who is usually unfamiliar with Italian dishes, a pleasing variety. Many of the recipes for "paste," i. e., macaroni, vermicelli, etc., and for eggs, vegetables, rice, sauces, and salads, will be found entirely unobjectionable by vegetarians and hygienists.

The mother who has noted with regret that the usual round of meals has become monotonous, and who is looking for something to reawaken the gastric enthusiasm of her family, will welcome many of the suggestions from this little book.

Prayer Changes Things, by D. S. Gordon. Decorated boards, 35 cents net. F. H. Revell Company, New York.

A convincing booklet by the author of "Quiet Talks" series,—a man of rare faith who has the faculty of inspiring faith in others. "Does your faith grow fainter in the work you love? Are your prayers unanswered by your God above?" If so, read this little booklet and it will help you to "let a little sunshine in."

Two other sermonettes in this little volume, "The New Spelling of the Word Ask" and "Pitching Tent on Olivet," have a high inspirational value.



The editor can not treat patients by mail. Those who are seriously ill need the services of a physician to make a personal examination and watch the progress of the case. But he will, in reply to questions sent in by subscribers, give promptly by mail brief general directions or state healthful principles on the following conditions: —

1. That questions are written on a separate sheet addressed to the editor, and not mixed in with business matters.

2. That they are legible and to the point.

3. That the request is accompanied by return postage.

In sending in questions, please state that you are a subscriber, or a regular purchaser from one of our agents; or if you are not, accompany your queries with the price of a subscription to LIFE AND HEALTH. This service is not extended to those who are not regular readers.

Such questions as are of general interest will, after being answered by mail, also be answered in this department.

## Epsom Salts .- " Are Epsom salts injurious?"

Epsom salts are by no means harmless, and in the quantities sometimes used are decidedly injurious. The habitual use of these salts for constipation is not to be recommended.

Care of Children.—"I am the mother of two children, one five years of age, and the other twenty months old. They are very cross, do not sleep well, and have rough skin; and the older is wormy. Is it the way they eat? They eat anything at any time. If I cook what is good for them, they will not eat it, and want what else is on the table. Do you think they are too old to break of the habit of eating at all hours? Will you please send me a list of what they should eat? How often should they eat? Does candy hurt them?"

Undoubtedly part of the trouble with your children is due to their manner of eating. They are not too old to learn to eat regularly, and you should insist on this. The children should be taught that there is a time to eat, and that nothing whatever should be eaten between meals. If there is a tendency for them to be a little too dainty regarding good food, you can lay it to their eating too many sweetmeats. When they get good normal appetites, they will relish plain food. Confectionery is not necessarily bad if it is not eaten in such a way that it will take away the appetite for other foods. A small quantity of real good confectionery is of advantage to children.

The worms you speak of in your older child have nothing to do with diet. This is a matter that should have medical attention, although it is possible that you might afford some relief from the trouble by using injections of tea made of quassia chips. However, this is a matter that is best attended to by a good, conscientious physician, as anything that poisons the worms is not entirely harmless to the child.

Children of the ages you mention should live largely on cereal foods and milk, with perhaps occasionally an egg; bread and butter, of course; and in their season fruits and vegetables. They should eat three times a day.

An excellent way to keep children from wanting what they should not have is not to have it for the older people; that is, to cook in such a way that there will be nothing harmful for the younger children. Naturally, if they see something on the table that they are not entitled to have, it is the very thing they want, and they feel that they are ill used if they do not get it. A feeling of this kind would interfere with digestion pretty nearly as much as some less wholesome food. The meal should be a time of cheer and good feeling.

**Poison-Ivy and Poison-Oak.**—" Does the treatment recommended in a recent issue for poison-ivy apply also to poison-oak?"

Probably it does. The poisons are very similar, if not identical.

Bunion .-- "What shall I do to remove or relieve a large or painful bunion?"

The only radical cure for a bunion is, perhaps, a simple surgical operation (puncturing, squeezing out the fluid and lentil-shaped bodies, and applying firm pressure), though painting with tincture of iodin or strapping (applying adhesive plaster very firmly over the part) has sometimes proved successful. A bunion is an overgrowth of the bursal sack that is located at the side of the great toe in order to lessen friction. In other parts of the body exposed to much friction there are similar bursae. Very much can be done for relief of the bunion by the use of shoes which will give entire freedom to the affected toe. While around the house it may be well to wear worsted slippers.

Reducing Fat.—" Please give suggestions how to reduce fat on abdomen and thighs?"

Such requests suggest the thought that if the greyhound and the mastiff had the power of human reason, they would each want to be standardized. The greyhound would want to be fatter and the mastiff thinner. But I question whether the Creator intended to standardize animals or human beings. If one is living a natural life, nothing is gained by attempting materially to alter the form of the body. Of course, where an overgenerous diet or the use of malt liquors are producing a condition of corpulence, the remedy is obvious. Something may also be accomplished by exercise, by massage of the parts, especially by means of the massage rollers made for the purpose, by the use of a minimum diet, especially as regards starches, sugars, and fats, and by drink restriction (that is, limiting the amount of water and other fluids drunk, to a minimum).

Acid Stomach.—"When one has too much acid in the stomach, what is good to neutralize it?"

A diet containing a liberal supply of milk is preferable to a diet consisting largely of fruits. Milk should be sipped slowly. You should be able occasionally to use certain vegetables, but probably potatoes, except in small amount, will disagree. Usually an acid stomach is due to an excess of hydrochloric acid. Fats tend to diminish the flow of hydrochloric acid. Rice and other well-cooked cereals usually give little trouble. Especially if there is fermentation it is necessary to avoid the use of sweets. Do not take too many foods at one meal.

Vinegar.—"In what way is vinegar harmful?"

Vinegar is, of course, harmful to any one having an acid stomach, but lemon-juice might be nearly as harmful in such a case. Vinegar is the secretion of a germ, and is not in any sense a natural food. I am not certain, however, that a small amount of vinegar, used occasionally by a person in perfect health, is particularly harmful.

Giving Up Meat.—" Do you not think that a great many persons who give up eating meat, neglect to provide proper food in its place, and thereby develop tuberculosis? While I believe that meat is not essential, yet one gets tired of peas, beans, lentils, nuts, etc. I eat a great many eggs, but soon tire of them." Most certainly they are apt to err in two ways: (1) To provide insufficient protein; and (2) to secure an abundance, perhaps an excess, of protein from "hearty" foods, like peas, beans, oatmeal, etc., which contain not only protein, but also considerable quantities of purin substances.

We are learning that the protein requirement is much lower than was at one time supposed to be the case, and doubtless those who eat moderately of meat get more than they need, and those who eat liberally of meat probably run great risks.

It is quite possible for one living on a nonmeat and especially on a vegetarian diet to be impoverished, especially if the diet be restricted from motives of economy, and without due regard to food values. Remember for variety such other foods as milk, cottage-cheese, kumiss, the nut butters, the proprietary nut foods, and the gluten preparations. But after all, the great bulk of the food, three fourths or more, should be carbohydrate.

I judge from what you say that you perhaps partake too liberally of protein.

As to tuberculosis, the standard diet for incipient tuberculosis was for a long time milk and eggs. I have thus far failed to find any records showing that non-meat eaters, or even vegetarians, are particularly susceptible to tuberculosis.

Warts.—" Please give me a convenient remedy for warts. We do not all have fig-trees growing at our doors."

A subscriber in California, who sends the following suggestion, says she has used it many times, and has never known it to fail: "Open the wart enough to start the blood, and cover with baking-soda. Repeat for two or three mornings, if necessary."

Constipation.—"What would you recommend as the very best thing for constipation?"

The very best thing is to quit temporizing and start in to cure the condition. Every one who is subject to habitual constipation has been tolerating the condition so long that it seems much easier to "take something" for relief than to get at the cause and remove it. The habits of life must be changed. There must be more exercise of the trunk muscles; rowing and horseback riding are good, but there are many exercises, as trunk bending and twisting, that one can take in his room five minutes twice a day. There should be systematic massage or kneading of the abdomen. Reflex massage, by circling a feather or the tip of the finger-nail lightly over the abdomen in a circle following the course of the large bowel, so as to produce a "tickling" sensation, continued for two or three minutes twice a day is a good stimulus to peristalsis. All

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these one can do for himself. The following are also beneficial: coarse food, graham bread, etc., a tablespoonful of bran in a glass of water mornings, free water-drinking, the free use of fruits, whole-grain preparations, etc.

Coffee and Rheumatism.—" I have a friend who takes coffee excessively,— morning, noon, and night sometimes. She is beginning now to have rheumatism. Do you believe there is any relation between the two?"

Undoubtedly coffee can have a very marked influence in the production of rheumatism. Some persons are particularly susceptible to the poison in coffee, which is related to uric acid, and they are the ones who are most apt to get into a bad coffee habit; that is, those who become enslaved by the coffee habit are the very ones who are most susceptible to the evil effects of caffein. In the case mentioned, where the person is using coffee three times daily and suffering from rheumatism, the rheumatism is probably related to the coffee-drinking.

Modern books on hygiene admit that the use of coffee more than once a day is harmful. And some, with us, teach that it is better for a person not to use any coffee.

When your friend tries to break up the habit, she will doubtless suffer in many ways. It is always difficult for one used to coffee to do without it, and great determination is required in order to overcome the craving. One of the cereal-coffee substitutes may help her to overcome her craving.

Gastric Fermentation.—" I have long heard that charcoal tablets relieve stomach fermentation. But would it not be better to remove the cause? What do you consider the most frequent cause of the same? Do you not believe that the eating of sweets in excess would be likely to result in fermentation or indigestion? Would not also the habitual eating of sweets likely result in constipation?"

Ordinarily fermentation in the stomach is caused by the overuse of sweets and starchy foods. Sometimes one may alleviate a tendency of this kind by having foods well dextrinized; that is, by having potatoes mashed

and well browned, and by using toasted bread and other toasted preparations, and by avoiding sweets. Sometimes it is some special kind of sweet that causes the trouble. By observing carefully one may often learn what the offender is and avoid it.

Sometimes a milk diet, or a diet of bread and butter, with avoidance of such things as potatoes and fruits for a time, will relieve fermentation.

I am not certain that the excessive use of sweets will produce constipation. Ordinarily sweets are rather laxative, but in some cases it may have the opposite effect.

Antitoxic Unit.—" Please explain what is meant by a unit of diphtheria antitoxin."

It is defined as "the amount of antitoxin which will completely neutralize the effect of 100 lethal doses of toxin in a guinea-pig weighing 250 grams." A similar definition is "the amount of antitoxin required to neutralize 100 units, the quantity of standard toxin that is sufficient to kill a guinea-pig weighing 250 grams." In plain English, it is sufficient antitoxin to neutralize as much diphtheria toxin as would be required to kill 55 pounds of guinea-pig. The strength of the serum is ascertained in the laboratory and marked on the containers. The ordinary dose of antitoxin will neutralize an amount of diphtheria toxin that would kill a good many tons of guinea-pig; and yet this antitoxin is comparatively harmless.

Starch Indigestion.—" What is the cause of pains coming all over my body, especially in my head and arms, whenever I am exposed to cold and winds or eat rich or sweet foods? I also have such a stupid, drowsy feeling after eating potatoes. What would you suggest as a relief?"

You seem to be suffering from indigestion of starchy foods, and may have an excess of acidity in the stomach. Prepare your potatoes by mashing them, and then browning them well in an oven. Do not eat a very large quantity of them. Take quite freely of such food as browned bread or zwieback, and masticate all your food very carefully. Your teeth should have careful attention at once by a good dentist, as your difficulty may be there.





**New York Will Sterilize Criminals.**— A law has recently been enacted providing for the sterilization of habitual criminals.

**Red Cross Founder Dead.**—Clara Barton, "The Florence Nightingale of America," who founded the American Red Cross and was for twenty-three years its president, died recently of lingering disease at the age of ninety in Glen Echo, Md., a suburb of Washington City.

**College of Medical Evangelists.**— A neat and well-illustrated calendar of this young but promising institution of medical learning has just been issued as a special double number of the *Medical Evangelist*. Any one interested in medical education should send a request to Dr. W. A. Ruble, Loma Linda, Cal., for a copy; or better, send 50 cents for a year's subscription.

**Coming in a Body.**— The three hundred Germans who will attend the International Hygiene Congress in September have chartered a special steamer. As the steamer has accommodations for more than that number, it is probable that some from other nations attending the congress will take passage. It ought to be a sanitary voyage, barring the beer and cigars.

American Hygiene Exhibition.— In connection with the International Hygiene Congress there will be opened in Washington, D. C., early in September an American Exhibition of Hygiene and Vital Statistics in which twenty-six federal bureaus will participate. Doubtless there will be exhibits by States and also by other countries, thus making it in a sense an international exhibition. Buildings for the exhibition will be erected in Potomac Park.

**Congress on Physiotherapy.**— The fourth congress on physiotherapy, or what we might call "drugless healing," convened in Paris April 9. The congress considered such topics as the treatment of exophthalmic goiter, chronic rheumatism, clubfoot, cancer, and obesity, by physical measures. The measures advocated included radium emanations, X-ray, heat, light, electro-coagulation, mechanical manipulation, electrical gymnastics, light baths, and dietetics. **Telephones and Tuberculosis.**— A careful investigation by competent scientists in England has shown that there is no ground for the belief that tuberculosis may be transmitted by the mouthpiece of the telephone.

**Phossy Jaw Bill.**— This bill which became a law by the signature of President Taft, April 13, will doubtless by its added tax do away with the manufacture of the old yellow phosphorous matches which caused so much bone necrosis among the workers.

International Hygiene Congress.— At the congress which will convene in Washington September 23 this year there will be a number of public addresses by sanitarians of international fame. Among those who are thus far scheduled are Sir Thomas Oliver, of London, who selects as his topic "Dust and Fumes the Foes of Industrial Life;" Dr. Max Rubner, of the Physiologic Institute of the University of Berlin, who will discuss "The Sanitary Intercourse of Nations;" Dr. Jagnes Bertillon, of Paris; and perhaps Dr. Laveran, of Paris.

Tuberculosis Perspiration Infectious.— Professor Poncet and Dr. Piery are advocating in high medical circles the startling doctrine that in a large proportion of tuberculosis cases, even what have been called "closed" cases, the bacilli in virulent form are passed from the body in the perspiration. They think that this explains the terrific sweats of tuberculous patients; that it is an effort of the body to rid itself of the germs. If this proves true, it will probably revolutionize our methods of caring for consumptives and preventing infection.

Sex Education.— The committee on public instruction of the District of Columbia Medical Society, and the Woman's Club, which have been doing valiant service in the way of educating parents, teachers, and pupils in the essentials of hygiene, have arranged for the formation of a new organization composed of physicians, lawyers, clergymen, and laymen, for a campaign of education in sex hygiene. Dr. Folkmar reports that the lectures on sex have been the most popular of all the lectures given by the Woman's clinics. She believes the time is ripe for instruction along these lines. Liquor Restriction.— The State of Wyoming has prohibited the sale of liquors in club houses and in the red-light districts.

**Constitutional Prohibition.**— The legislatures of Colorado and West Virginia have passed bills submitting the question of constitutional prohibition amendment to popular vote.

Berkeley Has Voted Liquor Out.— Students of the University of California have recently voted 5 to 1 against the use of liquors at any of the students' functions about the institution.

**Does Prohibition Sometimes Prohibit?**— A wealthy Tennessee distiller has paid a fine, and is serving six months' time for making whisky in Tennessee and shipping it into adjacent States.

Woman Suffrage in China.—It is said that the new parliament has extended the right of suffrage to all women who are twenty-five years of age who read and write and hold property.

The Children's Bureau.— One of the most important health measures passed by the present Congress was the bill providing for the establishment of a children's bureau. Julia C. Lothrop, of Hull House, Chicago, has been appointed superintendent of the new bureau. Next World's Tuberculosis Congress.— At the Tuberculosis Congress which closed at Rome, April 20, it was decided to hold the next International Tuberculosis Congress in London in 1917.

**Cancers Contain Radium?** — According to the daily papers, which of course are always to be believed, an English doctor demonstrated that radium is always present in cancer cells and absent in normal cells! We confess to a slight skepticism.

Militant Suffragettes.— Physicians in England regard the unseemly and unsocial demonstrations of the suffragettes as "a neurotic manifestation, such as is seen in the consulting-room in women who have no occupation and who have missed their vocation in life." These warlike, explosive suffragettes seem to be derelicts on the social sea.

International Hygiene Congress.— At this Congress, which will meet in Washington in September, there will be a section on dietetic hygiene and hygiene physiology under the presidency of Dr. Russell H. Chittenden, of the Sheffield Scientific School, Yale University. The papers in this section will be from the world's foremost students of dietetics. I do not mean the world's loudest talkers on dietetics.

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Being efficiently antiseptic, non-poisonous, and of agreeable odor and taste, Listerine has justly acquired much popularity as a mouth-wash, for daily use in the care and preservation of the teeth.

As an antiseptic wash or dressing for superficial wounds, cuts, bruises, or abrasions, it may be applied in its full strength or diluted with one to three parts water ; it also forms a useful application in simple disorders of the skin.

In all cases of fever, where the patient suffers so greatly from the parched condition of the mouth, nothing seems to afford so much relief as a mouth-wash made by adding a teaspoonful of Listerine to a glass of water, which may be used *ad libitum*.

As a gargle, spray, or douch, Listerine solution, of suitable strength, is very valuable in sore throat and in catarrhal conditions of the mucous surfaces; indeed, the varied purposes for which Listerine may be successfully used stamp it as an invaluable article for the family medicine cabinet.

Special pamphlets on dental and general hygiene may be had upon request

LAMBERT PHARMACAL COMPANY LOCUST AND TWENTY-FIRST STREETS :: :: ST. LOUIS, MO. Another Danger Possibility From Tuberculosis.— Professor Poncet has read a paper before the French Academy of Medicine in which he maintains and attempts to prove that tuberculosis patients extrude live virulent tubercle bacilli in their perspiration, and that safety demands a thorough disinfection of the consumptive's skin as well as of his sputum. He claims to have killed guinea-pigs by means of tubercle bacilli obtained in the perspiration of tuberculous patients.

Smallpox in Michigan.— During the first three months of 1912, there were reported 283 cases of smallpox in Michigan. The vaccination history of these cases is as follows: One was vaccinated "one week after exposure," 4 were vaccinated in early childhood, 28 at periods ranging from three to sixty years before, 5 were recorded as "doubtful if ever," and 245 had never been vaccinated. It costs Michigan \$150,000 a year to take care of indigent smallpox patients and to protect the unvaccinated.

Arsenic in Shellac.— According to a recent circular of the Department of Agriculture (Circular 91, Bureau of Chemistry, Agricultural Department), shellac often contains appreciable amounts of arsenic, added in India in order to render it opaque and strawcolored. Of a large number of samples examined, all contained arsenic. As shellac is used as a coating for cheap candies and confectionery, and as a varnish on various containers (beer containers, for example), this adulteration becomes important from a hygienic standpoint.

Extensive Tuberculosis Experiment.— A section of the Vanderbilt tenements in New York has been leased for a period of three years by the Association for the Improvement of the Condition of the Poor, to be occupied by families made dependent because of tuberculosis in one or more members. Twentyfour families are so provided for, and it will be determined whether, with proper care, isolation, and medical attention, tuberculosis can be wiped out in these twenty-four families. The experiment will be watched with considerable interest.

Early Employed.— The leper Early, who for some years has served as a kind of animated shuttlecock or football for various zealous health boards, and whose most recent experience was to be surrounded with a high board fence, has finally been employed by the United States government in the Port Townsend quarantine station. His wages, plus his pension, amount to eighty dollars a month not a bad sum, by the way, for a leper; but hardly enough perhaps to salve him for his physical condition and his years of posing as " a man without a country." Startling if True.— It is said that in the United States, with less than half the population of India, there were last year more cases of typhoid fever than there were of plague in India. A little cleaning up is needed around our own sanitary dooryard before we have too much to say regarding the insanitary condition even of India. And yet some wonder what need there is for a national health bureau.

The Owen Bill .- The present Owen Bill, providing for a United States Health Service under a director of Public Health to be appointed by the President of the United States, is now before the Senate as Calendar Bill No. 561, having been favorably reported by the committee. To the newly created service are to be transferred the present Health and Marine Hospital Service, the Division of Vital Statistics, and the part of the Bureau of Chemistry which has to do with the enforcement of the Food and Drugs Act. The new service is to include a bureau of public health and marine hospital service; a bureau of foods and drugs; a bureau of vital statistics; a bureau of child conservation; a division of sanitary engineering, etc.

Health Bureau Bill. - Senator New Smoot has introduced into the Senate a bill providing for the change of the name " United States Public Health and Marine Hospital Service" to "United States Public Health Service," that it be placed under an assistant secretary for public health, and that it have two new divisions, sanitary engineering and child hygiene. It would also have the division of vital statistics now in the bureau of the census. The present Owen Bill would make instead, a separate bureau of health, independent of the Treasury Department, under a commissioner of health, and having in addition to the divisions provided for by the Smoot Bill so much of the Bureau of Chemistry as is needed for the enforcement of the Food and Drugs Act.

Cheese Bulletin .- The United States Department of Agriculture has issued a bulletin on cheese and its economical uses in the diet. This bulletin refers to recent experiments which have established "that cheese properly prepared and used is not generally a cause of physiological disturbances, and that it may easily be introduced into the bill of fare in such quantities as to serve as the chief nitrogenous food." The pamphlet discusses source of nitrogenous food." The pamphlet discusses the manufacture and care of cheese, compares its nutritive value with other foods, and gives a large number of cheese recipes. Any one interested may secure a copy free of charge by sending to the Secretary of Agriculture, Washington, D. C., a post-card request for Farmer's Bulletin 487.

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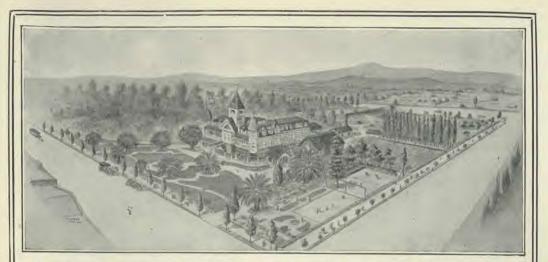
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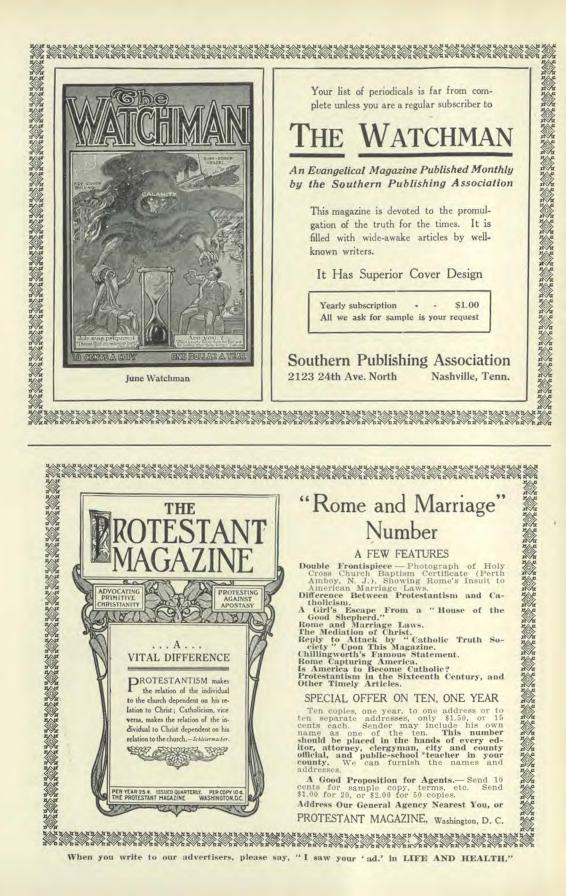
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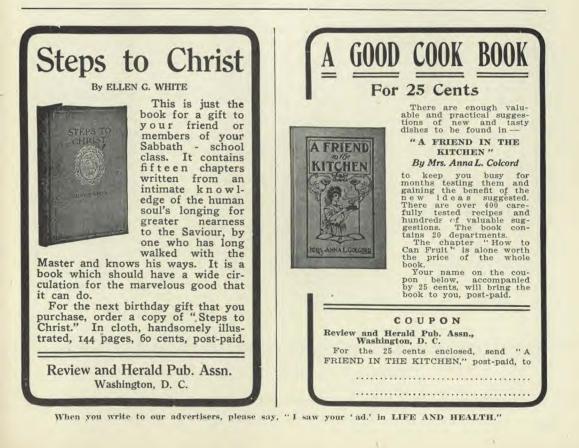
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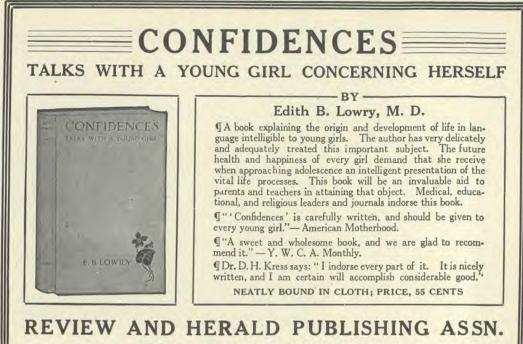
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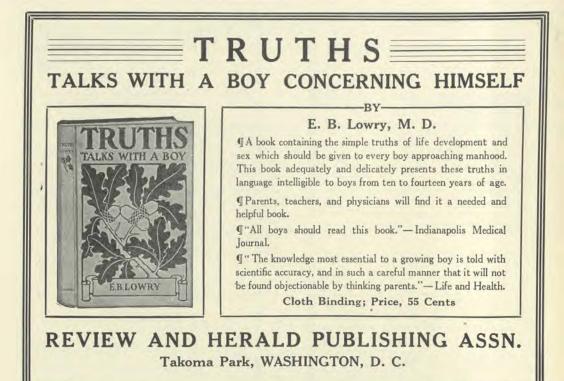


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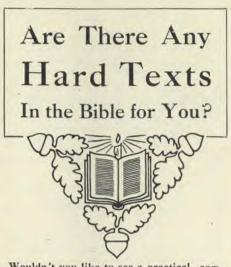
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