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THE NATIONAL HEALTH MAGAZINE

June, 1914

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CONTENTS FOR JUNE

FRONT COVER, Wilde Klamm, Bohemian Switzerland, Near Dresden.	
FRONTISPIECE, A View in Saxon Switzerland.	*
GENERAL ARTICLES	Page
The Tobacco Habit, By Various Authorities Burning Up the Bread, Wm. A. McKeever Cigarettes a Cause of Crime, Abraham Bowers The Cigarette as Related to Physical and Mental Decadence, D. H. Kress, M. D. The Price of the Cigarette Habit, Edward Quinn, Jr. Alcohol and Tobacco, Luther Burbank The Plague of Flies The Boy and the Cigarette (poem), C. M. Snow Chewing the Rag	254 255 260 261 262 264
HEALTHFUL COOKERY	267
Menus for a Week in June, George E. Cornforth.	
EDITORIAL	270
The Problem of Human Nutrition.	-
AS WE SEE IT	273
The Cost of Tobacco — Narcotics Versus Longevity — The Mental Effect of Tobacco — Tobacco and the Blood Vessels — Real Life Extension — Self-Consciousness in Children — A Practical Refrigerator.	
QUESTIONS AND ANSWERS	278
Constipation; Sore Mouth — Linseed Oil for Food — Sweating Feet — Remedy for Chilblains — Oxyfakes — Hookworm — Operating for Piles — Removal of Tonsils — Rectal Dilators — Rattlesnake Cure of Epilepsy — Tetter.	
SOME BOOKS	280
American Red Cross Textbook on Elementary Hygiene and Home Care of the Sick — Physical Training (Junior Course) — Physical Training (Senior Course).	
NEWS NOTES	281
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A VIEW IN SAXON SWITZERLAND

The masonry bridge spanning the chasms is part of the system of mountain walks which lure citizens of Dresden away from the city. Mountain climbers delight in scaling such crags as the one in the center. The view is toward the Elbe River.

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

George Henry Heald, M. D., Editor

TO SMOKE OR NOT TO SMOKE?

That's the Question

EVERY age has had its foibles, and the minority who have not adopted these frailties have been generally considered a misfit, behind the times, out of joint with

humanity, and the like.

Fifty to one hundred years ago a man who asserted that he could do as good a day's work without alcohol as with it was a fanatic or a fool—according to the current belief. It took a brave man to maintain such an opinion; and yet today it is accepted without question, for the reason that physiologists in the laboratories, life insurance experts, physical trainers, and others have given one verdict regarding the effect of alcohol,—a verdict which has completely reversed the ancient view, and established the fact that not only is alcohol not a benefit, but that it is, even in comparatively minute doses, a positive harm to the user.

But while we are learning - at least theoretically - the evils of drink, we are adopting other foolish customs and fads, in dress, in fashion, in food. But the smoking fad - the obsession that somehow a man is better off when poisoned, just a little, with nicotine - is chronic. It is a nightmare from which we do not readily recover, and an evil, unfortunately, in which those who know better are often compelled to participate - or get off the earth; for smokers claim the inalienable right to pollute the air of public places which others must breathe. It is rare that smokers will refrain, unless compelled to do so, even when in the presence of those who suffer severely from the effects of tobacco.

Many thousands of victims, suffering in health, in mind, and in pocket, would fain be rid of the tobacco habit, and yet the young readily take to it. Is it because it is "naughty" or "manly" or do they feel a real need for the seductive narcotic?

A very large proportion of smokers begin the habit at that age known as the "barbarous age,"—the age of novel reading, of running away from home, when there is a tendency to do something out of the conventional, when the boy feels some strange force within him compelling him to take a course to show that he is no longer under the leading strings of his parents; that he, in fact, is becoming a man. To the boy of this age, any argument as to the harmfulness of tobacco might make him the more anxious to court the danger and show that he can escape the penalty.

This fact in boy psychology, perhaps more than anything else, will explain our present slavery as a people to a vice that is costly in dollars and cents as well as in health. There are few boys who have sufficient strength of character to resist the temptation to tamper with the habit; and having once become victims, few indeed have the courage to give it up.

This issue of "Life and Health" is sent out in the hope that it may contribute something toward a movement for a non-narcotized youth and manhood, and that it may help some who have become victims of the habit to free themselves from its thralldom.

JULY—Children's Number, Summer Diseases and Dangers. AUGUST—Temperance Number. SEPTEMBER—Vacation Number.

THE TOBACCO HABIT

BY VARIOUS AUTHORITIES

HERE are two reasons why to-bacco using, not-withstanding the laws of kings, the bulls of popes, the protestations of preachers, and the warnings of doctors, has be-

come almost universal.

First, tobacco offers a temporary solace and comfort for ruffled nerves, and man was never given to the consideration of the after effects, provided the present effects are pleasing.

Second, the production of tobacco is capitalized, which means that a large amount of capital has been planted, as it were, in the industry, and capital once firmly planted always tends to grow. Its activities are manifest in the progressive increase of tobacco-raising lands and tobacco factories, and also in equally progressive propaganda to increase the sales by increasing the number of users.

An antitobacco campaign, in order to be successful, must meet not only the natural tendency of men to drift into a habit promising solace and comfort, but also the combined capital and the brains engaged in fostering the manufacture, sale, and use of tobacco. It is no small undertaking. The forces arrayed against the habit are the following:—

the W. C. T. U. women. Few women wish to see their sons use tobacco. And though they submit gracefully to what they consider the inevitable, most wives prefer that their husbands would not smoke. Frances G. Willard said:—

"I am with you heart and soul in what you are doing against the deadly cigarette. How many teachers have told me that when a boy

who had been clean and bright began to be dirty and dull, they knew too well that he had begun to make a 'chimney of his nose.' How parents can sleep and wake and go about their daily duties knowing that their sons are passing through this process under this bondage, is more than I can conceive of."

2. Y. M. C. A. leaders, ministers, and many Sunday school workers realize that tobacco saps the manhood of boys. In personal letters to the writer of this article, physical directors have stated the following:—

"Personally I have examined over 14,000 young men, and from general observation, I can say that smoking has had its effect most particularly on the nervous system of the growing lad, as well as hindered his normal physical development. This was particularly demonstrated some years ago when we had a junior baseball team. The young lad playing center field was a naturalborn athlete, yet it always occurred that when a close game was being played and much depended upon his making a good play, he would invariably fail in his efforts. Time and again has he missed what were, at the time, easy flies, but because of the closeness of the score, and the importance of his catching it, he would fail. For some time I could not account for this, until, upon investigation, I found that whenever he was away from the supervision of the association and the club, he would use cigarettes."

"I find that young fellows who smoke (which is invariably the cigarette) have not the endurance that the ones have who do not. A number of young fellows who had given up the smoking habit, remarked to me how much more they can stand, can run farther, and with much more ease. I believe the cigarette is the one thing that is keeping many young men from going into athletics today, and naturally keeps them from developing the best that is in them, not only physically but mentally and morally."

"I have now in my gymnasium a man who has been taking boxing instructions from the best teachers in the country, and is as skilled a man in the art of self-defense as any man I ever saw; but he is an inveterate smoker, and he cannot stand up before some of my first-year pupils, simply because he hasn't the wind. I told him that he would have to give up either boxing or smoking; and I am happy to say that he has given up smoking."

3. Athletic trainers, for the same reason. Edward Hitchcock, of Amherst College, writes as follows:—

"I shall not hesitate to pronounce the use

of tobacco in young men to be evil, and only evil, physically, mentally, and morally."

After stating that tobacco may not be immediately pernicious, he continues: —

"It may be used by many in moderation for a long time without apparent evil. But it is a drug,—a sedative, enervating, and unwholesome drug. It does not give vigor, strength, activity, or alertness of any kind, or vitality. It soothes, quiets, and benumbs the physical and mental condition."

The director of the Yale University gymnasium said:—

"We have carried on a series of observations relative to smokers. We find that smoking is injurious to growing boys and youth; that the smoker does not attain and hold as high a stand in the university as the nonsmoker does. His physical development is not so good as that of the nonsmoker, and his lung capacity is usually lower. I have no hesitation in saying that I consider the use of nicotine harmful for a growing youth, and I shall strongly urge our boys to reduce their smoking to a minimum if they cannot stop it altogether."

4. The heads of great business enterprises wish none but efficient young men in their employ.

"The head of a Chicago business college recently stated at an anticigarette meeting that of the five thousand students who had passed through his school he had had many bright students who had been cigarette smokers, but that among the pupils using cigarettes he had never had a good student. He said, further, that his ear was at the telephone a large portion of the day, and that the most frequent request made by employers was that he should not send them cigarette smokers."

The head of the Sharpless Cream Separator Company said: —

"My experience is that when a man or a boy gets a cigarette going for a few weeks, he is morally so gone as to be beyond appeal. More and more young men are hoisting the sign, 'I am a fool,' by appearing in public with a cigarette. In our own offices, where we employ a great many young men, a cigarette smoker gets no job, or, if he has it, gets no advancement. The fact that he smokes cigarettes is proof positive that he is weak in the upper story."

5. The Anti-Cigarette League, which is doing a noble work. Dr. Paulson, the president of this league, said in his popular lecture on cigarettes:—

"Most boys know some poor crippled boy whose leg was cut off in a street car accident, but if the boy has brains and character he may yet fill a position of honor and usefulness in the world; but the boy who begins to smoke cigarettes early can never be of any great use in the world. The effort to put knowledge into his brain is about as hopeless a task as to fill a basket with water. The boy who smokes cigarettes is an object of pity."

6. The Boy Scout Movement. Both General Baden-Powell and E. Thompson Seton are against the use of tobacco by boys. General Powell says:—

"A scout or any man whose life depends on his steadiness of nerve and his keenness of sight or hearing, will as a rule not trust himself to smoke, because he knows it is injurious to those qualities. . . .

"Smoking does more harm to you when you are young than when you are old. Therefore a boy should avoid smoking, in case some day he may be wanted to work as a scout or as a soldier, or in other duties where he will want a clear head and steady nerves."

7. Juvenile court judges. B. Lindsey says:—

"I sometimes wish I could give up the bench for a year or two to get out and help in a sort of evangelistic work in fighting the causes of juvenile weakness, misery, and crime. You may rest assured we should find the tobacco trust a part of the beast.

"The cigarette habit is certainly one of the very worst habits that attack the boyhood, and therefore the manhood, of the nation; there is no question but that it is one of the leading factors in the criminality of a large per cent of the young boys in the reformatory institutions of the nation, and every effort to eliminate the evil deserves the encouragement of the American people."

Judge Stubbs, of the Indianapolis juvenile court, says: —

"The boy whose bones are soft, whose nerves are weak, and whose muscles have not yet developed, becomes addicted to the use of cigarettes, with the result that he loses his vigor, his whole system being filled with lassitude somewhat similar to the effect of morphine or cocaine on a grown person. Such a boy, being without vitality, loses his ambition, without which a boy never amounts to anything. He falls behind in his school work, if he is in school, with the result that he quits school too soon; he loses his job if he is put to work, for the reason that he has not the strength or vitality to do the work that the normal boy ought to do."

These men ought to know.

8. Many physicians recognize the evils of tobacco using. Sir Benjamin Ward Richardson for many years wrote against the tobacco evil. Sir Benjamin Brodie more recently said:—

"No other evils are so manifestly visited upon the third and fourth generations as are the evils which spring from the use of tobacco."

When there is little evident injury to the smoker himself, his children are often weak, nervously as well as morally, and unfitted for any great work in the world.

9. Sanitariums for the cure of drug habits. No one is better acquainted with the effects of tobacco than those who have to deal with the drug habitués. Says Dr. Charles L. Hamilton, of the Keeley Institute:—

"It has been known for years that the use of the cigarette produces a mental torpidity and physical weakness that lead to moral degeneracy. . . .

"The constant irritation of the membranes by the inhaled smoke causes various catarrhal troubles, and the vitiated blood brings about great irritability of the nerve cells, and malnutrition.

"It is this irritable condition of the nervous system that causes the restlessness, inability to concentrate thought, tremor, etc., which are so apt to cause the cigarette addict to seek relief sooner or later through the quieting, soothing influence of liquor, morphine, or other drugs. He is almost incapacitated for mental labor through inability to concentrate thought, and finding that one drink of liquor, partially at least, antidotes the nicotine and quiets and soothes this restlessness and irritability, he is gradually led into the double addiction, liquor and cigarettes."

10. Educators. Here are some quotations from personal letters of experienced educators:—

"My general observation convinces me that students who use tobacco have less 'lasting' quality than those who do not."

"Tobacco is detrimental to the physical development, and dulls the edge of the mentality."

"I wish to exert my influence against the use of tobacco by the young. I deem the cigarette especially harmful and without redeeming features. It is a curse to multitudes of boys."

These are only samples of many letters indicating how intelligent persons realize the evils of the tobacco habit, many of whom are doing all they can to combat the evil. But as was said at the beginning of this article, there are two forces that seem to be greater than all the forces against the tobacco habit: one is the tendency of man to seek personal ease and comfort without thought of the future: and the other the fact that tobacco is now capitalized, and that its consumption is being pushed by brains and money. If this evil is to be checked and not become universal, much more strenuous effort must be made than at present in order to do it.





fires that have occurred in this country during the past three quarters of a century, as shown by the accompanying list of great conflagrations.

HE tobacco fire for 1912 entailed a loss of \$370,000,000 more than all the other fires put together. We are burning more than ever this year. Yes, this consuming fire burns up barrels of money, mountains of bread, and countless measures of human character. "A luxury" is what we men have been pleased to

call tobacco. And then we have proceeded to place a heavy revenue tax upon it, as if it were something that men buy with their surplus earnings over and above what is spent for the necessities and comforts of life. But my contention is that tobacco might better be classed as "groceries," because of the fact

that in a million and one instances the money paid for it comes out of the small family allowances, and cuts down by so much the sum available for feeding decently the women and children in the home. And, mind you, this particular form of groceries is not bought and paid for after the family grocery list is made out, and provided there is anything left for it. Tobacco belongs at the top of the grocery account. It is bought and paid for first, and the remainder of the income apportioned to the rest of the grocery budget.

What Fools We Men Are

Should we men of America not have our-

selves called before a board of alienists and be tried for our sanity? We rave and whine by turns about the high cost of living, and then we proceed to strike a match and burn up a good loaf of bread—an act which makes the high cost of living seem for the moment less oppressive. We read with not a little sym-

pathy and discomfiture the detailed accounts of certain of the ten million American women and children who are said to go to bed hungry every night of the week, and then we burn up another five-cent loaf of bread againagain an act which makes our pangs of sympathy for the hungry millions seem much easier for us to bear.

GREAT CONFLAGRATIONS						
Year	City	Loss				
1835	New York \$	20,000,000				
1848	Albany, N. Y	30,000,000				
1849	St. Louis, Mo	30,000,000				
1871	Chicago, Ill.	200,000,000				
1872	Boston, Mass	80,000,000				
1904	Baltimore, Md	70,000,000				
1906	San Francisco, Cal.	400,000,000				
1912	The Great Tobacco					
	Conflagration	1,200,000,000				

It has been estimated by the American Federation of Sex Hygiene that the men of this country are now expending \$1,200,000.000 annually for tobacco. (See *Literary Digest*, Oct. 12, 1912.) Now, let us change this all into bread money and see what it will amount to. Fractional answers are omitted for the sake of simplicity.

One billion two hundred million dollars is the amount of money expended directly and indirectly for tobacco in the United States, for the pleasure of us men only.

This sum of money is equivalent to more than \$13 per capita for our entire population. It would buy 300 loaves of bread for every man, woman, and child in the sountry, or

30,000,000,000 loaves in all.

It is estimated that ten loaves of bread will occupy one cubic foot of space; hence we have 3,000,000,000 cubic feet of bread burned up annually.

Now, suppose we make all this bread into one big cubical loaf; we should have a veritable mountain slightly more than a quarter of a mile in each of its dimensions.

Suppose we reduce the 30,000,000,000 onepound loaves to ton loads; we should then

have 15,000,000 wagonloads of bread.

Suppose we employ teams to haul these ton loads of bread. Strung out one close behind the other, there would be 60,000 miles of teams hauling bread—nearly two and one half times around the earth.

Now, a team will haul a ton load thirty miles a day, fast driving, over ordinary roads. So it would require the procession of bread wagons more than five and a half years to pass a given point.

Then, suppose we reduce this bread to teninch loaves, strung out end to end; they would extend a distance of 60,000,000 miles, or two thirds of the distance from the earth to the

Estimate the price of wheat at a dollar a

bushel. Then our tobacco money will buy 1,200,000,000 bushels of wheat.

Kansas is one of the great wheat-producing States of the nation. It would take her sixteen years to produce enough wheat to pay the annual tobacco bill for us men.

My native State (Kansas) is low in its consumption of tobacco. Government statistics show that she burns up annually only \$7,000,000 in tobacco. Some of the other States burn four times as much.

Now, the State of Kansas squanders about \$300,000 annually as a total expenditure for schoolbooks for the children. Some of this money might be saved and spent for tobacco.

The greatest pyramid of Egypt covers thirteen acres of ground, and towers up 450 feet. It is one of the wonders of the world. But it would look like a little toy block standing beside the big loaf of bread described above.

The magnificent Woolworth Building, the tallest skyscraper ever erected, could be duplicated hundreds of times and all wedged within the limits of the big loaf.

The mighty Eiffel Tower is man's effort to imitate the tower of Babel. And yet a man standing at its topmost point would grow dizzy in an attempt to look on up to the top of the bread loaf.

AT FIVE MILLION BREAKFAST TABLES

King Alcohol and the Duke of Tobacco sat down at 5,000,000 breakfast tables in America this morning, and took their heavy toll of the best the table had to spare. True, in a great many cases there remained an ample supply of good things for all the other members of the group. But in millions of instances the supply remaining was poor and skimp, and many little children had to go away with the cravings of hunger only partly satisfied.

Again, it is asked what right we men have to be such fools and such selfish brutes all in one. The answer is not far to seek. It is purely a matter of biography or environment, of what practices entered our lives as habits during the period of our youth. If we became thoroughly addicted to the use of tobacco during the days of our childhood or youth, then more than ninety per cent of us will continue throughout life to be easy victims of its seductive influences. If, through some unusual circumstances,

we were denied the use of tobacco until we reached the age of twenty-one or older, then more than ninety per cent of us are still plodding our way through this vale of tears and tobacco fumes with only a second-hand acquaintance with what so many men call a "good smoke."

Investments Worth Ten Thousand Dollars

It may be conservatively estimated that the boy in his middle teens or younger who takes up the habit of smoking, thereby enters upon what will prove during a full allotted lifetime to be a tobacco investment of \$10,000. what is the real income from such a tremendous outlay? Unquestionably the habitual smoker obtains a tremendous amount of satisfaction from his pipe. He can obtain a larger amount of precisely the same thing from the use of opium. Both of these indulgences put a man into an artificial frame of mind. They make it seem that his cares and perplexities are gone when they really

are not. Smoking quiets a man's sense of responsibility to the members of his own family and to his fellow men, if not to his Maker,

Do not misunderstand me. Thousands of good men are smokers. God's noblemen they are in many senses of the word. Indeed, they are often my closest companions and friends, and I love and respect them, but I hate the damnable habit of which they are the irreclaimable Although thousands of them are better men than I, they would all be from ten to one hundred per cent better still if they had never fallen into the grip of the tobacco habit. Little and insignificant as I am, I should be many times worse were I its victim.

But as to the money investment: For fifteen years I have made a continuous study of the tobacco habit, and am fully convinced that the estimates given above are conservative as an average. Figure it out for yourself. The Duke of Tobacco is smarter than all of us. knows that the prosperity of his business depends on the number of little innocent boys who can be taught to smoke before they are old enough to have any idea of the seriousness of the act. This iron-hearted duke knows that if the vouth once become fully saturated with nicotine, they will continue to pay him heavy tribute as long as they live.

Not a Dissenting Voice

In so far as I have made inquiry, in every single impartial investigation of the smoking habit among youth, I find nothing except damaging evidence against the practice. I submit the following reliable authorities:—

Dr. Edwin C. Clarke, who studied two hundred students of Clark College and found the scholarship distinctly lower among the smokers than among the nonsmokers.

Dr. George L. Meylan, of Columbia University, who found that the ratio of failures of smokers as compared to those of nonsmokers was ten to four.

In the study of eight hundred high school boys, P. E. Henry (see School

and Home, March, 1912) found a school record different, ranging from seventeen per cent to twenty-eight per cent in favor of the nonsmokers.

I myself, as the result of a careful test of the scholarship of one hundred college youth, found a difference of twenty-eight per cent in favor of the nonsmokers.

Dr. Frederick J. Pack (see *Popular Science Monthly*, Oct., 1912) studied two hundred and ten men who contested for position on a first athletic team. Ninety-three were smokers; one hundred and seventeen were nonsmokers. Again the nonsmokers surpassed the smokers, with a difference of thirty-two per cent.

Dr. Pack also made inquiry as to this athletic situation in fourteen other universities, and learned that the nonsmokers win with twelve per cent in their favor. He also found against the smokers, low scholarship, small lung capacity, and a uniformly low degree of success in "making the team."

Prof. Jay Seaver, of Yale University, likewise reports a decidedly impaired lung capacity on the part of the habitual smoker.

Dr. Charles B. Towne (see Century Magazine, March, 1912) gives an array of most damaging evidence against the youthful tobacco user.

Dr. J. W. Hodge (see Medical Century, November, 1911) sets forth the deleterious effects of tobacco upon the habitual user. He explains that the digestion is impaired, the blood impoverished, the heart action weakened, and that the mental, moral, and spiritual elements of the user's nature likewise suffer heavily.

Again: in my published account of the heart action of one hundred cigarette-smoking boys (see Home Training Bulletin No. 1) it is shown by graphic illustrations that these boys suffer from prostrated heart action, and that they are otherwise physically weakened.

Dr. Robert N. Wilson, in his courageous monograph entitled "Can a Gentleman Smoke?" has presented a long array of damaging evidence against the tobacco user.

The Scientific Temperance Federation of Boston, through the medium of its journal, has repeatedly published the accounts of scientific inquiry, all of which tend to show the same adverse effects.

Other studies in this field have established the conclusion that the use of to-bacco injures youth mentally, morally, and spiritually, even more than it does physically. The following points have been especially well established:—

r. That cigarette smoking is closely associated with juvenile crime.

 That cigarette-using boys fall behind in their grades, and tend very strongly to drop permanently out of school.

3. That the boys who habitually use tobacco almost invariably absent themselves from the Sunday school.

4. That the tobacco habitué among boys is, with few exceptions, an inhaler; that he is dulled in his sensibilities; and through the medium of this evil practice, is probably destined never to take any active interest in the moral, social, or religious welfare of his home community.

So the evidence accumulates to substantiate the claim that tobacco is the greatest menace in the life of American vouth today. Indeed, the problem of meeting this issue is no longer a matter of scientific proofs of the deleterious effects of tobacco on growing boys. The problem with which we must deal is largely one of methodology and psychol-You may go on until doomsday adding up the evils of this practice, and still the sale and consumption of tobacco among school youth will continue to increase. Wishes and decisions are of no avail unless they are acted upon. We who are fully aware of the evils of cigarette smoking among schoolboys continue to behave as a lot of weaklings. We have never perfected an organization to combat this evil, and much less have we done by way of devising a scientific plan for its destruction. Our groans and complaints avail nothing. We must

come together and perfect a well-organized scheme for preventing the use of tobacco among minors. We have made researches as to the poisonous effects of the weed, but we have made no farreaching inquiries as to the best scientific means of preventing its use by the youth. So now I wish to commend the Kansas method, and others as well, for dealing with this evil.

Out in my native sunflower State we have been engaged during the past third of a century in the production of a wonderful new crop of men. Under the administration of our prohibitory amendment and laws, we have succeeded in bringing up a race of men - very many of whom are now heads of families and voters - who are total abstainers from the use of alcohol. We have banished every semblance of the saloon from the borders of our fair State. Liquor selling in Kansas is on a par with bank breaking, highway robbery, and horse stealing. It is practically no more in evidence before the eyes of the general public, and is little more practiced, than are these other crimes. All this remarkable achievement in my State is merely the result of wise legislation, honestly enforced.

Now we have perfected a plan in Kansas whereby we hope to bring up another generation of men, who are to be total abstainers from the use of tobacco. We have perhaps the most efficient antijuvenile tobacco-using law in existence. Under penalty of a heavy fine, boys under twenty-one are forbidden to use tobacco in any public place, on any public highway, or on the property of any public corporation. Moreover, the person or corporation on whose premises the youth is permitted to violate the antitobacco law, is subject to a fine of twenty-five dollars.

But legislation is of little value except it be backed up by some public sentiment; and that backing we have in Kansas. Even public sentiment will avail little except it be stimulated and guided by those especially appointed to look after the enforcement of the law; and that again we have. We circularize the county attorneys, the police officers, the marshals, and the constables in regard to this law, and give them the benefit of special methods of enforcement. As a result, we are slowly eliminating tobacco using from the youth of our State. In the average town or village of Kansas it can be shown that comparatively few of the minors are using tobacco at all, and these are becoming so heavily discredited in a social way and in other respects, that the practice continues to grow less frequent and less popular.

We have quietly conducted another sort of campaign against alcoholic stimulants and narcotics in Kansas. Many years ago the legislature of our State enacted a law requiring that the destructive effects of these evils be taught in all the common schools. This agency has been quietly at work for a generation. Its helpful results are especially noticeable in respect to the liquor traffic, and not a little in respect to the tobacco evil.

What we need, therefore, is a handbook on methods of prevention. This document should consist of a compilation of all the best-known plans for instructing youth regarding the evils of tobacco, and for otherwise preventing their beginning the habit of smoking. This handbook should and could be placed in the possession of every teacher, all the patrons directly interested, the ministers in the local churches, and all the other workers in the field of child welfare. Who will forward such a help?

Professor McKeever is the author of the following list of home-training bulletins:

No. 1. The Cigarette-Smoking Boy.

No. 2. Teaching the Boy to Save.

No. 3. Training the Girl to Help in the Home.

No. 4 Assisting the Boy in the Choice of a Vocation.

No. 5. A Better Crop of Boys and Girls.

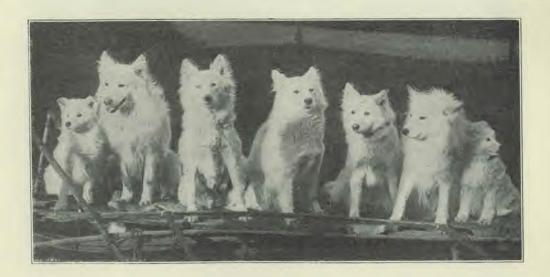
No. 6. Training the Boy to Work.

No. 7. Teaching the Girl to Save.

No. 8. Instructing the Young in Regard to Sex.

No. 9. The Boys' Vacation Employment.

These pamphlets have been very widely distributed among all classes of workers with children, and especially among parents. They are distributed personally by Professor McKeever, Lawrence, Kans., and are not sold for profit. The nominal price of two cents each for samples, and one cent each for quantities (ten or more of any one number), is charged to help out on the expense.



GICARETTES A NUSE OF CRIME

ABRAHAM BOWERS

This article first appeared in the "Scientific Temperance Journal"

OME years ago I was a teacher of boys awaiting trial in the Cook County jail in the city of Chicago. Prior to that time, I had not seen much of the evil effects of any of the narcotics. Almost immediately after beginning my work there, the insatiable grip of the cigarette was brought very forcibly to my attention. While taking training under my predecessor, I noticed that he was continually suppressing the use of the "nail;" and when it came my turn to take charge, I had much of the same difficulty that he had had. Although the sessions were only two hours in length, and the boys could smoke as freely as desired in their cells, it was nearly impossible to keep them from smoking in the schoolroom. When the school was in session, they would light cigarettes and take a puff or two while my back was turned. Often during intermission a few boys would form a small circle, one would make and light a cigarette, and then quickly pass it around to the others, attempting to do this without the teacher's seeing it. Some would carry the lighted cigarettes in their pockets, and, as they moved around the room on the pretext of spitting out of the window, would take two or three draws. After a cigarette had been apparently used down to the last and thrown away and trampled underfoot, some habit-ridden youth would grab up the "snipe" and give it a draw, though it was dirty and wet from the lips of another boy.

If a boy newly incarcerated was known to have a few pennies and he would not "divide up," the crowd would surround him, take them away, and pass them to the tier below for tobacco and wrappers. If a suit of old clothing was sent in to a destitute boy, he had to be watched to prevent his trading it to a man from another tier for a supply of tobacco for himself and friends.

Sometimes a boy would fall asleep on his bunk early in the evening without the cigarette materials for use before morning. He probably would be awakened about two or three o'clock in the morning by the physical demands for a smoke. Immediately he would begin to call to his friends in adjoining cells, and if they did not hear, he would call to the boys in the other cells to get them to assist in waking his nearest neighbors for cigarette material. If he could not succeed in that way, he would take his shoe or some other substantial object and pound the iron walls of his cell until he sometimes awoke nearly every one in the jail in his attempt to rouse the nearest boys for the "loan of a smoke."

One of the first things I noticed in the boys who came into the jail was that they told me that in their desire to reform they intended to cut out cigarettes. I was a total abstainer myself, and had not been particularly interested in the use of cigarettes by any one else, and for a long time I did not think of speaking to the boys in a way that would call for such statements. I used to hear the boys say, when they were talking to their relatives or friends (through the screen), that they intended to cut out cigarettes and begin all over again. For quite a while I gave

(Concluded on page 259)

THE CIGARETTE AS RELATED TO PHYSICAL & MENTAL DECADENCE

D.H. KRESS, M.D.





HERE are few poisons known to science more injurious to the human organism than those present in the smoke of tobacco. So much has

been said and written about nicotine that I feel some reluctance in even referring to it. Within the body, nicotine acts temporarily as a heart and brain stimu-

lant. It causes a functional constriction of the blood vessels. and raises the blood pressure. The excitation is. however, soon followed by its narcotic effect and a corresponding state of depression. This creates the demand for its repeated use in order to keep up the feeling of physical and mental fitness. In time, from the continuous irritation produced, structural changes take place in the various

glands of the body which have to deal with it, and then in the circulatory system. The liver, kidneys, and other vital organs whose work it is to keep the blood free from poisons, wear out prematurely because of continuous overwork; and then the elastic muscular tissues of the blood vessels, which normally aid in propelling the blood throughout the body, are rapidly replaced by hard, unyielding fibrous or scar tissue. The extra burden thrown upon the degenerate heart, and the abnormal pressure within the diseased arteries, may ultimately result in one of these diseases—heart failure, apoplexy, or Bright's disease—which are carrying off nine tenths of our multi-

millionaires and politicians at a comparatively early age. The strenuous life and hard work are not responsible for the many sudden deaths from these diseases. as is supposed. Neither are the excessive heat. exposure, or overexertion to which they are frequently ascribed, responsible. These may act as exciting causes, but the real cause of death is degeneracy, brought about gradually



D. H. KRESS, M. D.

and insidiously by habits which are supposed to do little or no harm.

In France, where a careful investigation of the causes of the degeneracy prevalent there has been made, it has been found that the women annuitants of the various life insurance companies



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THE GIGARETTE CLINIC

Hundreds of cigarette "fiends," tired of their slavery, sought relief in the nitrate-of-silver cure.

live longer than do the men - not merely a year or two, but actually one third longer. For instance, on the books of one company it was found that while men annuitants barely reached the age of fifty, women succeeded in reaching the age of seventy. On the books of another company, were seven centenarians all of whom were women. In an attempt to explain this marked difference in the longevity of the sexes, a distinguished physician said: "Men drink too much and smoke too much, while women, being much wiser, think of the future and drink ten times less, and seldom smoke."

The sudden deaths at an early age from heart failure, apoplexy, and Bright's disease are much more common among men than among women. Since an intimate relation exists between physical and moral degeneracy, we should expect to find moral degeneracy proportionately more marked among men than among women.

The cigarette is more injurious than the pipe, because of smoke inhalation. The poison contained in the smoke, by being brought in contact with an extensive area of the lung surface, is absorbed in much larger quantities than when merely brought in contact with the mucous membrane of the mouth, and naturally the injury sustained is correspondingly greater. Some abandon the cigarette and take up the pipe or cigar, thinking they are making a partial reform; but having acquired the habit of smoke inhalation, they continue to inhale the smoke. The inhalation of the smoke

of the cigar or pipe is possibly more injurious than the smoke of the cigarette, because of the greater amounts of nicotine and carbon monoxide present. Out of over five hundred who applied for aid at my clinic in Chicago, nearly all were smoke inhalers.

Smoke inhalation is quite a recent practice in the United States. Fifty years ago cigarettes were practically unknown in this country, and smoke inhalation was seldom witnessed. Our forefathers smoked moderately, if at all, and usually only in the evening or after meals for a few minutes. With many, smoking is now almost continuous. Few possess the will power to use tobacco as moderately as did their forefathers. The apparently innocent cigarette has had much to do in lessening the power of self-control.

The effects of the cigarette upon the vouth are well known to all observers. In referring to the change that had taken place in her boy, one mother in writing for advice said: "He was as fine and bright a boy as one could meet until he began this habit. It seemed to change his entire disposition. He could not study or read; he gave up his music, in which he had always been interested. He is sullen and ill-tempered to the point of desperation. He will go without clothes to purchase tobacco. As he is my only boy and I had hoped much for him, I feel I cannot give him up. This, and this only, is my excuse for troubling you. I am, and have been for years, on the lookout for something or some one to help me. My prayers, though constant, seem to do no good, and in the meantime the years go by, and he is wrecking his young life as well as mine."

In some of our public schools from fifty to seventy-five per cent of the boys over eleven years of age smoke cigarettes. Most of the truancy, carelessness, indifference, poor school work, and bad conduct come from these youthful smokers. The mind of the cigarette boy becomes obtuse, his morals are perverted.

His ideas of the rights of property, as well as of the rights of his fellow pupils, are very indefinite. The cigarette boys have to be corrected, suspended from school, and many of them finally expelled.

The cigarette naturally leads to the juvenile court, the reform school, and the penitentiary. There is some significance to the fact that not less than ninety per cent of our youthful criminals are cigarette smokers.

Statistics from the female employees of the Spanish, French, Cuban, and American tobacco factories support facts long ago discovered, that the maternal tobacco habit, or the inhalation of the fumes consequent on occupation, is the cause of frequent miscarriage, of high infant mortality, and of defective children,

Dr. Herbert Tidswell, member of the Royal College of Surgeons of England, finds from careful study and observation of the families of smokers and nonsmokers that the "wives of smokers suffer from a high degree of sterility and a larger number of abortions than the wives of nonsmokers." We have here a possible explanation of the rapidly decreasing birth rate which is causing alarm in all civilized countries. France already has a lower birth rate than death rate. In the United States the decline in the birth rate is at present equally as marked as in France.

Women, with their higher and more sensitive nervous organization, take to the soothing influence of the cigarette more naturally than do men. The injury sustained by them is correspondingly more serious. Unless there is a check, the prediction based on cold calculations made by the Harvard professor, that by the year 2020 it will be impossible to find a native-born child five years of age in the United States, may be realized, for a degenerate family tree will bring forth degenerate fruit, and ultimately it will cease to bear. Nature in her own interest arrests the propagation of defectives and unfits.

Tobacco is England's greatest curse today. Her young men are stunted and unfit for army service, and many of them have what the examiners term "tobacco heart."

Sir Brompton Gordon in his recent speech on the finance bill said: "The evil effect of the growing habit among boys of smoking filthy cigarettes could scarcely be exaggerated. Without doubt it was a habit which left the rising generation deteriorated in physique, and the result of such indulgence could be found in the miserable failure of the Spanish forces in their war with the United States; in the inferiority of the French to the German soldiers; and even in the Transvaal war there could be found the effects of this pernicious habit. If ten or fifteen years hence we should have the misfortune to engage in war, this habit among our youth of today would tell against us."

Thirteen years ago cigarettes were almost as universally used in Japan as they are at present in England and America. Japan became alarmed. A bill was introduced into the house forbidding the use of cigarettes and tobacco in any form by young men under twenty years of age. This bill passed the house and became a law on April 1 in the year 1900.

Japan is more fully awake to the evils of the cigarette than is the United States. Hon. S. Nemoto, in introducing the bill, said: -

"I should like briefly to give you reasons why we have introduced this bill. Recently even children in our common schools have come to smoke cheap, imported cigarettes, the consequences of which, we fear, may bring our country down to the miserable condition of countries like China or India, because tobacco, like opium, contains narcotic poisons which benumb the nervous system and weaken the mental power of children addicted to smoking, and thus give a deathblow to the vitality of the nation. Therefore, from the standpoint of our national policy, we must strictly prohibit the smoking of tobacco by children and young people." He made the sig nificant statement: "If we expect to make this nation superior to the nations of Europe and America, we must not allow our youth in common schools, who are to become the fathers and mothers of our country in the near future, to smoke. If we desire to cause the light of the nation to shine forth over the world, we ought not to follow the ex-

ample of China or India."

We are a great nation, and are fully conscious of it. But America's greatness is chiefly due to the start she received from the splendid men and women who first landed in the New England States. They were all haters of tobacco. Hutton described a Puritan of that day as one who "abhors a satin suit, a velvet cloak, and says tobacco is the devil's smoke." America gave birth to some of the world's greatest men at that time. But America is not securely great. She is great only in proportion as she can make sure of having great and good men in the future; and the future of this country is stored up in the boys of today. To sanction by law an evil which will ruin our boys physically, intellectually, and morally, means certain ruin to America as a nation.

Physical and moral degeneracy is marked in every country where the use of tobacco has become general among the people. The Indians, among whom smoking had its origin, are about exterminated. Spain is degenerate. When Spain began the cultivation of tobacco. the revenue received added greatly to her riches and apparent greatness. trade in tobacco, it is said, proved more profitable to her than her gold mines of India. She was then possibly the most powerful and influential nation on the earth, possessing the largest and richest While wealth and riches colonies. poured into her treasury, her boys and women were being ruined with cigarettes. She has fallen from her coveted position. One by one, her colonies have been taken from her. She has been deprived of her American possessions, including Cuba, the island on which the tobacco plant was first discovered.

In the United States, with an annual revenue of one hundred million dollars from tobacco and twice that amount from drink, we are able to run the government, it is true; but in depending upon this revenue, we are following in the footprints of other nations, are repeating their mistakes, and our fate will be the same as theirs.

We have strict laws shutting out of the United States criminals, imbeciles, and defectives; and yet because of the revenue received we are permitting our boys to be converted into criminals and defectives. The government is spending money lavishly when necessary to protect the nation's crops from pests of various kinds, but is doing practically nothing to protect her boys. The time has come when a united effort should be made to stop the manufacture and sale of cigarettes, and to stop the use of tobacco in any form by boys before the age of twenty years.

Cigarettes a Cause of Crime

(Concluded from page 254)

the boys a set of sixteen questions to answer in writing, concerning the causes that led to their being locked up in this place. Fully seventy-five per cent mentioned cigarettes as a contributor. Some even told me that when they were younger and were on the streets, their craving for a smoke would cause them to steal in order to secure money or some-

thing with which they could procure cigarettes. Others testified that they had not learned to use liquors in excess becaused they preferred the cigarette.

It may be of further interest to know that but few saloon keepers have cigarettes for sale, and that they are opposed to their use, on the ground that they prevent the sale of alcoholic wares.



As seen by mother

As seen by the neighbors

THE PRICE OF THE CIGARETTE HABIT



FEW years ago I heard a young man complain about the hard time he was experiencing financially, and yet he was consuming two packages of Turkish cigarettes each

day, which cost fifteen cents a package. Think of it! thirty cents a day, almost \$110 a year. His salary was only fourteen dollars a week; hence about one seventh of his wages literally "went up in smoke." Although this was serious, how much more serious was the action of the deadly poison, nicotine, on his body! In my experience I have cared for cigarette fiends, and invariably they were intellectually stupid and irritable, had a distaste for physical exertion, loss of vigor, etc., all due to the effects of this poison on the nervous system.

Dr. D. H. Robbins, for forty years an insurance examiner, in speaking of the pernicious effect of cigarette smoking on the body, said that one half of the tobacco users he examined were perceptibly injured by it, and at least one eighth had irregular or intermittent valvular action. commonly known as "smokers' heart." He said:—

"This weakened condition of the human pump allows slight regurgitation of blood through improperly closed valves, preventing complete oxidization in the lungs, thereby retaining the poisonous gases in the system, and eventually resulting in dropsy or other systematic breakdown."

If space permitted, I could relate many experiences in which I have witnessed serious physical breakdowns as a result of this habit. While working in the operating room with a prominent surgeon, it was recognized that great care was

necessary in giving the anesthetic to habitual tobacco users.

As a physical, moral, and financial destroyer, tobacco using is second only to the use of alcohol; and they usually go hand in hand. The most serious problem is the effect of the cigarette habit on boys before they attain maturity.

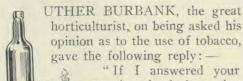
Many employers, recognizing the ill effects that cigarette smoking has upon the health of their employees, will not keep any one in their employ who uses cigarettes. This is evidenced by the following from *Denver Young Men*:—

"The president of the Colorado Fuel and Iron Company recently addressed the following letter to the heads of all departments of that important corporation: 'It has been noted that a number of our young men are apparently regular smokers of cigarettes. Even though the habit may not be indulged in in our office, it is just as objectionable and as much a matter of concern to the company if carried on out of office hours. It is well known that persistent smoking of cigarettes will finally result in either-mental or physical breakdown, and sometimes both. therefore cannot regard one with this habit as qualified for advancement, and the interest of the company demands that it should have in its employ only such as are or will be capable of doing better work than they are doing today. You will, therefore, please advise your clerks that cigarette smoking will not be tolerated, and that those who are unwilling to cease the habit shall seek employment elsewhere."

Trainers of athletes recognize the fact that the cigarette habit destroys a man's endurance. The following, from the

(Concluded on page 261)

COHOL AND TOBAC THE OPINION OF LUTHER BURBANK



question simply by saying I never use tobacco or

alcohol in any form, and rarely coffee or tea, you might say that was a personal preference and proved nothing. But I can prove to you most conclusively that even the mild use of stimulants is incompatible with work requiring accurate attention and definite concentration,

"To assist me in the work of certain kinds of budding and other work requiring special attention, - work that is as accurate and exact as watchmaking, - I have a force of twenty men. I have to discharge men from this force if incompetent.

"Some time ago my foreman asked me if I took pains to inquire into the personal habits of my men. On being answered in the negative, he surprised me by saying that the men I found unable to do the delicate work of budding invariably turned out to be smokers or drinkers. These men, while able to do the rough work of farming, call budding and other delicate work 'puttering,' and have to give it up owing to inability to concentrate their nerve force.

"Even men who smoke two or three cigars a day cannot generally be trusted with some of the most delicate work.

"Cigarettes are even more damaging than cigars, and their use by young boys is little short of criminal, and will produce in them the same results that sand placed in a watch will produce - destruction.

"I do not think that anybody can possibly bring up a favorable argument for the use of cigarettes by boys. Several of my young acquaintances are in their graves who gave promise of making happy and useful citizens; and there is no question whatever that cigarettes alone were the cause of their destruction. No boy living would commence the use of cigarettes if he knew what a useless, worthless, soulless thing they would make of him."

The Price of the Cigarette Habit

(Concluded from page 260)

Washington Herald of Oct. 23, 1913, illustrates this: -

"Over in England the followers of the turf are lamenting the excessive use of cigarettes among their jockeys. There is at present in England a most noticeable dearth of capable jockeys, and the reason is said to be that the youngsters are entirely too fond of the coffin tacks. Hon, G. Lambton, who trains for Lord Derby, declares this to be the fact. He mentions the case of an acquaintance of his who happened to be traveling in the same car with a young jockey on the way to a race meeting, and the friend noticed that in less than an hour the youngster had consumed three cigarettes."

Agitate and educate until all will realize the detrimental effects of tobacco upon young manhood and also young womanhood.

Takoma Park, D. C.

E PLAGUE OF FLIES

ONE are safe from fly-borne diseases so long as our dairies. markets, and provision stores are swarming with flies.

Fifty thousand persons die of typhoid fever yearly in the United States. Much of this disease is distributed by flies. Forty-nine thousand infants die annually of enteritis or summer complaint, the germs of which are probably carried to the milk by flies.

All this sickness and death can be stopped. This is proved by the work in Panama. France failed in her effort to build the Panama Canal because she did not rightly value sanitation.

This country succeeded because we have practically rid the Canal Zone of mosquitoes and flies.

Today Panama is safer to live in than any city in the States.

The brief fly catechism which follows was furnished the writer by the sanitary department of the city of Cleveland, Ohio. A synopsis of these questions reveals four things necessary for us to do: -

1. Kill all the flies that survive the winter, as soon as they appear in the spring. These are the mother flies, few in number, but responsible for all the

generations that follow. One fly killed at this season is equal to millions killed in August or September.

2. Be sure that no flies either feed or breed on our premises. This must be our universal rule, for even in the best of homes we have record of garbage cans that have neither top nor bottom.

3. We need to have some kind of fly trap set in our back yards, so as to catch all the flies on their way from their breeding places to our homes.

4. Realizing the dangers of the house fly, we must cease to trade with dealers who permit flies to swarm in their dairies, restaurants, markets, and bakeries. By withdrawing patronage from the careless dealer, you protect yourself, and he is forced to line himself up on the defensive. He will in turn demand that all places in his neighborhood be cleaned up. The children have gladly cooperated in this work wherever the subject has been presented. In fact, it is they who have brought success to every public campaign.

The catechism entitled "Questions About the House Fly " will be of great educational value to every child. Read it, explain it to the children, then hang it near the screen door.











OUESTIONS ABOUT THE HOUSE FLY

1. Is the house fly known by any other name?

Yes; it is now called the typhoid fly, because it has been proved to spread much of our typhoid

2. Is the fly the only means of carrying typhoid fever?

No; this disease is also distributed by water, milk, and other foods, if the germs get into them.

3. Does the typhoid fly spread other diseases?

Yes; it brings cholera infantum, dysentery, tuberculosis, spinal meningitis, infantile paralysis, and many other filth diseases.

4. Do flies live all the year round?

Yes; in winter they may be seen active in places warm enough — restaurants, bakeries, cellars, stores, and office buildings. Where it is cold, they hide in cracks and come out in the spring.

5. Do many flies live over winter?

No; only a few young mother flies survive. The rest die before spring.

6. What do flies do in the spring?

They begin feeding actively, and soon commence laying eggs. For this purpose they go out of the buildings, and seek preferably horse manure; if they cannot find this, they may lay their eggs in any rotting animal or vegetable matter. They find this matter by smell, even though we may not notice any odor.

7. How many eggs does a fly lay?

About 120 to 150 at a laying, and a fly may live to lay six times,

8. How long does a fly live?

About three months in summer. Flies may live much longer in the winter. The stages in the life of a fly are: (a) Egg, eight hours in hot weather to six weeks in cold; (b) maggot, six to eight days of active feeding upon filth and of rapid growth; (c) pupa, a resting stage of two or three days, in which the maggot becomes covered with a hard case and completes the great change from a worm-like maggot to a winged insect. It then comes out full size. "Little flies" do not grow into bigger flies. There are many different kinds of flies, big and little.

9. How old is a fly before it begins to lay eggs?

After coming out as a fly, it feeds and flies about for fourteen days before it matures its first batch of eggs. This is very important, because if every fly gets caught during these two weeks, no eggs will be laid, and the pest will disappear.

10. How many flies may breed from a pair in spring?

Allowing six batches of eggs, of 150 each, supposing all to live and find filth to breed in, the number would be 191,010,000,000,000,000,000, enough to bury the entire earth forty-seven feet deep. Why not kill the fly in the winter or early spring?

11. What kinds of food are most attractive to flies?

They swarm to any fermenting or rotting matter,—garbage, the contents of spittoons, and all sorts of unnamable filth, except at mealtime, when they swarm over our tables.

12. How do flies carry diseases?

They feed upon filth containing disease germs, and carry them on their feet and proboscides to our food. The germs may pass through the body of a fly unharmed, and may be distributed in the fly species.

13. Where do disease germs come from?

From the bodies of sick persons.

14. Can a family escape the dangers from flies by screening them out of the house?

No, not If they use food over which flies have swarmed or into which they have fallen.

15. Do flies carry sickness and death to many persons in the United States?

Fifty thousand persons die of typhoid fever yearly in the United States; much of this is distributed by files. Forty-nine thousand infants die annually of enteritis or summer complaint, the germs of which are probably all carried to the milk by files. Files are now known to be the most deadly enemy of man.

16. How is it possible to protect ourselves against flies more than we already have?

When we thought flies merely annoying, we could afford to hide ourselves behind screens; now that they have been proved to be our deadly enemy, we must come and fight them in the open.

17. How?

Clean up all filth, and destroy the breeding places. Kill every fly that lives through the winter, - swat them, trap them, annihilate them.

"THE MAN MUST KILL THE FLY - or THE FLY WILL KILL THE MAN."

- Quoted from the Indiana State Board of Health.

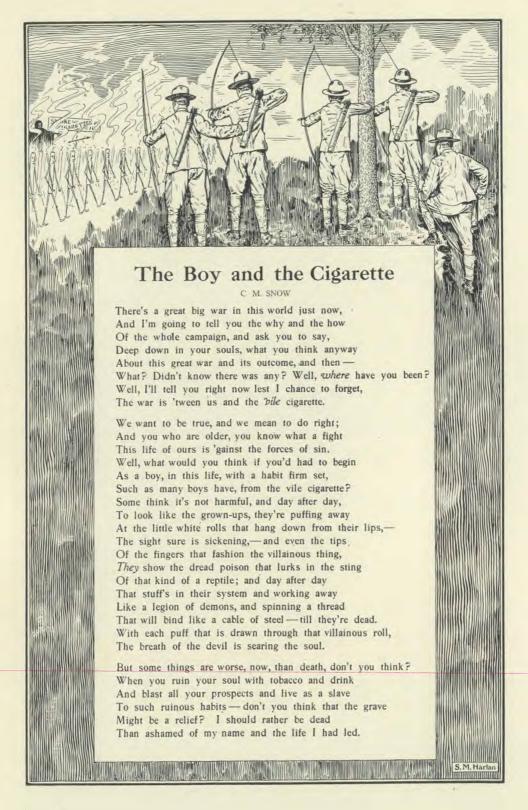


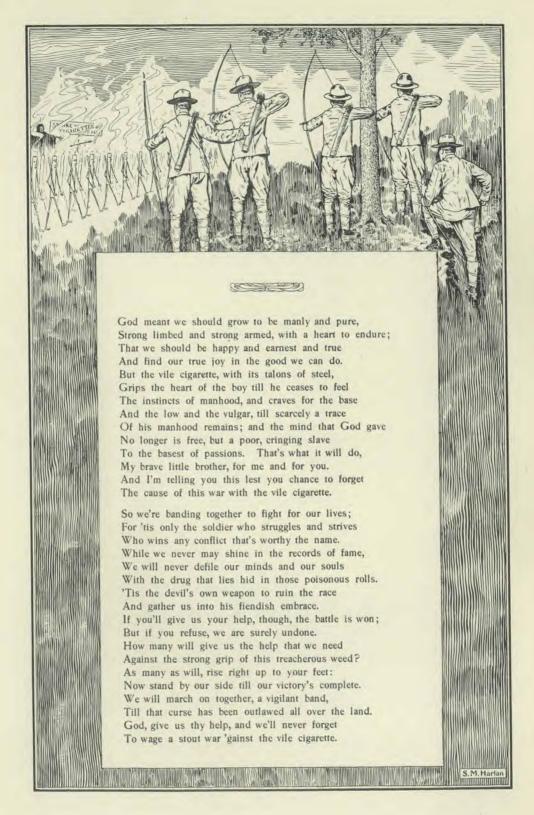












CHEWING THE RAG





FRIEND in Baltimore who is on the editorial staff of the American, has kindly sent us a photograph of part of a plug of tobacco which tells its own story. It seems that a man purchased this to-

bacco, and had enjoyed several chews before his teeth met something that did not chew just like tobacco. When he looked to see what it was, he found embedded in the heart of the cake a dirty. blood-stained bandage from somebody's sore thumb. I have not learned whether the discoverer realized from this the nastiness of the tobacco habit. Most cer-

tainly nothing could be more disgust-- ing than to unexpectedly take into the mouth such a morsel as this filthy rag; but after all, is chewing the rag any more filthy than chewing tobacco? The fact that a rag of this kind could be incorporated into a plug of tobacco gives us some hint as to the methods employed in connection with the manu-

facture of tobacco products. Doubtless if some one should write up the story of the tobacco factories, as Sinclair wrote up in his "Jungle" the story of the Chicago packing houses, it would create a stir.

The fact is that chewing is in itself a dirty habit. There is no milder adjective that is properly descriptive of the practice. The habit, once somewhat popular, has hidden itself from the sight of the refined and self-respecting, as has the habit of snuff taking.

Since we have learned that saliva is, more than anything else on this globe, the means by which germs get from one human being to another, we are not so tolerant of practices that spread this secretion around promiscuously. Doubtless when we have fully learned to be clean enough not to exchange saliva with our neighbors,- not in the obvious man-

ner of the school children who "swap gum," but in ways just as effective. - we shall have broken the most important link in the chain of disease communication.

The man who persists in chewing,tobacco or what not .and spitting on the floor or sidewalk where others are to walk, is a fit candidate for a detention home.



Photograph of a plug of tobacco containing a dirty rag. Made by a press representative in an Eastern city and sent to the editor of LIFE AND HEALTH.



MENUS FOR A WEEK IN JUNE

George E. Cornforth

NQUIRY has been made about how to make out menus for the other weeks of the month. All that is necessary is to keep in mind that each menu should include a little building food (protein), supplied by such foods as beans, peas, lentils, nuts, eggs, or milk; a little fat, supplied by nuts, vegetable oils, milk, cream, and butter; considerable starch food (carbohydrate), supplied by cereals, bread, macaroni, legumes, and some vegetables; a little sugar (also carbohydrate), supplied by fruits and sweet foods. And each menu should include foods which contain cellulose, for bulk and also for mineral elements, which are necessary constituents of all parts of the body, and which have medicinal properties. The cellulose and mineral elements are supplied by vegetables and fruits and by the bran of cereals.

Recipes are given for dishes marked with a superior 1,

Egg Macaroni

Break one-fourth package of macaroni into inch-length pieces. Drop it into two quarts of actively boiling water to which two teaspoons salt have been added. Boil rapidly, stirring oc-casionally to prevent the macaroni from sticking to the bottom of the dish, till the macaroni is tender, which will require from thirty minutes to one hour, according to the age and size of the macaroni. Turn the macaroni into a colander to drain off the water. Dash cold water through it, then put it into a baking pan in layers with sliced hard-boiled eggs, spread-ing cream sauce over each layer. Sprinkle ing cream sauce over each layer. Sprinkle zwieback crumbs over the top, and bake till well heated through.

Lemon Pie

A recipe for good lemon pie has previously been given in LIFE AND HEALTH. but here is a recipe for a lemon pie which is more economical and, at the same time, good : -

r cup sugar 4 level tablespoons cornstarch

13 cups water

2 level tablespoons crisco

3 tablespoons lemon juice, one very large or two small lemons

Grated yellow rind of 1 lemon

First Day DINNER

Egg Macaroni Boiled Potatoes with Nut Gravy wed Tomatoes Graham Bread Stewed Tomatoes Lemon Pie

BREAKFAST

French Toast with Maple Sirup Baked Potatoes with Cream Gravy Zwieback with Nut Butter Fresh Strawberries

SUPPER

Cottage Cheese Salad Graham Bread Rhubarb Sauce Molasses Cake

Second Day

BREAKFAST

Boiled Rice Rhubarb Sauce Cream or Milk Lyonnaise Potatoes Graham Bread

SUPPER

Egg Sandwiches l'otato Salad White Bread Bananas

DINNER

Stewed Cranberry Beans Baked Potatoes Scalloped Corn White Bread Strawberry Whip Lady Fingers I egg } teaspoon salt

The level tablespoons of cornstarch should be measured by taking up a rounding spoonful, then leveling the cornstarch by running a knife over the bowl of the spoon from the handle, the cutting edge of the knife being to-

ward the tip of the spoon.

Mix the sugar and cornstarch in the inner cup of a double boiler. Pour the water, boiling, over these while stirring, and cook in the double boiler till thick. Separate the yolk from the white of the egg, beat the yolk, stir a little of the hot mixture into the yolk, then stir the yolk into the hot mixture, add the lemon juice, lemon rind, crisco, and salt. Pour into a baked crust. Beat the egg white stiff, then beat into it one tablespoon sugar. Put this on top of the pie in as many spoonfuls as there are to be pieces of pie when the pie is cut, so that there will be a piece of meringue on each piece of pie. Put into the oven to brown lightly.

Oatmeal Puffs

In some places oatmeal flour, which is as fine as Graham flour and looks much like it, can be bought. This kind of flour is the oat flour called for in this recipe: -

I cup milk

I egg

teaspoon salt de cup oat flour

1 1-6 cups white flour, or, possibly

1 cup oat flour I cup white flour

Follow directions which have been given for making puffs.

Strawberry Whip

1 quart strawberries, measured after they have been rubbed through a colander

2 cups sugar

3 cups water

11 tablespoons cornstarch

3 eggs

teaspoon salt

Heat the water and sugar to boiling. Thicken with the cornstarch stirred smooth with a little cold water. Add the eggs, beaten, first mixing some of the hot mixture with the eggs. Add the strawberries and salt and, if desired, one tablespoon vanilla.

Baked Split Peas

Wash well and soak overnight one pint of split Scotch peas (green). In the morning cut very fine one-half clove of garlic over the bottom of a baking pan. Put the peas into the pan with water enough to cover them. Add one large teaspoon salt and one-half cup cream or two tablespoons oil. Cover and bake four or five hours, adding boiling water as may be necessary. At the last remove the cover so as to brown the top nicely. When done, the peas should be dry and thoroughly tender. Serve with cream sauce.

Fresh Strawberry Toast

Cover slices of zwieback which have been dipped in hot cream with crushed and sweet-ened strawberries. Place spoonfuls of whipped cream on top of the berries.

Spaghetti With Tomato Sauce

Cook spaghetti according to the directions for cooking macaroni, then put it into the following -

Tomato Sauce

I pint canned tomatoes

I onion, sliced r tablespoon oil

3 level tablespoons flour

teaspoon salt

teaspoon thyme

Simmer the onion and tomato together slowly for twenty minutes, then stir into it the flour, which has been stirred smooth with a little cold water. Cook two or three minutes. Rub through a colander fine enough to remove the tomato seeds. Add the oil, salt, and thyme. Reheat.

Third Day DINNER

Bean and Corn Soup Pine Nuts Nut French Potatoes Radishes Spanish Cream White Bread

BREAKFAST

Nut Scrapple with Jelly Oatmeal Puffs ! Creamed Potatoes Oatme Lettuce with Lemon

SUPPER Peanut Butter Sandwiches Buttermilk Strawberry Whip Cake

Fourth Day

BREAKFAST

Egg Timbales with Bread Sauce Browned Potatoes Fig Puffs Strawberries

SUPPER Shred Lettuce with French Dressing Whole Wheat Bread Junket Fruit Crackers

DINNER

Baked Split Peas with Cream Sauce ¹
Mashed Potatoes Beet Greens
Whole Wheat Bread Rhubarb Pie

Bread Pudding With Strawberries

Serve sweetened crushed strawberries over each dish of bread pudding.

Egg and Asparagus on Toast

Over one half of a thin slice of zwieback which has been dipped in hot cream place a nicely poached egg. Beside the egg place three asparagus tips, and put a little cream sauce on the tips of the asparagus.

Baked Lentils

Follow the directions for baked split peas. Serve with them a tomato sauce like the one given for the spaghetti.

Tapioca Cream

1 quart rich milk d cup tapioca a cup sugar teaspoon vanilla 1-6 teaspoon salt

Mix together all the ingredients except the vanilla, and allow them to stand one-half hour, Then stir well, put into a double boiler and

cook till the tapioca is transparent, which will probably require two hours or more if pearl tapioca is used. If minute tapioca is used, it will probably require less than one-half hour to cook. After the pudding is cooled a little, add the vanilla. The pudding should be served cold. It is perhaps nicer made the day before. it is to be used.

Strawberry Shortcake

For this, sponge cake may be baked as for layer cake. Put sweetened, slightly crushed strawberries between the layers and on top.

Serve whipped cream or plain cream with it. Or a crust may be made like the crust for the nut cheese and potato pie, a recipe for which was given in the May number of LIFE AND HEALTH, using one-half cup oil instead of one-fourth cup oil. After the dough has risen, roll it out three-fourths inch thick; cut it into biscuits, placing them on a pan far enough apart so they will not touch one another. Let rise a little and bake. Split each biscuit, place sweetened crushed strawberies between the pieces and on top of the biscuit, and serve with whipped cream or plain cream. For Sabbath these may be made the day before.

Fifth Day

DINNER

Spaghetti with Tomato Sauce ¹ Cold Sliced Nut Cheese with Jelly Asparagus on Toast Whole Wheat Bread Bread Pudding with Strawberries ¹

BREAKFAST

Tousted Wheat Flakes Cream or Milk Nut Cheese Cutlets with Mint Sauce

Potato Cakes Fresh Strawberry Toast

Egg and Asparagus on Toast 1 Scalloped Potatoes Nut Puffs Bananas

SUPPER

Cream Gravy Toast Ripe Olives Plain Buns Rhubarb Sauce

Sixth Day

BREAKFAST

SUPPER

Spinach Cream Broth with Croutons Lettuce Sandwiches Cup Custard

DINNER

Baked Lentils with Tomato Sauce Steamed Potatoes in Jackets
New Spinach with Lemon
Whole Wheat Bread Taploca Cream

Sabbath

DINNER New Peas

Potato Salad Mixed Nuts Currant Buns Strawberry Shortcake

BREAKFAST

Toasted Wheat Biscuit Cottage Cheese Coffee Cake

Cream or Milk Whole Wheat Bread Strawberries

SUPPER Bread and Milk Nut Cake Pear Sauce

ED TOR AL

THE PROBLEM OF HUMAN NUTRITION

HE Ohio Agricultural Experiment Station has issued a bulletin (No. 255) containing the results of food analyses, which are of considerable general interest; for we are gradually coming to appreciate the fact that we cannot determine the value of a food by its proportion of protein, carbohydrate, and fat, and that if we neglect consideration of the mineral constituents we make a fatal mistake. In fact, it would seem that much of the malnutrition that may have been attributed to the use of foods from a certain kingdom, as animal or vegetable, was in reality due to the fact that there was not a proper balance of the elements from the third kingdom, the mineral.

The work of the Ohio station was performed primarily with the thought of furnishing data to be a basis for more intelligent stock feeding, but it also contains much pertaining to human nutrition.

Before calling attention to the characteristics of the different foods, the bulletin makes the following observations regarding the requirements of the body, which should be kept in mind in considering the various foods. The greatest deficiency in the mineral nutrients of the common foods is in the calcium. Phosphorus is also often deficient. Sodium and chlorine are likely to be lacking in unseasoned foods, but this is usually more than made up in the use of table salt. Magnesium, more than any other mineral, acts as a laxative, and foods having a high magnesium ash are likely to be laxative, while those with a low magnesium content are likely to be constipating. An excess of basic over acid mineral in the food is desirable. Too great an excess of acid restricts the growth of bone, and may even cause death. The mineral elements are especially important during growth, and during pregnancy and lactation, when the development of a new life must be provided for by the mother. Discussing white flour, the bulletin says:—

"Not only is the total ash low, but the individual elements are each one present in very small quantities, and hence we must regard white flour as a poor food for all purposes served by mineral matter. In everyday life the one deficiency of white flour which is most likely to make itself apparent is its lack of magnesium, this deficiency causing its constipating character, a matter of no concern to most healthy adults, but one of much importance in the feeding of the very young and of others who for any reason must subsist on a diet of limited variety."

The bulletin thus characterizes the wheat preparations in general: -

"In common with other cereals, the wheat preparations have almost equivalent amounts of acid and basic mineral elements, but usually with a slight preponderance in favor of the acids. A considerable excess of the base in the remainder of the ration would therefore be desirable."

Corn, we are told, contains less ash than the wheat, and is an exceedingly

poor bone food. Deficient in protein, it is still more deficient in calcium. Bolted corn meal (from which, if I am rightly informed, some of the corn flakes are made) is even a poorer food for the growing animal than the whole corn. Polished rice contains less mineral matter than any of the corn products, and it is perhaps this deficiency that causes beriberi in those whose diet is largely polished rice. Concerning the cereals as a group this pamphlet says:—

"From the point of view of this discussion, the dominant characteristic which they have in common is the lack of lime. The acid mineral elements slightly and rather uniformly exceed the basic elements, and the phosphorus is almost wholly organic. . . Considering the cereal products as human foods, the greater acceptability of the highly milled products is attained at a considerable loss of mineral nutriment, and the use of these modern products requires more careful consideration of the remainder of the diet than was necessary in the days of primitive milling processes."

Then follows this significant statement: -

"Growing animals subsisting on cereals alone soon come to suffer from malnutrition of the bones."

Doubtless this will explain much of the rickets that used to be prevalent among the children of the underfed, for cereals bulk up about as fast as anything in filling the stomach, and when economy is the most important consideration in providing for the family wants, the temptation is strong to fill up on the bulky foods. And perhaps some for hygienic reasons have thought that they were about right in living largely on cereals.

There is, however, according to the bulletin, a class of foods that in a way supplement the cereals, not only in their protein (even to an excess) but also in their mineral content. These are the leguminous seeds, including the soy bean, the navy bean, the cowpea, and the peanut, which have an excess of the basic mineral and of calcium.

Concerning animal products the bulletin says that milk merits especial attention.—

"since it may fairly be considered a perfect animal food. It is characterized by an excess of basic over acid mineral elements, and contains considerably more calcium than phosphorus, and generous amounts of both of these."

But more remarkable yet is the value of whey, especially as an infant food: --

"Whey contains a greater proportion of basic to acid mineral elements than does milk. . . . The ready assimilability of its organic constituents and the corrective tendency of its minerals in the various digestive disturbances of infancy, especially those in which acidosis is a feature, make whey the rational basis for the modification of milk for infants. Perhaps no single bearing of this matter of the mineral elements in nutrition is likely to cut more of a figure in the happiness of the average man than the use of whey rather than water in the modification of milk. Whey is also especially useful in severe illness of older children. Many a child has been taken through protracted sieges of fever on whey alone."

In such cases the mineral salts correct the tendency to acidosis, and there is considerable nutritive value in the sugar and albumin present. Whey may be

prepared from fresh milk by the use of rennet, which may be obtained from any druggist.

Eggs, we are told, are low in their calcium content, the chick obtaining its calcium from the shell of the egg. To obtain sufficient lime when we eat eggs, we should have to eat them shell and all.

Of the animal products as a group, we are told that -

"they usually contain an abundance of phosphorus, but only milk and bone preparations contain enough calcium to make them of value on this account in supplementing the cereals."

Fruits and vegetables are recommended for the reason that they have in common a very decided preponderance of basic over acid mineral nutrients, due largely to the high potassium and low phosphorous contents, the bases being present as salts of organic acids; and when the acids are oxidized in the body, the bases are free to neutralize the mineral acid element that may have been taken with the food. The fruits and vegetables are also rich in calcium. In conclusion, the bulletin says:—

"All things considered, then, the ration which is most likely to contain in abundance all the mineral nutrients required by animals [and man — Ed.] is one characterized by diversity of origin, no one class of foods greatly exceeding the others. A diet of cereals, or of meat, or of eggs, or of any combination of these three, would not be well proportioned. Cereals and milk, or cereals and fruits, or cereals and vegetables, would make better proportioned dietaries.

"Grouping together the foods with acid ash,—cereals, meats, and eggs.—and opposing to them those of alkaline ash,—fruits, vegetables, milk, and legumes,—the latter group should be liberally represented in

the dietary.

"Among single foods, milk and legumes are perhaps more nearly complete foods on the mineral side than others, though there are many reasons why extreme simplicity of diet is not advantageous."

Prepared by men who are not attempting to advance any particular dietetic fad, this testimony against the prevalent carnivorous diet is important. Not infrequently the advocates of a carnivorous diet point to the fact that many of the poor, who are unable to buy liberally of meat, are poorly nourished. It will be seen from this report that there are other things that are lacking in the diet of the poor,—certain mineral elements, and especially the basic,—which may be supplied largely from the vegetable kingdom.

The feeding of stock economically and efficiently has proceeded farther than human feeding. The reason is plain. To feed stock economically and yet efficiently is to increase the wealth and the productiveness of the country. With the humans, it is different: at least the connection between human diet and wealth is not so apparent to the great majority of people. Those who are intelligent are more interested in a dietary that appeals to the palate than they are to economical considerations, and those who are in most need of an economical and efficient menu have not the knowledge nor the intelligence to select such a menu, and there are few of the masters of industry who have realized the importance of planning for the better nutrition of their employees. But as the feeding of stock is becoming more of an exact science, the importance of an economical and efficient menu for all human beings will gradually filter through our craniums.



The Cost of GLANCING along the Tobacco magazine racks of the Library of Congress, my eye caught the name of a newcomer, the Unpopular Review. What a name! It was Vol. I, No. 1, published January, 1914, by Henry Holt & Co., New York. It seems well named, for the articles are not written from the "popular" side, and the editor evidently preferred to remain unknown. Some of the articles would act as a very good tonic for those who have been carried along with the popular idea that democracy is a corrective for all the ills of government. There is one article on "Our Tobacco; Its Cost." The writer shows his reasons for believing that \$1,200,000,000 is a conservative estimate of the amount spent yearly by Americans for tobacco, and continues: -

"The significance of these figures can best be appreciated if we compare them with other terms of our national budget. To put the matter concretely, 'tobacco takers' spend in a single year twice the amount spent by the en-tire country in railroad travel, and about three times the amount which it spends on its common school system. They pay out annually about three times the entire cost of the Panama Canal. They destroy directly about three times as much property as was destroyed by the San Francisco earthquake [fire, he should have said, to retain the good will of Westerners, but then it is the Unpopular Review, and uses no such diplomatic methods.- Ep.]. Their smokes and chews cost them just about twice what it costs to maintain the government of the United States, including the interest upon the public debt. Our smokers could in a year and a half pay off the entire bonded debt of our States, cities, counties, as it was in 1902; and in an additional nine months, the entire interest-bearing debt of the United States, if they were all to exercise the self-denial which was exercised a few years ago by the Persian people [who are said to have given up smoking as a protest against the concession of the tobacco monopoly to an English company]. .

"The cost of smoking to the country is by no means limited to its cost to the smoker. Chief among its indirect burdens is the incineration of property other than tobacco leaves, and the destruction of innocent lives which it exacts as its annual toll from nonsmokers. We have had some tragic illustrations of this in recent years. The Triangle shirt-waist factory in New York City in 1910 not only burned up valuable property, but caused a cruel loss of life. Over one hundred and forty workers were sacrificed in this case to a cigarette

"In the winter of 1912 occurred the destruction of the Equitable Building, caused by the careless tossing of a match into a waste-paper basket in the Savarin restaurant, which occupied quarters in the basement. This match had doubtless been used to light a cigar or cigarette. [Report of the Fire Department of the City of New York, 1912, page 13.] . . . "The cases are referred to because they are

"The cases are referred to because they are peculiarly dramatic, and are still fresh in the memory of newspaper readers. But it would be a mistake to assume that they represent anything exceptional or phenomenal, like an earthquake or tornado. Smoking is a chronic and regular cause of fires, perfectly familiar to those whose profession requires that they risk their lives in fighting them. [Here he gives statistics from the reports of fire marshals bearing out the above statement.—Ed.]

"But tobacco is also a cause of many forest fires. The State forester of Massachusetts estimates that smokers are responsible for more forest fires in that State than is any other single agency."

Then follow statements from other foresters along the same line.

"The effect of tobacco upon the health is an important item in the cost of the habit to the country, though one which can obviously not be expressed in figures. Dr. von Frankl Hochwart, the eminent nerve specialist, has written an article dealing only with the nervous diseases of smokers; and though his paper was read at a meeting of neurologists, and eight physicians took part in the discussion, not one of them expressed dissent in any essential point.

"This distinguished authority based his statement on the study of fifteen hundred of his own patients who were heavy nicotinists. After eliminating all the other poisons which might have affected these cases, he reached the general conclusion that, among smokers in general, about one third complain of troubles which they attribute to tobacco. These symptoms were particularly strong in the case of

heavy smokers, of whom one half showed bad effects, lasting sometimes for a considerable time. The troubles were especially noticeable in the case of cigarette smokers. The most common complaints were palpitation of the heart and general nervousness, but a large number of other nervous affections were diagnosed as specifically attributable to nicotine, such as loss of memory, meningitis, aphasia, deafness, and dyspepsia."

The writer goes on to give a number of other debits, and then the credits, which are, (1) \$105,000,000 revenue to the government, and (2) the feeling of well-being which comes to the smokers as a result of their habit; and finally he draws up a balance sheet, with these debits: one billion two hundred million, less one hundred and five millions, the direct cost of the habit; forty-five millions to ninety millions in buildings destroyed; other millions in forests destroved; more in health destroyed, etc. To the credit of the account is - smokers' euphoria! The country pays pretty dearly, my smoking friends, in order that vou may have the comfort of your indulgence. And you yourselves pay part of the bill.

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Narcotics Versus

Longevity

number of life insurance companies which have made a distinction in classification between abstainers and nonabstainers, uniformly show a remarkably low death rate among the abstainers, which is more than a coincidence. Life and Health has at various times commented upon this very significant showing,

The health bulletin of the Postal Life Insurance Company, dated Nov. 20, 1913, calls attention to some figures furnished by the New England Mutual Life Insurance Company which show "not only a low rate of mortality among abstainers, but a ratio of mortality among moderate drinkers, increasing with the degree of indulgence."

RATIO OF ACTUAL TO EXPECTED MORTALITY

	Al	stain- ers	Rarely Use	Temper- ate	Mod- erate
Tobacco	- 11 + 4	59	71	84	93
Alcohol		57	72	84	125

The figures comparing nonusers and users of tobacco almost parallel those of alcohol. Probably this may be explained largely by the fact that the users of tobacco are likely to be users of alcohol, and vice versa. These figures were, in fact, presented for the purpose of emphasizing the caution that should be observed in interpreting such statistics.

Many insurance authorities believe that the low mortality among abstainers might well be due to a "generally conservative habit of living" (that is, to the observance of personal hygiene) rather than to the nonuse of alcohol. But we know that the use of alcohol, by diminishing inhibition, lessening caution. and increasing optimism, is prejudicial to a "conservative habit of living," and that the use of one narcotic seems to call for the indulgence in others; so the insurance statistics are valid as an argument against the use of alcohol. The fact is, statistics show repeatedly and unanimously that the abstainer has a much better chance for long life than the moderate drinker; and the probability of an early death is in proportion to the amount of alcohol habitually consumed. Grant, if you will, that the use of alcohol makes for carelessness in hygiene in other directions, the case is just as strong for abstinence. Moreover, as the Postal bulletin says: -

"The wealth of clinical and laboratory evidence now available regarding the physiological effect of alcohol in the quantities consumed by those who use it in the most limited way as a beverage, removes much of the actuarial mystery that has surrounded such figures."

In other words, the laboratory, in showing the effect of alcohol even in small doses, has shown just why abstainers are more long-lived than even moderate drinkers.

Moreover, the parallel of the tobacco figures do not necessarily militate against the figures for alcohol, but they point to another series of facts which require study in the physiological laboratory. Tobacco is a violent poison. The human system undoubtedly learns to tolerate it, but no proof is forthcoming that this toleration is more than relative. In other words, it has not been proved that the organism can become so accustomed to the use of tobacco that the narcotic will cease to make its influence felt in mortality reports. Doubtless any company which can make a separate classification between the smokers and the nonsmokers, will get figures very comparable to those of the New England Mutual Life Insurance Company.

Possibly when the effect of tobacco is studied as carefully as the effect of alcohol has been recently studied, there will be some more startling develop-

ments.

You can "put it in your pipe and smoke it" that the habitual use of any narcotic is prejudicial to longevity.

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Mental Effect RECENTLY S. Philip of Tobacco Goodhart, chief of clinic, neurological department Mount Sinai Hospital Dispensary, and neurologist of the Montefiore Home and Hospital, read a paper before the neurological section of the New York Academy of Medicine on "Amnesias of Tobacco and Malarial Origin," giving some remarkable cases of loss of memory due to the use of tobacco, in which he makes the following general comment on the effect of the use of tobacco on mental disease: -

" A true and characteristic psychosis, having origin in tobacco intoxication, is fairly well established. . . It has been observed that the true psychosis described is invariably found in excessive and prolonged users of tobacco. . , . The characteristic psychologic features may be divided into three stages. . . .

"The patient experiences distressing symptoms of weakness and incapacity after effort, and true hallucinations and suicidal tendencies follow. A prodromal stage initiates this nicotinosis mentalis and is succeeded by three distinct periods, unless it terminates promptly in recovery. The prodromal stage is the one which should be recognized if the patient is to be spared a long period of mental anguish. These initial symptoms generally consist of an apparently unaccountable wretchedness. There is change of disposition, and restlessness at night, finally becoming obstinate insomnia. The patient suddenly finds his work distasteful,

although he struggles on; there is a tendency to brood, and often a turning to thoughts of religion, which later form the basis of illu-sions and pathologic imagery. The insomnia and psychic depression increase temporarily, and attacks of precordial distress with palpitations appear. At the end of from six weeks to three months the actual psychosis abruptly

manifests itself.

"The patient is dominated by hallucinations, visions of a religious character appear; there are imperative concepts and ideas, often associated with suicidal tendencies; there is marked depression; a feeling of great weari-ress and exhaustion. There are brief attacks of indefinite fear during which acts of vio-lence may be committed; otherwise the pa-tient is quiet and obedient. He speaks only on request, but gives reasonable answers to questions. Nutrition is maintained, and the appetite is good. After six or seven months re-covery begins, or the disease enters a new stage. The depression changes to a state of exaltation. The patient speaks freely of what he describes as visions, such as visits of angels and other visual and auditory hallucinations. These periods usually last from two to three weeks, with indefinite intervals during which the patient is discontented and gloomy and has hallucinations of a depressing form. although the patient speaks distinctly and otherwise intelligently. This stage may extend over an indefinite period, and unless recovery ensues it passes into the third or terminal stage of the disease. In this last stage of the nicotine psychosis there is a blending of the symptoms. The periods of euphoria gradually subside; the patient's mentality becomes seriously impaired. There are defects of memory, though the patient does not become indif-ferent to his surroundings. He becomes taciturn, speaking only on urgent request; his answers are brief, but now not always logical, though distinct and well articulated. The expression is vacant, and often there is rapid compulsory movement.

"The prognosis may be said to be favorable when the patient comes for treatment in the incipient stage and is entirely deprived of to-bacco. The cure is then said to result within six months. Some authorities regard recovery as almost sure in the second stage, but years may elapse before the pathological periods disappear."

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Tobacco and the Dr. H. JOHN has re-Blood Vessels cently studied the effect on the blood vessels of smoking to a degree not productive of obviously toxic effects; in other words, of what might be called moderate smoking.

He found that smoking two medium cigars caused in typical cases characteristic changes in the bloo1 pressure. Even during the act of smoking there may be a rise in diastolic pressure, which

may continue for two hours. The Journal A. M. A makes the following comment: -

"Despite the interfering complications . . . the smoking of from eight to ten cigars or from twenty-five to thirty cigarettes during the course of a day, is by no means negligible, if we may believe the statements made by John. The widely current impression, based in part on experimental investigations, that nicotine can produce vascular alterations in the sense of sclerotic changes, is thus confirmed. We may argue as we will that habitual smokers have consumed extraordinary quantities of tobacco over long periods without signs of vascular change, and that it is difficult to believe that tobacco can, as a rule, have an important influence beyond what the ordinary wear and tear of life itself would warrant. Nevertheless, we are in duty bound to take cognizance of careful blood pressure measurements, and to consider seriously the advisability of extreme moderation in smoking, to say the least in conditions where the familiar untoward possibilities are threatened. Indifference to scientific evidence is an intolerable

This is good testimony given in a good place, for unfortunately a large proportion of physicians themselves smoke, and for this very reason are inclined to view the habit with more or less complacency, and are perhaps too little inclined to warn young men regarding the dangers of the habit.

Real Life THE officers of the Extension Postal Life Insurance Company have been working along the line of life extension of its policyholders, through two channels: (1) the periodical medical examination of policyholders (optional) in order to caution regarding the insidious advance of disease, which the policyholder may not have noticed, so that the disease may be treated in time; (2) the publication of bulletins giving general information regarding the preservation of the health. The last bulletin of this kind published by the company has some statements which are well worth quoting in full: -

"The best time for life-extension effort is before impairment begins, which will not happen prematurely unless we invite it; which will not thus happen if we remain natural be-

ings.
"For we must admit that it is the unnatural

that hurts.

"It is unnatural for any animal - man or brute - to drink alcohol, to smoke tobacco, to take drugs or employ narcotics; these things are unnatural because we never would do them or other things like them of our own free will or on our own initiative. They have to be forced upon us; we have to be trained to take them unto ourselves, or at least we have to be led to take them by the force of example - bad example.

"Consider for a moment how many lives are shortened by alcohol, tobacco, and drugs; then think how life might be extended if the desire for these unnatural things were, through some potent agency, suddenly and forever taken away: if from that moment mankind made a fresh start, it is safe to say that the average life of the race would be extended by many a

"Then wipe out overindulgence in eating, avoid overwork, take proper exercise in the open air, eat proper foods, give proper care to the body, and years more would be added to the span of life.

"Don't say all this can't be done; it can be done, and it is being done right now by thousands of men and women throughout our

own and other lands.

"The Postal Life has a scientific record of what has been attained among its own policyholders through the influence of its health bureau, and therefore has positive knowledge on the subject.'

That is the point. This matter of life extension is not guesswork, but fact. The records of the company show that (as a result, probably, of heeding the suggestions given by its medical examiners, and the advice contained in its bulletins) the average life of its policyholders is being increased.

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Self-Consciousness PARENTS do not alin Children ways realize that the traits of which they are so proud in little Johnnie or Mary may be the first signs of serious nervous or mental trouble. Pediatrics, a magazine for physicians specializing on children's diseases, in calling attention to this fact, says (August, 1013):-

"Few parents can be got to believe, for example, that 'forwardness,' disobedience, and rude conduct in a young child are sometimes a grave sign of mental deficiency. Gowers has noted them as one of the earliest indications of abnormal cerebral function. Instead of the youngster's being prompted to rudeness and impertinence and laughed at for his supposed precocity, such performances should be viewed with anxiety, and should be gently but promptly suppressed. That small-children

should be 'seen and not heard' is a maxim based on an enlightened psychology."

And it is not only the abnormal child who requires attention. Even the normal child may be made abnormal by an unwise attitude on the part of parents or elders:—

"Even where it is not congenital, a morbid feeling of self can be awakened and nourished with alarming ease and speed. No child should be encouraged to repeat poetry before his mother's guests, or praised for his 'pretty curls,' or even have his first trousers made too much of. The less he thinks of himself, the better."

Instead of training children in faulty ways, the parents would better train them in mental habits that will make them efficient citizens:—

"Both boys and girls should be taught to endure; to neglect trifling aches and pains, and seek for a remedy rather than cry over the trouble. . . . If such principles of education were more closely followed, hysteria and the 'artistic temperament' might gradually disappear; and the hosts of insane people now walking at large, because their disorders of consciousness are not directly menacing to society, might be much diminished."

Undoubtedly the foolishness, and the oddity, and the inefficiency, and other unsocial characteristics which make people less useful as citizens are due partly to inherited traits; but only partly. Parents often unconsciously increase the evil tendencies of their children by bad management.

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A Practical In home sanitation Refrigerator there is no more important article of furniture than the refrigerator or ice chest. A liberal supply of ice for the preservation of milk and other foods is a veritable life preserver. And yet at the current prices of ice—nearly half a cent a pound—many of the poorer families find it necessary to do without ice.

This condition is due partly to the exorbitant price charged for ice; ice could be made and delivered for one fourth of a cent a pound at a handsome profit. But it is also due, according to Dr. John R. Williams, of Rochester, N. Y., who carefully investigated the subject, to shoddy ice chests, which waste a large proportion of the ice cooling the outside air.

To be really efficient, he believes an ice chest should consist of six inches of cork board. Many of the cheap refrigerators or ice boxes contain no cork board, and the thin layer of "insulating material" they do contain soon becomes moist and fails to insulate. Here is Dr. Williams's directions for making an ice chest which will cost about twelve dollars:—

"It should be made of cork board, which comes in slabs of any desired thickness, in convenient lengths and widths. The skeleton frame of wood should be made of the shape and capacity of the ice box desired. On this frame should be tacked the cork board slabs, which should first be coated with tar or asphaltum. One surface should be left for the door. After the first layer of slabs has been attached to the form, the second layer should be applied, over the first, the two being cemented together with tar or asphaltum, and the slabs toenailed to each other. Care should be taken to lap the joints in fastening on the slabs. The cork board should be at least two inches thick. After the box has been made, the form should be removed, and the insideand outside of the box coated with a very hard surface cement about one fourth of an inch thick. The door may then be made of wood, with a cork board lining. It should be beveled and fitted as tightly as possible into the door frame, which should also be made of wood."

Dr. Williams believes that such an ice chest, which can be made at a cost of twelve dollars, will be fully as efficient as a refrigerator costing forty dollars. Undoubtedly most of the so-called refrigerators and ice chests sold at low price are very uneconomical because of the large amount of ice they waste.





Questions accompanied by return postage will receive prompt reply by mail

It should be remembered, however, that it is impossible to diagnose or to treat disease at a distance or by mail. All serious conditions require the care of a physician who can examine the case in person.

Such questions as are considered of general interest will be answered in this column; but as in any case, reply in this column will be delayed, and as the query may not be considered appropriate for this column, correspondents should always inclose postage for reply.

Constipation; Sore Mouth.— Relief has been asked for a lady seventy years old who has been bothered with constipation for a number of years, and who recently has been troubled with sores coming in different parts of the mouth.

For constipation use laxative foods. Give liquid paraffin three times a day, beginning with a teaspoonful dose and increasing until it is effective. For the mouth sores apply burnt alum, by means of a toothpick, to each sore. To prepare the burnt alum, take ordinary alum and heat it on the stove until it turns to a powder. Wash the mouth three times a day with peroxide of hydrogen, one-fourth strength. If the burnt alum does not relieve the sores, try washing the mouth with a one-per-cent solution of silver nitrate. This should not be swallowed, and the mouth should be washed out afterward, as the silver nitrate, if swallowed in quantity, might be poisonous. Another remedy which is efficacious in similar conditions is a saturated solution of picric acid, applied immediately to the sore by means of an absorbent cotton swab on the end of a toothpick. The picric acid should not be swallowed.

Linseed Oil for Food.—"A family has been using refined linseed oil for shortening for years. Now all the members are suffering with their eyes, and I am wondering if the excessive use of this oil can be the cause."

Linseed oil is a drying oil, and so far as I know is not recommended by any one as a food. It is not improbable that the troubles which are coming upon this family are due to the free use of this oil.

Sweating Feet.—"Can you suggest some relief for sweating feet?"

If changing the stockings and washing the feet twice a day does not suffice, use in addition to this measure a powder made up of equal parts of boric and salicylic acid. Bathe the feet in cold water. It may be an advantage to add a small quantity of formaldehyde to the water.

Remedy for Chilblains.—" Kindly give me in your Questions and Answers department a reliable remedy for chilblains."

Nutt ("Diseases of the Foot," E. B. Treat & Co.) advises the use of woolen stockings. To allay the burning and itching he uses a cooling lotion, as a 50-per-cent solution of alcohol. If the skin is broken, it is necessary to guard against infection. Internally he advises calcium, either the lactate or the chloride. I would suggest the free use of milk and perhaps of cheese, which are rich in calcium.

Oxyfakes.—"What is your opinion of the various 'oxy' remedies, which are advertised to cure almost all kinds of disease, which consist of a piece of tubing with cords to be attached to the body?"

The appliances concerning which you write are fakes pure and simple. These things have come out under various names, and have been shown to be frauds in different ways. The Australian government has forbidden the importation of some of them into that country

I have no doubt there are persons who attribute cures to them, the same as there are people who attribute cures of rheumatism to a potato carried in the pocket, or the cure of fever to a slice of potato on the forehead, etc. In other words, it may be a case of mind cure, or it may be that the disease self-terminated at about the time this apparatus was used. But it would be just as sensible to tie a brick bat to a string and fasten the string around your ankle, as it would be to use this thing. It produces no electric current, no magnetic current; in fact, no current. Any one who knows anything about physics or chemistry would see in an instant that the thing is a fraud of the crudest kind. But, as Barnum said, the American people like to be humbugged. That is why these fakers get rich.

Hookworm.—" Was healthy, till recently, when I suddenly began to lose weight. I feel a scratching sensation, and the doctors diagnosed it a kind of hookworm. Though I have spent several dollars, I have not had much relief. Kindly prescribe for me a medicine that will cure hookworm."

I know of no remedy for hookworm that would be safe for one to use without the direction of a physician. Your expression "a kind of hookworm" seems to me rather odd. So far as I know, there is only one kind of hookworm in the United States, at least commonly, and that yields readily and absolutely to one remedy, thymol, and the cure ought not to cost you more than a very few dollars, five at the most, if it is hookworm.

If the doctors have not made a microscopic examination to determine for certain that it is hookworm, they have taken your money fraudulently. It never pays to go to cheap doctors for anything,—to men who are willing to guess at what the condition is, and take pay for writing the first prescription that comes to their minds. It may cost more, but it will pay you in the end, to go to a man who is conscientious enough to give you a careful examination.

If you have hookworm, there ought to be no difficulty in getting rid of it. The fact that these men who pronounced it hookworm did not succeed in getting rid of the trouble, makes me think that probably the trouble is not hookworm.

It is not safe for you to attempt to use thymol except under the direction of a physician.

Operating for Piles.—" Please inform me whether the cutting of piles is usually a dangerous operation."

There is no reason why an operation for piles should be dangerous. It is usually done by cautery or burning, rather than by cutting. Recovery is the almost general rule, although recurrences may occur if the conditions remain which in the first place produced the piles.

Removal of Tonsils.—" May any particular harm result from the removal of hypertrophied tonsils from a boy of six years, and especially would such removal affect vocalization, speech or song?"

No particular harm comes from the removal of tonsils when they need removing, provided they are rightly removed. I would not say that the operation is entirely without danger, but one might say the same thing of riding in a motor car. There are some, however, who believe that the tonsils are there for a purpose, and should be left. In my opinion the principal function of a diseased tonsil is to admit disease germs into the body. I have not been convinced that operations on the tonsils affect the voice.

Rectal Dilators.—" May rectal dilators be used to advantage, and to what extent?"

There are conditions in which the physician may find it of advantage to dilate the rectal sphincter; but as a routine treatment, advised by some quack for a cure-all, it is just like the rest of the quackery, and should be let alone.

Rattlesnake Cure of Epilepsy.—" Is epilepsy cured by the rattlesnake cure?"

There are reports in some of the medical journals of cures by the rattlesnake venom, crotalin, but I have no personal experience with any cure of this kind, neither acquaint-ance with any one who has witnessed such a cure. This does not mean, however, that such cures do not take place. It is well to keep in mind that physicians who introduce a remedy always seem to have better success with it than do physicians after them. As a mother cannot see the faults of her child, the physician cannot always see the failures and the weaknesses of the remedy he has introduced. I note that you have had rather unfavorable results from it.

In every epileptic attack, there are two factors: (1) the epileptic habit — for epilepsy is simply a bad habit the nerves have got into of reacting in a particular way to certain irritants; and (2) some irritation — indigestion, autointoxication, phimosis, growth in the brain, etc. By the removal of the irritation, the attacks may be greatly reduced, or in some cases relieved entirely. The constant headache complained of in this case may indicate some brain tumor, and there is a possibility that an operation on the skull might relieve entirely the epilepsy.

A paper published in the Journal A. M. A. (March 2) by Dr. John F. Anderson, director of the Hygienic Laboratory, United States Public Health Service, records one death as a result of sepsis from the use of crotalin. In order to be sure that it was the crotalin solution that caused the infection, the other ampoules of the drug were examined, and were found to contain the same germ found in the pus of the patient who died from the crotalin injection.

It would seem that, as put up, there can be no assurance that the crotalin solution is germfree, and one using it may be jumping from the frying pan of epileptic fits into the fire of a general and fatal septicemia. It would be well for any one who contemplates making use of crotalin to give Dr. Anderson's article a careful reading.

Editorially the same issue of the *Journal* expresses the opinion that it would be wise "to leave the crotalin treatment of epilepsy in the hands of its adventurous author for administration to those unfortunate victims of epilepsy whose desperation has led them, knowingly, to assume a great risk with a very small promise of benefit."

Tetter.—" What remedy would you recommend for tetter?"

It would be necessary to know what you mean by tetter. This is a somewhat general term for skin troubles characterized by blisters, or vesicles,— such troubles as ringworm, eczema, psoriasis, and herpes. There are temporary skin troubles that get better of themselves, such as herpes labialis, or cold sore. There are others that are most persistent, and should have the attention of some physician who has given especial attention to the skin. Often the skin trouble is only a symptom of internal disease, and the treatment should be constitutional. Eczema is the most common skin disease. It is rather persistent, and as a rule requires both local and constitutional treatment, including a regulation of the diet.



American Red Cross Textbook on Elementary Hygiene and Home Care of the Sick, by Jane Delano, R. N., and Isabel McIsaac, R. N. Prepared for and indorsed by the American Red Cross. \$1.00. P. Blakiston's Son & Co., publishers, Philadelphia, Pa.

This is about the most compact compendium of what is established and essential regarding the prevention of disease and the home care of the sick that we have seen. As its name in-dicates, it is a textbook for class work, but it is also admirably adapted to private study and home use. Such a book as this put into every family, with at least one member interested in its study, would have a potent influence in the reduction of disease and death: for a large proportion of the sickness that oc-curs is preventable. If the public knew just how disease is transmitted, and what precautions should be observed in order to prevent such transmission, sickness would largely be eliminated. In proportion as the mass of the people become intelligent on this subject, we shall have a lessening of preventable disease. There are few families who would not be benefited by the chapters in the last part of the book on the home care of the sick.

A bibliography of literature on hygiene, including the government pamphlets, adds to the

value of the book.

Physical Training (Junior Course); Swedish Exercises, Games, Swimming, Diving,

Advance of Gorgas.—Colonel Gorgas, who cleaned up the Canal Zone, and afterward helped to clean up Guayaquil and then gave his attention to the sanitation of South Africa, has been made surgeon-general of the United States Army, with the rank of brigadier general.

Enamel Ware and Appendicitis.— Owing to the fact that in cases of appendicitis, small pieces of enamel ware are often in evidence, the Council of Hygiene of the Department of the Seine (France) asked the chief of police to prohibit the use of enamel ware utensils. But it was found that as the law now stands, such a prohibition cannot be made.

Patient Swallows Radium.—A patient in a Vienna hospital for cancer of the tongue was given a radium tube to hold in the mouth, with instruction not to eat anything while the tube was in the mouth. At the end of a four-hour sitting, the tube could not be found. The woman denied having swallowed it. The X ray was brought into requisition, showing the \$3,000 tube in the woman's duodenum. As it was feared that the radium might do considerable damage to the mucous membrane and the abdominal organs, if left to take its own course, the woman was immediately operated upon, and the radium tube removed. She

Life-Saving, by E. John Solano. 75 cents net.

Physical Training (Senior Course); Swedish Exercises, Athletic Sports, Swimming, Diving, Life-Saving, by E. John Solano. 75 cents net. The Bobbs-Merrill Company, publishers, Indianapolis, Ind.

Some physical culturists believe in the superiority of gymnastic exercises, others prefer athletic exercises. Solano believes that the best results are obtained by a judicious combination of the two; and in these two books he gives attention to both.

The gymnastic exercises are after the Swedish system. The tables of exercises progress gradually from the more simple to the complex. Every exercise is made plain by illustration and description. The games have been selected for their recreational character. In both volumes instruction is given in swimming and in life-saving methods.

The junior book has considerable space devoted to games, the senior book to athletic sports,—obstacle running, marching, and the like. Both have ample space given to calisthenics.

Both books, being intended for class work, have chapters with special instruction for physical directors. There seems to be more duplication of material in the two books than is necessary.

made a good recovery, and will probably be more careful in the future not to swallow a tube of radium.

Saving Infant Lives.— The Seventh Annual Report of the New York Milk Committee states that in the last seven years forty-one thousand baby lives have been saved in New York by the combined activity of public and private philanthropies. That is the population of quite a little city. Moreover, we can be sure that where life has been saved, the health of many more has been improved. The work of the milk commissions is partly to insure that mothers may get pure milk, or at least safe milk, at a reasonable price, through the various milk stations, and partly to educate mothers in regard to the care and feeding of babies.

Creating a Necessity.—Sir Isaac Newton is reported to have said, "I will make no necessities for myself." He was wise. Every added necessity is an added slavery. The man who forms a habit to which he must ever after pay a tribute in money and health, is paying exceedingly dear for the comfort he gets out of it. The man with the fewest necessities, the fewest habits, the fewest slaveries, is the most normal, the most efficient, the most happy in the long run. Why deliberately create a necessity by forming a narcotic habit?



Synthetic Milk.—It is announced from London that a process has been perfected for making synthetic milk from the soy bean.

Effort to Banish Cigarettes From Canada.

— Mr. Andrew Broder, M. P., has been preparing a bill to prohibit the importation, manufacture, and sale of cigarettes in Canada.

Liquor and Tobacco Legislation in Canada.— The Dominion parliament is attempting to pass legislation curtailing the manufacture and sale of alcoholic liquors. There is also a measure on foot to prohibit the importation and sale of cigarettes.

Not Vaccinated, Got Smallpox.—Of fortyone smallpox cases which occurred in Chicago between January I and March 14, thirty-six had never been vaccinated. The other five, ages ranging from twenty-six to fifty-seven, had been vaccinated in early childhood. Of the last twenty-one smallpox victims, nineteen had never been vaccinated. Significant!

Railway Sanitation.—For several years the Baltimore and Ohio has maintained rigid regulations to insure the healthy condition of employees of the dining car department, who handle the food served on the trains. All cooks, waiters, and other employees are examined by a company physician when they enter the employ, and they are required to submit to periodical examinations to show that their health has not been impaired.

General Safety Committee.— The Baltimore and Ohio system has a committee whose work is to safeguard the lives and the health of the employees of the road, and also to supervise the sanitary conditions of passenger trains. An educational campaign is conducted by this committee to impress on employees the importance of cleanliness. The course includes instruction in the prevention of the spread of communicable disease, and in social hygiene.

Saving to a Purpose.— A manufacturer of piano players in England, seeking for prospective customers, has suggested that smokers cut down their tobacco bill by half, and with the money thus saved, purchase a piano player on installments. It could be done. There are many very desirable things that might be added to the home for the price that is paid for tobacco. The smoker does not notice at the time the amount that is paid for a package of cigarettes, but let him reckon what it would amount to in a year, and see what he might have that would be a joy without the sting. There are musical instruments, new furnishings,—a thousand and one things that the wife would dearly like to have in the home,—all sacrificed on the altar of the tobacco habit.

Vitamines.— A German has published a book in which he has shown or attempted to show that certain diseases, such as scurvy and beriberi, are due to the absence in the food, not of minerals, but of "vitamines," substances allied to the amines or "building blocks" of which proteins are composed. He believes that pellagra is caused by the lack of some vitamine in the food. In a recent editorial, the Journal A. M. A. has expressed itself rather pronouncedly against the theory of the infectious nature of pellagra and its transmission by insects, on the ground that the evidence in favor of this theory is wholly inadequate.

Hereditary Morphinism.— A mother who had been in the habit of using morphine, about six grains a day, to allay the pain of menstruation, was delivered of a healthy, well-nourished child. The attending physician, knowing that the child had doubtless been receiving morphine from the mother's blood, was doubtful whether to attempt to withhold the drug from the child. The only thing noticeable the first day was the infant's repugnance to the breast. The second morning it began to manifest symptoms due to the lack of its customary stimulant, such as refusal to take food, irritability, fretfulness, and tremor. Small doses of the drug quieted the child. But what a risk for a mother to take with her unborn babe!

Testimonials Unreliable.— It has been said - was it by Captain Marryatt? - that one could get exceedingly strong testimonials to the efficacy of brick dust as a medicine. The experience of the United States Post-office Department in its efforts to prevent the sale of fraudulent medicines shows that this statement is no exaggeration. It seems that there are more fraudulent cancer cures than almost any other kind of fraud. One of these on analysis proved to be composed of water with a very small quantity of quinine in solution. The makers announced that it contained a very large quantity of radium, so large an amount, in fact, as to be in excess of all the known quantities of radium in the United States; the mixture would have been worth several million dollars if the assertions of the manufacturers had been true. The manufacturers were denied the use of the mails by fraud order, but for more than eighteen months after this order was issued, the Post-office Department was bombarded with letters from people who asserted that they had been benefited by this cure, and begged the department to vacate the fraud order and allow them to obtain the only medicine that has saved their lives. In view of such faith, it need not be a matter of surprise to physicians that the advocates of drugless therapy of all kinds have their following.- New York Medical Journal, March 14, 1914.

A Good Issue.— The Journal of the Outdoor Life is always worth while to those who are in any way interested in tuberculosis; and in mentioning the April number as "a good issue," it is not to contrast it with other issues. Three articles in this issue are well worth attention: "The Effect of Habits of Posture on Health," "How and When Do We Contract Tuberculosis?" and "The Home Treatment of Pulmonary Tuberculosis."

Plague in Cuba.— In March two cases of plague were reported in Havana, Cuba. Since it is known exactly how plague is transmitted, such a report is not of so serious a significance as it would have been in former times. Thanks to the Public Health Service, there is little chance that this country will be endangered by the presence of plague in Cuba. A more serious problem is the extermination of the disease among the rodents of this country, and the antirat campaign. The rat is a constant menace and a destroyer of property, and should be exterminated. The same is true of the ground squirrel.

Rheumatic Heart Disease in Children .-The editor of Pediatrics calls attention to the danger of heart complications to rheumatism in children. He says: "In childhood and youth the articular manifestations are slight, but in spite of [the absence of] any marked symptoms, the heart rarely escapes, and owing to the insidious nature of the inflammatory process irreparable damage may be done before the severity of the cardiac symptoms compels the patient to seek medical advice or take his bed." In all joint troubles of children, call them "growing pains" or whatever you like, a physician should be consulted in order to have the heart carefully examined for the first indication of inflammation. With the first indication of heart trouble, the child should be given absolute and continuous rest in bed until the danger is over. Otherwise there may be a crippled life and an early grave.

Health Conditions Among Negroes.—A conference was called to be held in New Orleans the latter part of April to consider the betterment of health conditions among the Negroes. The call was issued by the Louisiana State Board of Health. The purpose was to have the health authorities of the South agree upon a plan of concerted action. It is a notorious fact that the mortality and morbidity rates are excessively high in the South, and this fact tends to give an impression that the climate of the South is unhealthful. But as is known, the death rates among white people of that region compare favorably with other parts of the country. The high death rate among the Negroes raises the general average; and the important causes of sickness among them are ignorance and indifference, prejudice against preventive measures, the custom of the promiscuous visiting of the sick, and abomi-nable housing conditions. The remedy seems nable housing conditions. The remedy seems to be threefold, hygienic instruction of the Negroes; municipal or civic oversight of the housing conditions; and the enforcement of sanitary rules relating to cleanliness, spread of contagion, etc.

Smoking on Street Cars. - Sooner or later every city large enough to need street cars has to settle this question: Should or should not smoking be permitted on street cars? In all cars of the closed type, the most prevalent kind, when smoking is permitted it is usually limited to the front or rear platforms. As passengers need to use both the rear and the front platform in boarding and leaving cars, the condition of these parts of the car is a matter that directly concerns the public health. While many cities have antispitting ordinances, these laws are, in the majority of instances, more honored in the breach than in the observance. As a result, the street car platforms where smoking is permitted become both an offense to the eye and a menace to health. Where smoking is allowed on the front platform, and particularly in that type of car that has the front platform inclosed, the motorman works from morning until night in a tobacco-smoke-impregnated atmosphere, while the passengers who leave the car by the front platform have to pass through this ex-pectoration-decorated "fume chamber." When the question, Shall smoking be abolished on street cars? comes up for settlement with any city, there can be only one answer. From the point of view of hygiene and common cleanliness, to say nothing of the comfort of the majority, smoking on street cars is an indefensible nuisance. - Editorial, Journal A. M. A., Feb. 14, 1914.

Quinine and Malaria.- H. R. Carter, Senior Surgeon United States Public Health Service, has an article in *Public Health Re-*ports for March 27, on the use of quinine as a preventive of malaria. He cites instances in this and other countries, and gives statistics, showing the remarkable reduction in malarial deaths in localities where quinine has been used as a preventive. In his summary, he says: "The use of quinine in small doses is an efficient method for preventing malarial fever. This method is especially adapted for use in farming communities where it is not practicable economically to get rid of malarial mosquitoes or to properly screen against them. This is practicable everywhere, at all times, and by almost every person. In malarious States it should be taken in doses of from five to seven grains by grown persons, two to three grains by children - less if small - during the malarial season, say, June to November. Somewhat smaller doses will be efficient in places where malaria is not bad. If begun in March or April, it would prevent a certain number of relapses. In these doses thus given it does no injury of any kind to those taking it, and it does not produce blackwater fever (hemorrhagic malarial fever) nor cause such attacks of malaria as do develop to be more difficult to cure by quinine." Those living in malarious districts would do well to send five cents (in coin, not stamps) to the Superin-tendent of Documents, Washington, D. C., for a copy of Public Health Reports for March There may be a question whether quinine in five-grain doses daily is entirely harmless, but certainly it is less harmful than an attack of malaria.

Pushcart Men Examined.— In New York City all applicants for licenses to run pushcarts must have a medical examination; and in cases where tubercle bacilli are found in the sputum, license is refused.

Low Diphtheria Death Rate.— The health officer of Erie, Pa., reports a very low death rate from diphtheria, and recovery with fewer bad permanent results than was formerly the case. He attributes this to the fact that anti-toxin is being used earlier and in larger doses than formerly.

Stimulating Effect of X Ray.— Dr. Schwartz, a German scientist, has shown that the X ray has a strong stimulating effect upon living tissue; but this stimulating effect upon living tissue; but this stimulating effect may be harmful as well as beneficial. Plants subjected to the rays for half a minute showed no apparent effect; five-minute exposures injured the plants; but plants subjected to a two-and-one-half-minute exposure were so stimulated that at the end of three weeks they had grown to twice the size of similar plants that had not been so treated. On the human body he found that a few X-ray treatments sufficed to heal up sluggish wounds that had lost vitality and the power to heal. It should be remembered, however, that, as in the case of plants, the X ray may do harm to the human body as well as good. Used as a cure for cancer, it has itself caused incurable cancers in healthy tissue.

Flies in London.—We had been informed that "the fly is not a problem in London." It would seem, however, that it is a problem, though not so serious, perhaps, in the West End since motor vehicles have largely supplanted horses in street traffic. But especially in rural England the health officers are appealing to the public to cooperate in a campaign of fly extermination. So the fly is not yet an archeologic curiosity confined to museums of the little isle.

A Savings Account.— Many of those who are self-supporting live so near the line that if sickness or accident occurs, they must either accept "charity" or secure money at an exorbitant rate from a pawnbroker or a loan shark. Many of this class are much better acquainted with loan establishments than they are with savings banks. And why? Is it that they must use up every week their entire earnings on necessities?—Not usually. In nearly every case, a part of the earnings is spent on beer and tobacco. If this class could but realize that these things are not necessities, and could feel it a necessity to have a growing savings account, it would increase their self-respect, their self-confidence, and their worth as citizens. Banks provide means by which the pennies and nickels can be saved until they total a dollar, which may be deposited. A nickel invested in a deposit stamp is capitalized; a nickel invested in tobacco is gone forever.

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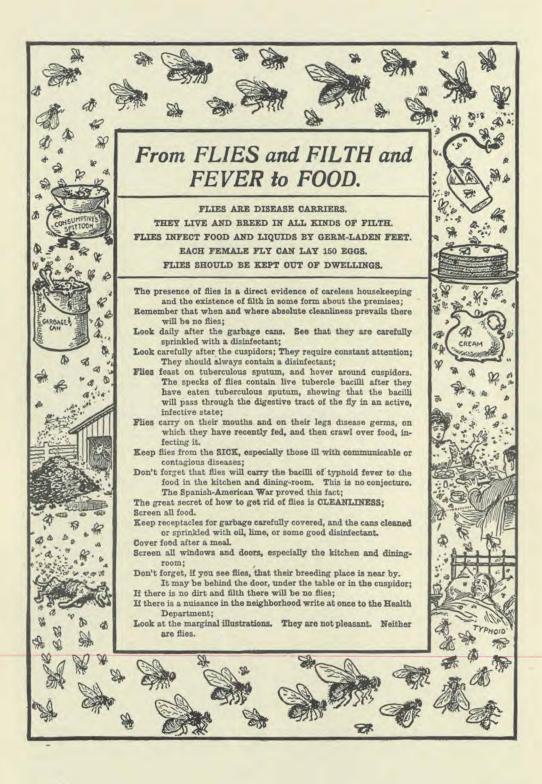
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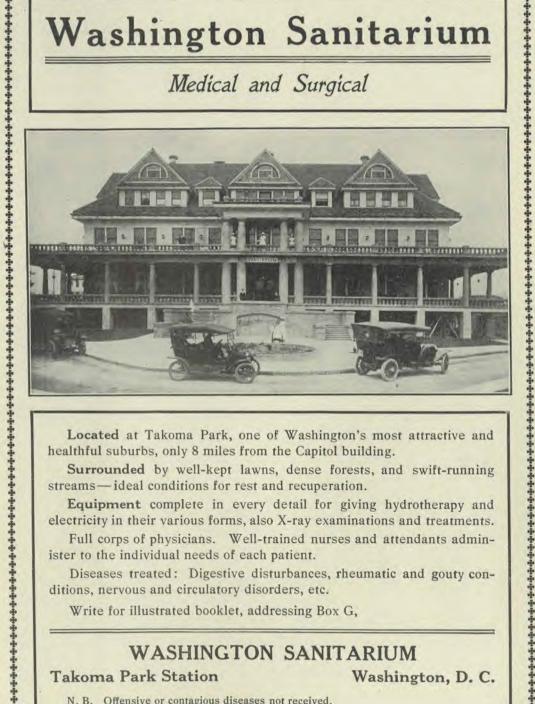
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Almost a Man, by Dr. Mary Wood-Allen. 50 cents.

What a Young Boy Ought to Know, by Sylvanus Stall, D. D. \$1.00.

For Young Men

What a Young Man Ought to Know, by Sylvanus Stall, D. D. \$1.00.

What a Young Husband Ought to Know, by Sylvanus Stall, D. D. \$1.00.

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Confidences: Talks With a Young Girl Concerning Herself, by E. B. Lowry, M. D. 55 cents.

Almost a Woman, by Dr. Mary Wood-Allen. 50 cents.

What a Young Girl Ought to Know, by Dr. Mary Wood-Allen. \$1.00.

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The foregoing books are highly recommended by physicians throughout the country. One of the most important periods in a person's life is when a boy or girl is blossoming from boyhood or girlhood into manhood or womanhood. Their future usefulness and happiness depends to a large degree upon proper instruction at such a time. The books here mentioned have been a great boon to many.

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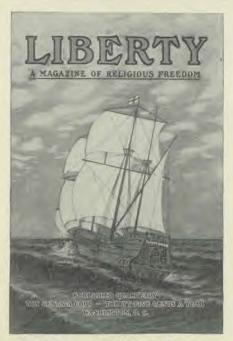
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