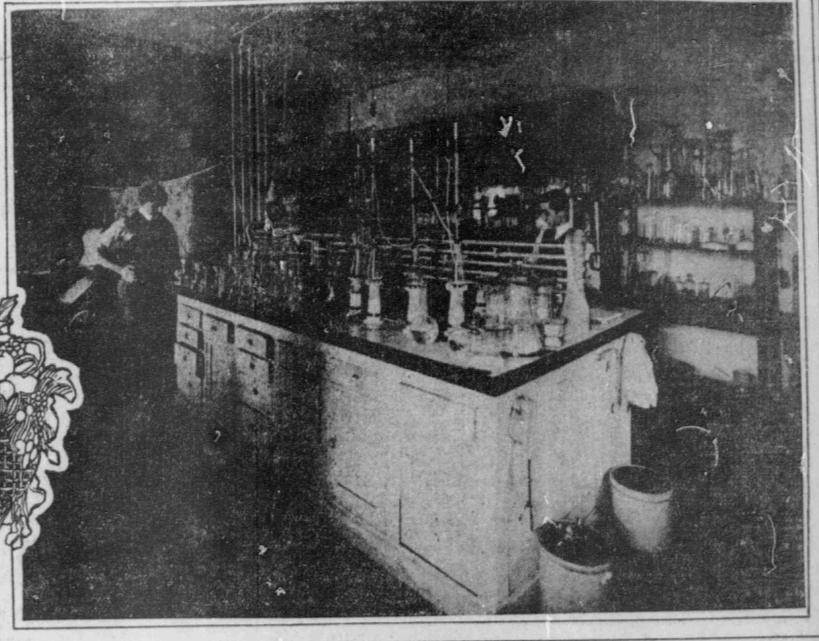


The Man Who Is Leading The Fight For Pure Food.



Chemical Laboratory Dept. of Agriculture



Another View of Laboratory



Relentless Foe of All Who Deal in Adulterations.

Earnest Work to Safeguard Public From Frauds.

Gets Many Letters and Keeps Some Upon a Funny File.

The last shot in the pure food war will be fired in the next session of Congress if the hopes of Dr. Harvey W. Wiley are realized.

A bill empowering the authorities to examine and pass upon the purity of all domestic foods introduced into the States and Territories of this country comes before the Senate for vote. Already it has passed the House. If it becomes a law the chain will be complete, and hard will be the way of the transgressor. For there is a law already in effect which provides for the inspection of suspicious foods imported from foreign lands. With the proposed interstate law in working order the people of the United States will be assured protection against manufacturers both European and American. What a great benefit this will be can only be realized when it is known how many hundreds and thousands of frauds have been perpetrated here by the adulteration and false labeling of foods imported and manufactured in this country.

If all the ills that flesh is heir to originate in the stomach, as many medical men would have us believe, it certainly behooves the great American people to be more careful what they eat. Already they have come to such a pass that many of them live on pre-digested food and have prehistoric theories about eating only once or twice a day.

"It has been my ambition to live long enough to see the American people assured pure foods," said Dr. Wiley to a Times reporter, "and I hope that a few weeks will see its fulfillment. For more than fifteen years I have worked to accomplish this end."

Dr. Wiley, the "pure food man," at whom all manner of fun has been poked by the joke makers, is by no means a joke. When he took up the gauntlet thrown down by a crowd of greedy parasites who were making huge fortunes by selling to the public foods that were not what they seemed, he determined to quash their nefarious practices. This work has been arduous and apart from the large amount of purely scientific investigation which has been carried on by the doctor as head of the Bureau of Chemistry of the Department of Agriculture.

"In the fifteen years of work we have covered and are covering all kinds of foods and drinks," continued Dr. Wiley. "The results of these investigations have been published in Bulletin 13, which, when completed, will have thirteen parts. Let's hope that this combination of numbers will bring hard luck to the fraudulent dealers. We began with dairy products and are ending with hard drinks. And apropos of these same hard drinks, I would say that I do not object to the sale of Scotch whisky in this country nor to the sale of domestic whisky either, but what I do insist upon is that what is sold as whisky shall really be whisky."

"My personal experience with Scotch whisky is rather limited, for I do not drink it. When I was in Edinburgh I bought a bottle of the genuine stuff, intending to bring it to this country for examination and comparison with the article sold here. I packed it carefully in my valise, but that was the last I saw of it, for my traveling companion drank it all, and left only the bottle. But there is no doubt that much of the Scotch whisky sold in the United States is made of alcohol manufactured in, say, Peoria.

Has Manufacturers on the Hip.

"The manufacturers are compelled to label all their products truthfully, people will know exactly what they are getting. And this is just what we have been working for so long. The consumer will get what he wants, what he asks for, and what he pays for. The consumer is protected from the cheat and the manufacturer is prevented from

cheating. In spite of the rumors to the contrary, there has been little direct opposition on the part of the manufacturers to the enactment of the pure food laws. In the first place, to oppose laws that are on the surface only fair and just to the public would be a decided back eye for the man who was trying to put food stuffs on the market for consumption by that same public. Nor will these pure food laws materially affect the commerce of the country except in a direction which should commend itself to all.

"The work on the pure foods has been along two separate lines—chemical experimentation and the determination of what were and what were not pure foods, and the framing and carrying through of the laws which should govern the sale of the foods. A great deal of the hard work has been necessary to organize the work of investigation along scientific lines, and to perfect the executive organization. But this is usually the case with the establishment of any new line of work. There have been discouragements at times, but the work has progressed, and I hope to turn it over to my successors on a firm basis."

Ten or fifteen years ago Dr. Wiley used to spend a great deal of his time in the laboratory, giving the examination of the foods his personal attention. But today he does comparatively little of the actual laboratory work, though he has entire supervision of the work, and makes frequent visits to the work rooms, and test tube in hand, helps the chemists with their experiments. The chores working on the pure food experiments now numbers more than twenty-five, and there are five separate laboratories in the Bureau of Chemistry which are used solely for these investigations. In addition to these rooms are the kitchen and dining room, which are used for the members of the "training table," of which Dr. Wiley is the host.

Test Table Again in Operation.

"We have just begun the table again," said Dr. Wiley. "The men are eating specially prepared foods, with a view to learn the effect of food adulterants similar to borax."

"No, we are not feeding them upon cold storage food exclusively. I expect to make experiments with cold storage food, but there will be no special table started for them. The frozen foods will be tried on special subjects at different times. By the way, I am not making war on cold storage, for I consider it a great boon to mankind that has been wonderfully perfected in the past few years. The experiments are only to see how far cold storage can be used safely. I have some food in view now which has been in cold storage for two years. This will be tried at the earliest opportunity. It appears to be in good condition."

"The work with special tables for food experiments is only in its second year. It has proved a valuable addition to the experimentation with foods. Last year when the table first started I used to do all the marketing myself even saw to the weighing of all the food that was used on the table. But now I have given this work to my assistants. The executive work of the bureau occupies nearly all of twelve or fourteen hours of my day. And of this at least half of it is taken up in interviews. Sometimes I spend whole days listening to arguments of amateur chemists, answering questions of all kinds and being interviewed by newspaper men."

"A very large percentage of the food frauds which have been practiced upon the unsuspecting public are those of false origin. I mean a manufacturer or dealer will sell goods made in one State or country as from some other State or country. A case of this kind came into the office today. A shipment

of olive oil was received at New York labeled Italian, whereas the customs officers have strong suspicions that the oil originally came from Spain. Of course, it is to the dealer's advantage to say that the oil is from Italy because oil from that country is supposed to be the best in the world. If the importer can sell this oil as Italian oil his profit will be much larger than it would be if the oil was put on the market as Spanish oil. That is a sample of what is attempted time after time. Is there any wonder that some law is necessary to prevent such hoaxes, and to prevent the cheating of the public?"

"Other practices which have been common are the introduction of adulterants to food stuffs and the sale thereof without any mention of the fact that these adulterants had been added, the substitution of foreign matter for valuable constituents, and the use of coloring matter. The law passed at the last term of Congress in regard to the inspection of imported foods has reduced such frauds to a minimum in imported foods and if the present bill goes through we will have the foods of this country well in hand."

How the Laws Are Enforced.

"Although Congress has not provided for a special corps of officers to examine the foods brought into the country and those manufactured and sold in the various States, nevertheless, we have small difficulty in discovering the frauds. Instruction has been given the customs officials to take care that no impure foods be passed, and if there is any suspicion of fraud samples of the foods are brought to us for examination. They are sent either to the laboratory here, or to the laboratories in New York and San Francisco. Another safeguard we have is in the manufacturers and importers themselves. You may be sure that if their trade is being cut into by the sale of adulterated or falsely labeled food they will not hesitate long before they bring the matter to the attention of the proper authorities. In this way the Government and the manufacturer work together to give the public the best that there is to be had for the money."

Willard D. Bigelow, Dr. Wiley's chief assistant, has direct charge of the experiments which are now being made with foods and food adulterations. All of the analyses recorded in the various laboratories are brought to him for approval and then put on file. The records are as complete as a carefully arranged system can make them. The experiments for which a special table has been started, go into the minutest details. Every morsel of food that the twelve "boarders" eat is carefully weighed before it is eaten and note made of it. Its effect upon the health and weight of the eater is recorded as well. Once a day, before dinner, the "boarders" must strip and weigh in. It might be embarrassing to have every morsel of food you eat carefully examined as to size and weight at any other table than this of Dr. Wiley's, but here everybody is treated the same, and big or little appetites are accommodated to the satisfaction of all, at least in the so-called fore period. Three divisions are made of each series of experiments, namely the fore period, when it is determined as nearly as possible how much food the body needs to maintain it as its normal weight; the preservative period, during which adulterated food is allowed the boarders but the adulterant is left out. The time assigned to each of these periods varies, and the total time of the experiments varies from thirty to seventy days. The object of the after period is to restore the "boarder" to his condition precedent to the beginning of the experimental period. If there has been any evil change in his physical condition,



Class Which is Experimenting With Refrigerated Foods

Three times a day the guests of the Bureau of Chemistry assemble in the basement of the bureau's headquarters at Fourteenth and B Streets southwest, where a dining room has been fitted up. They are not loafers, even if they are getting their daily bread free of charge, and they give a good imitation of "Johnny-on-the-Spot" every morning at 8 o'clock, the breakfast hour. Luncheon comes at 12 midday, and dinner at 5:30 in the afternoon. The members of the "hygienic table" of the Bureau of Chemistry, as it is officially named, must be on time, as the food has to be weighed, and if they are late they get cold meals. The bill-of-fare is made as varied as possible, as the men are kept under observation for such a long time. Roast beef, beef-steak, lamb, veal, pork, chicken, and turkey are among the meats selected. Fish, oysters, and eggs also have places on the list. Butter free from coloring matter and salt is used. Eggs, milk, and cream are carefully selected from dairies inspected by the authorities of the District of Columbia. The vegetables of the season are chosen for the table, or if they cannot be had, vegetables preserved by sterilization alone. Fruits, coffee, and tea, in small quantities, make up the rest of the bill-of-fare. A rotary bill-of-fare is only duplicated once every seven days.

The men at the table are not watched or spied upon. They are simply put under their honor to follow the rules laid down by Dr. Wiley, and when they leave the table for a period of recreation they are required to sign a paper to the effect that they have faithfully observed these rules. One thing that the experimenters insist upon is that the men shall not have the blues. Every physician is familiar with the marked effect the mental attitude has upon the bodily health. They may be either favorable or unfavorable. Cheerful surroundings and good company have a lot to do with the good health of every man. It has been impossible to make the experiments without telling the boarders what was going on, and thus avoid all effect that the knowledge they were eating adulterated food might have upon them. In order to prevent the men from taking a dislike to any particular food in which the adulterant was placed, the adulterant has sometimes been placed in a capsule and given to the men at meal times. Then they felt a keen relish for all the foods put before them.

Formaldehyde Tests.

In the present tests formaldehyde has been substituted for borax. It is probably the most widely used food preservative in this country next to borax. These experiments will be of especial interest to the milkman, for it is in milk that formaldehyde is principally used. There have been vegetables on the market in which this preservative was used, but they have been few and far between. So as not to force every man to be a milk drinker irrespective of his tastes, the food which is used at the table is

adulterated according to the desired amount.

Speaking of the borax experiments and of the effect of such adulterants upon the human system, Dr. Wiley said: "In the consideration of the action of preservatives of a mineral nature, such as borax, or boric acid, it must be remembered that the animal as well as the plant possesses a certain mineral hunger. These minerals serve as real foods and also aid the functional activity of the various organs."

"But it is admitted by all who have examined the subject in a critical way, even by the users of preservatives, that in certain maximum quantities the limit of toleration is reached in each individual and positive injury done. But it is also well recognized that many, if not all, of the usual foods when used in large excess produce injurious results. The many cases of disease produced by over-eating, or by eating improperly prepared or poorly cooked foods, or by eating at unusual times, are illustrations of this fact. Upon this basis and upon the further statement that when used in extremely small quantities the preservatives in question cannot be regarded as harmful, it founded the principal argument in favor of the use of the preservatives, aside from the fact that the foods themselves are kept in a better and more wholesome state."

"If, however, the question of borax is decided in favor of its use as a preservative of foods, the principal is established that all similar preservatives may be used with impunity. Now, while it might not eat enough preserved meat to do him harm, yet if all the other foods he eats held similar adulterants he might be seriously injured."

Public Safeguarded by Labels.

"It appears, therefore, that there is no convincing force in the argument for the use of small quantities unless it can be established that there is only a single preservative used in foods, that this preservative is used in only a few foods, that it will be consumed in extremely minute quantities, and that the foods in which it is found are consumed at irregular intervals and in small quantities. On the other hand the logical conclusion which seems to follow from the data at our disposal is that boric acid and equivalent amount of borax in certain quantities should be restricted to those cases where the necessity thereof is clearly manifest, and where it is demonstrated that other methods of food preservation are not applicable and that without the use of such a preservative the deleterious effects produced by the foods themselves, by reason of decomposition, would be far greater than could possibly come from the use of the preservative in minimum quantities. In these cases it would also follow, apparently, as a matter of public information and especially for the protection of the young, the sick, and the debilitated, that each article of food should be plainly labeled and branded in regard to the character

and quantity of the preservative employed.

When Dr. Wiley pronounced most of the Scotch whisky sold in this country creosote, raw alcohol, and water, the native distillers and dealers in the great American beverage threw up their hands and crowed for joy. But no prophet not even a weather prophet, and Dr. Wiley specifically followed in the footsteps of his illustrious predecessors. He put his foot in it, metaphorically speaking, when he declared that the greater part of the American whisky sold in this country is no better or purer than the so-called Scotch brandy.

"Not less than 85 per cent of the whisky made in the United States is impure," said Dr. Wiley. "Probably an examination of the whole would show an even greater proportion adulterated. We are now collecting samples of whisky made in various parts of the country, and will make an examination of them later. Merely a chemical examination," added the doctor, with a dry smile. "We shall not run an experimental table for determinations along this line."

How the Rectifiers Take It.

Since Dr. Wiley made his accusations against the American article, there has been a howl from the manufacturers all over the country that has nearly deafened the department. Especially have the voices of the rectifiers been raised in a shrill chorus. For it is they who furnish the great part of adulterated whisky. One indignant party writes in these by no means uncertain terms: "The rectifiers of the country pay into the United States Treasury more than \$130,000,000 annually. They do more than any other industry to support the Government of the United States. It will be found that your policy is shortsighted and inimical to the Government's interests, and we believe that you have outlived your usefulness."

This came from a prominent firm of whisky men, and there have been others. Those interests have frankly served none on Dr. Wiley that they will do their best to separate him from the Government service as soon as may be.

Furthermore the rectifiers hotly claim that their product is as good as any whisky produced.

Dr. Wiley could make his fortune now by leaving the Government service, connecting himself with a whisky house, and giving some particular brand his unqualified indorsement. For he has received letters from all parts of the country beseeching him to do this. A letter from Gen. Lew Wallace, author of "Ben Hur," said in part: "Won't you be good enough to tell me where and of whom I can get some really pure rye whisky? I am in need of a supply of the article, not for merchandise, but to put down in my cellar for the sick, and of that of my friends." This letter is a fair example of a flood of them, daily pouring in.

Famous Poison Squad Is Not Composed of Loafers.

Crusader Reviews Work That He Has So Far Achieved.

Last Shot in War to Be Fired at Next Congress.

But the peculiar letters which come into Dr. Wiley are not all from those who are interested in the whisky question. He gets advice, that cheapest of human commodities, from all sorts and conditions, of men and women. The notice that he was going to start a table for special food experiments drew hundreds of applications, and still draws them. One man whose specialty has hitherto been "wild and farm lands" in Wisconsin and the Dakotas wrote as follows: "I have observed from time to time articles in the newspapers in regard to your experiments with preservatives for foods by tests upon persons under your charge and direction, and now it occurs to me that you might wish some 'new boarders.' And, if so, will you kindly inform me under what arrangements I would offer myself. I am fifty-two years old, in good health, young in appearance, being taken as perhaps forty or so years old. The land business has been only a temporary affair with me, and the office work in which I have been employed has failed. So I would look upon this as a new job."

A member of the West Side Athletic Club in New York, who runs better than he writes, wrote to Dr. Wiley in regard to some tests of tobacco which the Department of Agriculture made. It read: "Reading about the experiments you are going to make on tobacco users, I would like to be one of your subjects. I have used tobacco for about ten years, and never found any ill effects from it. I have used it continually while training I can run from one to twenty-five miles without stopping. Could you have me run every day and put what effect tobacco would have on me I think I would make an interesting subject. I have got an open challenge to run my amateur runner in the country a 12 or 24-hour race, hoping to hear from you, I remain, etc."

A Poet on Borax.

One of the most amusing letters on Dr. Wiley's files came from a Massachusetts sage. It was on the subject of borax that he tackled the department. "I am poet, novelist, archeologist, former, etc., about thirty, and have had I have studied long and faithfully on soda and borax and this is why I write to you. I know of the experiments being tried in your department and I can help you. I can enchain a cadaver as it was done 4,000 years ago, but I will dissolve all the fluids, lubricants, mucus in the body, leaving only a little of the muscles and tendons on the bones like leather. Borax is one form of soda. Borax is a devil; boric acid worse. "I am sorry our country is ruined so by trusts, monopolists and butchers and R. R. magnates. People will begin soon to call things by their right names." The poet in him could not help breaking out and he added these verses, which he called "An Address to Congress."

"Of all the devils in this world of grace Perhaps the trust-fund takes the strongest place; The strike-fund is a power far from small; Perhaps the borax-fund will beat them all."

"When the trust Judas tries the state to block, Taking his millions out of watered stock, It is not public policy I see, High treason is the name that comes to be."

"The public Judas will all trades control; Behold and see; a Congress without The people freeze and they begin to die; We thing of Haman and his gallows high."

"Congress awake! your bleeding country calls; Congress awake! you freeze in your own halls! Congress awake! be to the people true! The would now demand this right of you."