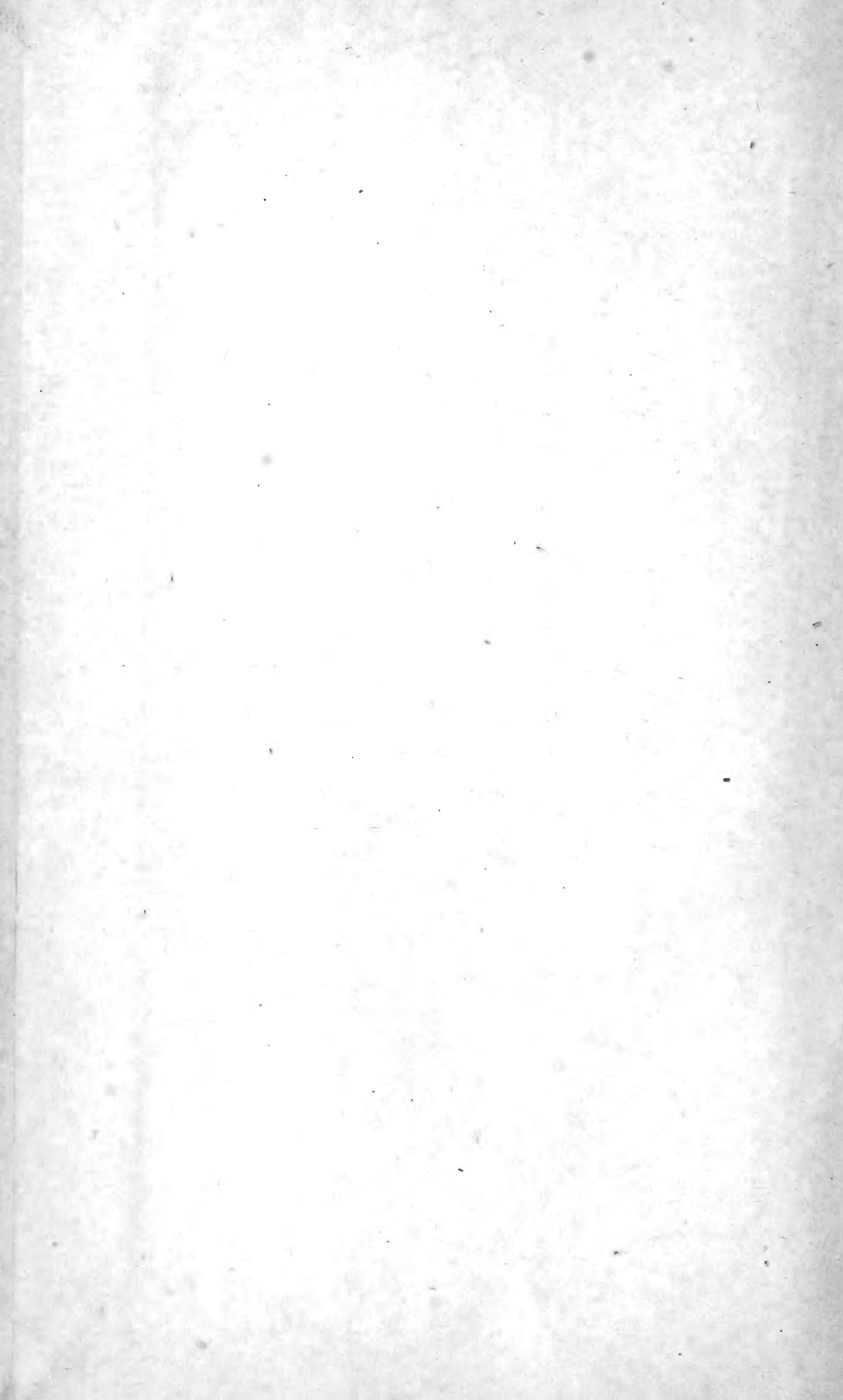




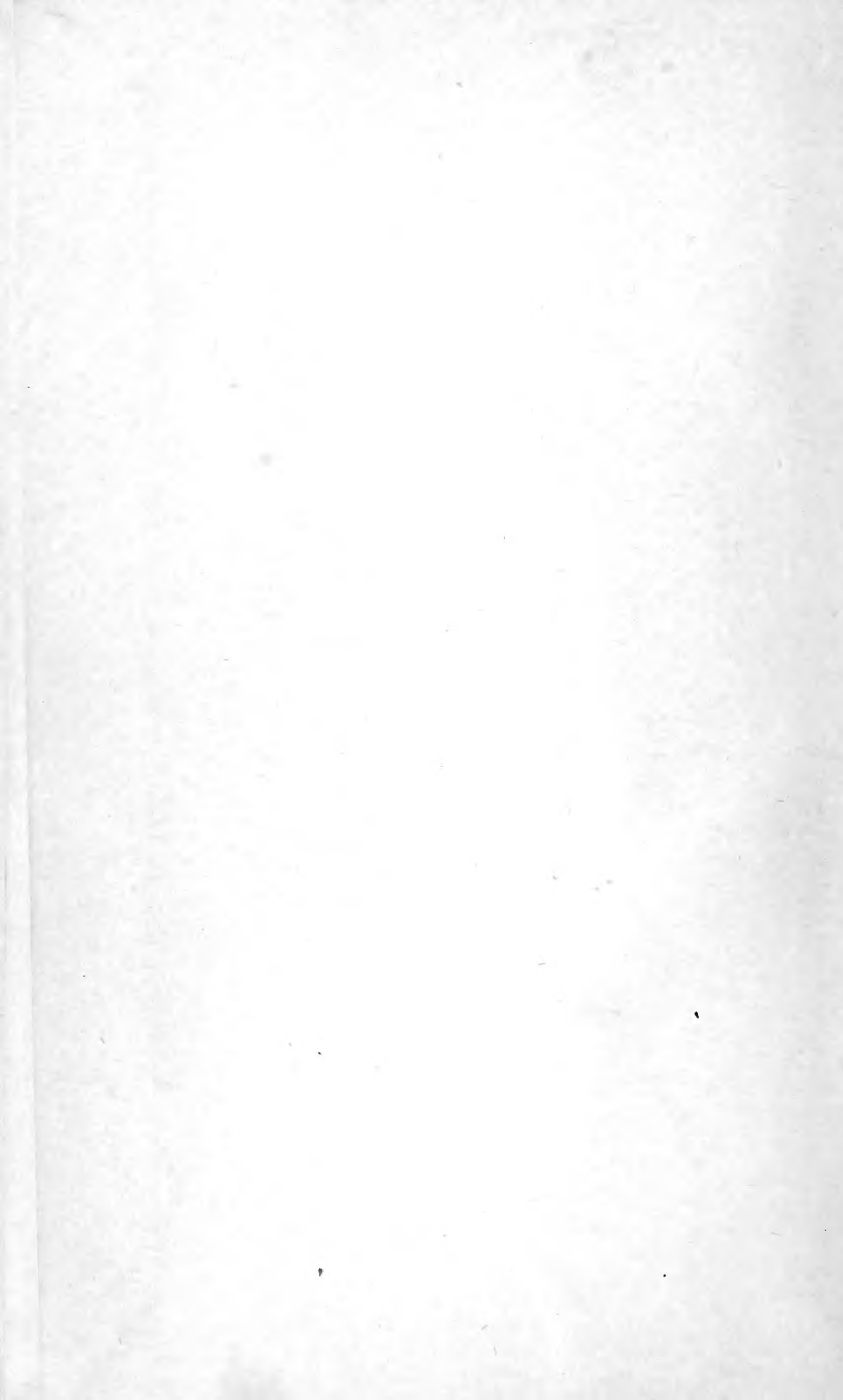
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IMITATION DAIRY PRODUCTS.

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Statements made before the Committee on Agriculture and Forestry of the United States Senate in regard to the bill (S. 1837) to prevent the illegal sale of all imitations of dairy products, and for other purposes.

WASHINGTON, D. C., April 28, 1886.

The committee was called to order at 10.30 o'clock a. m.

The CHAIRMAN (Senator MILLER). This is a hearing granted to the representatives of the dairy interests of the country who, being present in Washington, desire to be heard now rather than to wait until the Senate shall receive the bill from the House, if it does receive it. We have a stenographer here who will take down all that is said, and we hope that our friends will make their remarks as concise as possible, and give us facts and data as well as they can. The president of the American Agricultural and Dairy Association of the United States will make a preliminary statement before calling upon the other gentlemen who are present to state what they have to say.

Mr. JOSEPH H. REALL, president of the American Agricultural and Dairy Association, addressed the committee as follows:

Mr. Chairman and gentlemen, we appear on behalf of the measures introduced by the chairman of this committee in the Senate and by Mr. Scott in the House. The bill in the House was referred to the Committee on Agriculture, and has been unanimously agreed to by that committee. In behalf of that measure we have this morning present gentlemen from New York engaged in trade, representing the dairymen as well as the mercantile interest; the president of the Orange County Milk Association of New York; the president of the Holstein Breeders' Association; delegates from New England, representing the New England States; five delegates from Baltimore, Md., and a number of other representatives of the dairy interests, who, with your kind permission, will present to the committee the grievances of the dairymen.

I appear before you myself in behalf of the most important measure to the farmers ever brought before Congress, and than which no question of equal importance has been so unanimously favored by the members of the National Legislature.

The Committee on Agriculture of the House have unanimously agreed upon the measure proposed by the American Agricultural and Dairy Association, placing the manufacture and sale of imitations of butter under the control of the United States Department of Internal Revenue, imposing a license fee upon manufacturers and dealers, and taxing the compounds 10 cents per pound. The bill that will be reported by the Hon. W. H. Hatch, chairman of that committee, meets the wants of the

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producer, protects the consumer, and is not unjust to the few interested in manufacturing artificial butter.

Directly, and through various organizations, I have the great honor and grave responsibility to represent five million dairy farmers, whose lands and cows are depreciating in value day by day, and three millions of their brothers engaged in other branches of husbandry who sympathize with them and are indirectly affected.

I also represent that great body of consumers in the cities and in the Southern States, comprising over half our entire population, who purchase their butter, and who, rich and poor alike, suffer the grossest imposition in this important article of food, chief among whom are the laborers and mechanics who can least afford to be swindled in their purchases.

After having brought a noble industry to the verge of destruction and imposed upon the consumers of butter for years, the manufacturers of artificial butter now raise the cry that they have long harped upon, for fair treatment. Driven to the last ditch they begin to appeal for mercy. Seeing that the dairymen have arisen in their might, and that Congress is in full sympathy with their demands and anxious to afford them every relief and protection, these enemies of honest industry, demoralizers of public morals, and robbers of the people ask for quarter. They offer to accept without opposition all of our bill except the tax. But while thus admitting their dishonesty in the past, they do not offer to reimburse the dairymen for their loss, nor could they do it with all their millions if they would. They do not propose to return to the consumers the millions of dollars out of which they have defrauded them. They do not suggest bringing back to life the innocent people they have killed with the poisonous drugs they have used, nor restoring to health the thousands who now suffer from the diseases they have entailed.

If our measure has a fault, it is in being too merciful. It is a serious question whether or not public policy, public health, and public morals do not require the total extermination of imitation butter. For myself, I believe they do; and if my earnest advice in this direction had been followed when its manufacture began in America twelve years ago, untold loss to the farmers would have been saved, and millions of dollars to the country. But we want to be absolutely fair, and therefore ask only the adoption of our moderate measure.

It is not alone the direct loss from which the dairy farmer suffers, nor can the effect be measured by the profits of the manufacturer. All branches of agriculture suffer through this fraud, for they each sympathize with the other in depression as well as in prosperity, and the influence is extended to all branches of commerce and industry. It has depressed our farming lands and the value of our cattle. It has injured our foreign markets for dairy products and created a suspicion against all our exports. It is curtailing a healthy consumption of food by alarming the consumers. It sets an example of morals before our people that, if followed, would make every man a scoundrel, and this phase of the question, though least considered thus far, is the most important of all.

The general pursuit of the practices of those who sell imitation butter would make us a nation of robbers entitled to the curse of God and the disgrace of mankind. The iniquity of the business cannot be characterized in words, nor can the train of evils following in its wake be enumerated.

If, after selling their stuff for butter for ten years, as the manufacturers admit over their own signatures, and by deception obtaining the price of butter for it, they cannot stand a tax of 10 cents per pound,

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which, added to the low cost of production, makes their stuff cost less than it does to produce butter, they had better convert their factories into some respectable employment, such as soap-making, for which many of the fats they use would be more appropriate.

The country can find use for the tax that may be realized. It can be used in building up our Navy, creating a coast defense, improving our rivers and harbors, promoting popular education, establishing agricultural-experiment stations in the different States and counties, extending the benefits of the signal service to agriculture, creating and conducting a department of agriculture of the national Government, and making a like department of labor and commerce.

The threat is made that the law we propose will not be sustained by the courts on constitutional or other grounds. Give us the law; the courts will sustain it. The first State laws on this subject were excepted to by the courts, but subsequent enactments of even stronger tenor were declared valid under stronger public sentiment. There is a sentiment behind this measure representing the conservative farmers of America that would sustain any law based on right that the State or nation would enact.

In conclusion, allow me to quote a little paragraph that appeared in yesterday's Washington Star, which says: "The elaborate legal arguments brought forward in the House against the right of Congress to defend the American people against vile food adulterations are not going to be allowed to settle the question forever by any means. Whatever technical difficulties may be grubbed up to obstruct the operation of a measure founded in righteousness and common sense, the Committees on Agriculture in both houses seem resolved to do their duty just the same. The Internal Revenue Bureau is lending its aid to the good work in an advisory capacity, and before long the question will be laid before Congress on its merits. Then we shall see how many members are willing to go on record as opposing the plain demand of the people for honest trade in dairy products, and for the taxation of a noxious compound which, if it cannot be wiped out of existence altogether, can at least be crippled by a tax which will render its manufacture less profitable."

Mr. L. I. SEAMAN next addressed the committee as follows:

Mr. Chairman and gentlemen of the committee, since the foundation of the Government it has been the practice of citizens to call upon the governing powers for protection whenever they have felt that their industries have been assailed, yet I do not know that I have ever read or heard of an industry similar to this one being assailed.

In speaking of this subject I will first refer to the geographical location and advantages that nature has provided the United States with for producing dairy products. There is a dairy belt extending from the New England States on the Atlantic to the westward, confined principally within latitudes 41 and 44, although diverging southerly in a few instances as far as latitude 40. That range extends from 125 to 150 miles in width, and is about 1,800 miles long, running to the westward, so far developed. We have in the United States lands particularly adapted to the raising of cotton, other lands particularly adapted to the raising of sugar, others to the raising of corn, others to the raising of wheat, and so I might go on and name other products to which our soil is adapted. But this belt of country to which I refer seems to be particularly adapted, as can be proven without dispute, to the successful operation of dairying.

This section of the country also has for its watershed the river Saint Lawrence, Lake Ontario, Lake Erie, Lake Huron, Lake Michigan, Lake Superior, and the Lake of the Woods, in Northern Minnesota. Then up in Canada a little ways there is a watershed which is a tributary to some of the northern sections of Minnesota and Dakota.

Let me call your attention to this section of Canada called Manitoba, which is attracting so much interest. That has a watershed in three large lakes immediately north of it that is watered the same as our country is by the lakes and rivers that I have named. The three lakes watering that section are Lake Winnipeg, Lake Manitoba, and Lake Winnebago—three large lakes. In addition to this is this section of the West which has been so largely devoted to grain, and which has recently developed into a dairying section, which is watered by the Mississippi, while Minnesota has the Missouri River running through the center of it. And let me say here, gentlemen, that in Central Minnesota, which has been producing the best wheats that we have had for many years, we find there that the wheats are running out, as they did in the Genesee Valley some years ago, and farmers there are learning that those lands are as well adapted to dairying as they have been in past times to wheat growing.

I will not strive to tell this committee in the short time allotted to me how many acres of pasture lands there are in this vast belt, or how many milk-cows there are grazing thereon, or how many millions of inhabitants are dependent upon this industry for a livelihood. Suffice it to say that there are many millions of people engaged in it, many millions of dollars invested in this industry, and that is the industry which is assailed by these manufactured bogus goods, in regard to which not only myself but a number of gentlemen here present have heard retailers confess that they could not sell them if they represented them honestly to the people who purchased them.

This manufacture can be produced by a handful of men and by a few manufacturers in as great quantities as can be produced by any of the largest dairying States within this Union. The production of butter is an adjunct to the crop of grass produced, one of the most important crops, as is admitted by learned men with whom I have talked, that there is raised, because grass produces our butter, our cheese, our milk, our beef, and our mutton, and is the food for man's helpmate, the horse, and an injury to either one of these products affects in some degree the whole.

Now, a word in regard to our exports. It is a misfortune to have these bogus goods manufactured here, because they harass and annoy our trade in every sense, and particularly our export trade. It has been particularly annoying within the last period of several years, because we have made great progress in the manufacture of butter by manufacturing it on what is called the creamery plan. Everybody who knows anything about it at all knows very well that the system of manufacturing it on the creamery principle has improved the average quality of the product so largely that we are on the eve of building up a larger trade in butter than ever before known. But the fact is that instead of doing so we have barely held our own. The exports of butter from the United States amount to about \$5,000,000 per annum in value. The exports of cheese, let me say, by the way, are very much larger, because it was found that adding the oleo oil, the lard oil, either one, to the cheese, injures it so that it does not stand the transit across the ocean. There is something about the hold of a vessel that injures the cheese, and they found that when it got over there it was impaired in

value very greatly, and they had to discontinue the adulteration of the cheese. But for that our cheese trade would have been injured and damaged as much as our butter trade has been.

While we are exporting five million dollars' worth of butter per annum, let me call your particular attention to France, a smaller country, with less than two-thirds of the population of this country, which exports nearly nine million dollars' worth per annum. Also to a very much smaller country, Denmark, which exports eight million dollars' worth per annum. These figures have been computed and handed to the State Department by the American consuls who are located abroad in these different countries. England imports about forty million dollars' worth per annum. Now, see what a paltry proportion of it she takes from us. England also exports a large portion from her shores. Denmark, as I say, a small country, exports eight million dollars' worth of butter annually, and she looks upon the butter business as one of the most important industries of the country; and I learn that those who are engaged in that line of trade there, in that line of manufacture, give as much attention to it as it is possible for them to do, and when a package is branded "Smith" or "Alaska," or any other name which may be on a package of butter, it is meant to represent the precise quality of it, and they are very particular to put precisely the same qualities of butter under these different brands, as each man is anxious to sustain his reputation and name in this connection, while in this country we have no control over the matter in any manner whatever.

By the CHAIRMAN (Senator MILLER):

Question. Can you give us the actual figures showing the amount of butter exported during the last three or four years, stating the amount exported each year?—Answer. The amount was over four million dollars, but scarcely reaches five million dollars, and we cannot give the exact figures for this reason: There is no law on the statute books of the United States to protect importers in other countries from these imitations of butter. In other words, the people here can export goods under any name that they choose. The only law which could possibly prevent that is the law which relates to correct clearances of vessels. After a considerable effort some years ago I succeeded in calling the attention of the Government to that fact, and they issued orders to the proper officers in New York not to permit any vessels to be cleared unless they had correct clearances.

Q. Is oleomargarine exported abroad under the name of butter in the clearances?—A. Yes, sir; it is.

Q. And you cannot determine how much is butter and how much oleomargarine?—A. No, sir.

By Senator BLAIR:

Q. Of this \$5,000,000 worth exported annually, some portion, then, may be oleomargarine?—A. Yes, sir; unquestionably a large percentage of it, at least 20 per cent. of it, is oleomargarine. Allow me to say right here that the United States Government is employing, at a vast expense of money, a large number of clerks to keep the statistics of exports and imports of the United States—

Q. What is the average cost of this stuff at the manufactory?—A. At present it is about 9½ cents a pound. I was about to remark that the United States Government was spending a large amount of money to give us the statistics of the exports and imports, and also the different exchanges in the principal cities are spending a great deal of money for the same purpose. But there being no guard whatever upon the

way-billing and shipping of goods under those names, the statisticians' reports are unworthy of credence in any form; that is, so far as regards dairy products.

In regard to the unwholesomeness of these goods, I will say, without fear of successful contradiction, that scarcely any of the families in the United States will knowingly buy them. They are largely used on the tables of hotels, restaurants, and boarding-houses. The physicians on Blackwell's Island, in the harbor of New York, or, rather, in Long Island Sound, will not permit their use in the hospitals or in the insane asylums. Physicians generally decline using them in their own families, because, to use the terms they employ, they do not assimilate with the system as butter does. Butter is made of little globules, distinct and separate, like living globules, while oleomargarine and butterine are solvent, like wax or tallow, and therefore we say they do not assimilate with the system as butter does. Manufacturers of oleomargarine and butterine, even of the very highest qualities, do not use it in their own families, and we have had them come to us and purchase for their individual use butter, and I have heard from many others who have had similar orders.

Senator PLUMB. On the same principle that doctors do not take their own medicine?

Mr. SEAMAN. Precisely. I do not wish to occupy the time of the committee, and therefore I will not say much more. But before closing I desire to make this statement. We urge the adoption of this law because it will be of vast importance to one of the most prominent and important industries of the country. I sent to a correspondent in Iowa a copy of the Senate bill, and a few days ago he wrote to me saying that the Senate bill was an excellent one and should be passed; that if it was passed it would place the dairymen upon their feet again. Now, gentlemen, that is all we ask of you, to place the dairymen on their feet again.

By Senator PLUMB:

Q. Let me ask you a question or two. You say this oleomargarine costs about 9½ cents a pound?—A. Yes, sir.

Q. Do you place that value upon all the forms of these articles described in this bill, oleomargarine, butterine, lardine, and suine?—A. That depends altogether upon how much butter the manufacturers put into it. When they want to present it to you, or to anybody who is concerned in legislation upon the subject, they put in a large percentage of fine butter, which acts upon it in the same way that adulterations of liquor do. The liquor dealer or mixer will take 5 barrels of gin, and a little oil of cognac, and a little apple-jack whisky, and will make as many barrels of spirits as he has got, with a liquor flavor, and the same thing applies to butter. They can flavor these oils with a small percentage of butter, so as to give it a butter flavor. You will find it sometimes perfectly flavorless.

Q. But the oleomargarine without the butter costs about 9½ cents a pound to manufacture?—A. No, sir; it is sold for that price; that is the wholesale price on the average.

Q. What is the usual retail price?—A. It retails at the retail price of butter.

Q. It sells for just as much as creamery butter?—A. Yes, sir; for the same price as creamery butter. You can go into some of these stores and find a row of tubs as long as this table, all filled with the same article, and they will have the price marked on one tub 18 cents,

on another 20, on another 22, 24, 30, 40, and so on, and no matter which the customer buys, he gets just the same thing.

Q. Do the people who buy it pay as much for it, knowing what it is?—A. No, sir; when they buy it they do not know what it is.

Q. What is the trouble, then? Is this the trouble: that it is sold for something that it is not?—A. Yes, sir; that is just it. It is sold for something that it is not.

Q. Then if it was required to be sold as butterine or oleomargarine, or whatever it is, a compound not embracing the actual product of milk or cream, it would not displace the sale of butter by the retail trade?—A. No, sir; it would go down by its own weight if sold for what it is.

Q. Are there not laws in some of the different States requiring it to be labeled, actually describing what it is?—A. There are, and that brings to my mind another point. In a number of our States there are laws upon the subject that are strict enough if they could be enforced; but it is like trying to enforce the operation of the law against liquor selling; they cannot enforce it. These people violate the law, and then when they are arrested and convicted they pay the fine of \$100 and go back and repeat the offense, and yet make money by it.

Q. Suppose the penalty for a violation of the law was imprisonment?—A. If the penalty was imprisonment the law might be more easily enforced. But there appear to be so many milk-and-water judges on the bench, who seem to regard the violation of the law in the light that they do some other unimportant violations of it, that it is an exception when a man is fined even. But to show you the sentiment of the people of the United States, I believe if it was put to the vote of the people of this country, 90 per cent. of the people of the United States would say, put this internal revenue tax of 10 cents a pound on it, and I state this upon the basis of the large majority voted by the different houses and different legislatures of the States upon the question where these laws have been passed. In the State of New York, my own State, when a vote was taken on this subject, there were only three votes against it in the senate and one in the house. I will not occupy the time of the committee further.

The CHAIRMAN. Mr. Chapin, representing the New England interests, desires to be heard.

Mr. GARDINER B. CHAPIN, of Boston, Mass., addressed the committee as follows:

Mr. Chairman and gentlemen, I come here as a representative before this committee of the farmers directly, in one sense of the word. I was a farmer's boy, and lived on a farm until I was twenty years of age. I have spent thirty-five years of my life with the farmers and as a commission merchant in the city of Boston, having direct business relations with the farmers themselves. We have probably on our correspondence books the names of five hundred farmers who, at one time or another, have sent us butter direct from their dairies, butter dairies, &c. I pretend to know the sentiments of the farmers in regard to this question. They say to me that unless they can be protected they cannot maintain themselves in this business. They say it is seldom that they ask Congress or any legislature to protect them in their products or the manner in which they raise or sell them; but they say that this protection means life or death to them. That is especially true of the small farmers. They say they cannot manufacture butter for 10 cents a pound, or for 12½ cents a pound. I have talked with a great many of them, and they say that unless this thing is stopped their farms must grow up to bushes.

I furthermore know it to be a fact, from personal observation, that they are suffering in this way. I have seen on one little road in New Hampshire the remains of nineteen houses where the houses had rotted down and nothing but the cellars remained; the people had abandoned them and gone away. And that is only in one part of New Hampshire. In the State of Maine there are similar instances which could be mentioned. Those hills up there cannot be tilled; that is, all of them cannot be, and there are thousands of acres fit for nothing except pasturage. They must have some meadow land to raise hay to support the cows during the winter. They often come down to Boston and say to me, "Show me some butterine—show me some oleomargarine." I take them to the place where they retail it, and they try it and shake their heads and say, "I have got through; that is enough." One gentleman told me that in a district where he lived in New Hampshire there were eighty schools. When I visited my old home last year I found they were keeping up a school there for four scholars. The farmers—the young men—had been driven away from home by this same depression, and they come to the city and live there as long as they can and then go somewhere else. But they leave the New England farms because they cannot compete with these manufacturers of oleomargarine or butterine, especially when lard does not cost but 7 or 7½ cents a pound and can be made into butter which is sold at 20 or 25 cents a pound.

I further know, as a business man, that not one in ten of the men, women, and children who use oleomargarine or butterine know what they are using. I have a brother who is in one of the retail markets, and has been there some twenty-five years, and he tells me that if a man should stand up and sell this stuff for what it is and tell the truth about it every time, his business would be killed in thirty days. And I know from my own personal observation and experience in my own business that it is almost impossible for a man to do business in Boston and compete successfully with his neighbor and tell the truth about this matter. Our firm probably sells 100 tubs a year; no more than that. I could sell as much as my neighbor if I had been brought up to tell that which was false. I tried the experiment once and sold a man a lot of it for 26 cents a pound; a small lot. I said to him afterwards, "Do you know what you are buying?" "Why," he said, "I am buying butter." I said to him, "No, sir; that is oleomargarine." "Well," he says, "I don't want it." I said to him, "Very well; if you want it for 20 cents a pound"—the value of it at that time—"all right." He said, "No, sir; I don't want it at any price."

I personally know, from what a gentleman told me within ten days, of a firm that is receiving 700 hundred tubs of this butterine a week from Chicago. All the brand there is on it is a horseshoe, with a white clover in the center, and the words "Good Luck Creamery." That is all the mark there was on it, and he said he was selling it promiscuously for butter, pure butter. He was selling it for 24 cents a pound. At the same time we were trying to get a living at selling pure butter at 30 cents a pound. Our customers would come along and say, "Here is this man underselling you 6 cents a pound." "Well, that is butterine." "How do I know? They sell it to me as butter, as pure butter, and there is the bill." The bill read "so many tubs of butter at 24 cents a pound," and there was no mark by which he could distinguish oleomargarine, butterine, or anything else. That is the way our trade is going to-day. If a man makes up his mind to be dishonest and say, "I am selling you that [pointing to some white paper] for blue paper," and make him believe that is blue paper, you can get a living; otherwise you cannot. That is the standpoint I take as a merchant.

I also represent here to-day the butter interest of the Boston Chamber of Commerce. We have drawn up a petition and sent it to each of our members from Massachusetts urging the adoption of this bill. It is signed by seventy-two of the largest butter dealers in Boston. Some of these men sell this butterine and sell oleomargarine; they are compelled to do it. Whether they sell it truthfully or not, I do not know; I am not conversant with the fact. But, as I said before, if you will put it on its own merits, or if you will pass a law whereby every man shall sell it for what it is, we shall be satisfied; we will run the risk. I am talking now of the merchants of the city of Boston. We have no fear of it, if they will sell it for butterine or oleomargarine or whatever it is, because, as I said before, there is not one man, woman, or child in ten but what suppose, when they buy it, they are getting pure butter.

While I was on the train yesterday coming from New York I took dinner in the hotel car, and I said to the porter of the car, "Can't you furnish me with some pure butter?" He said, "That is the best we have got on the train." I asked him, "Can't you buy pure butter?" Said he, "I think not, boss; I think not. There is so much butterine on the market it is almost impossible to find the genuine article." I agreed with him at once.

These merchants whom I represent—there are but two of us, Mr. Hibbard and myself, here to represent them—wish to give you the facts just as they are, as near as we understand them, and we ask for the adoption of this bill just as it is, with a tax of 10 cents a pound, and that will only bring the actual cost up to 20 cents or a little less.

Q. Now, some of them speak to us in regard to the constitutionality of this bill. They forget that you tax the farmer—

The CHAIRMAN. I do not think it is necessary for you to go into that matter. Let me ask you a question: Is there any law in Massachusetts respecting the manufacture or sale of oleomargarine?

Mr. CHAPIN. There is in regard to the sale of it.

Q. What is it?—A. The law compels us to brand it for what it is, oleomargarine or butterine.

Q. Is the law generally obeyed or not?—A. No, sir; it is not.

Q. Why not?—A. Because they take the law into their own hands, and it costs \$15 to analyze it. Suppose I am quite certain that my neighbor is selling butterine for pure butter. I go to an officer and complain of it, and he says to me, "Are you willing to go to the expense of paying for an analysis of that butter?" I say to him, "No; I don't feel like doing that." He says, "It is impossible for me to tell unless I do analyze it; it is impossible to detect it where there is from 10 to 20 per cent. of lard mixed with it, and," he says, "I make some failures, considerable many, and the bill of expense is running up pretty high, and unless you are pretty certain that you know what you are talking about," he says, "I prefer not to molest the parties." That is one reason why the law is not enforced.

Q. The execution of the law is left to the ordinary civil officers to prosecute, is it not?—A. Yes, sir.

Q. In connection with information by any private individual who sees fit to make complaint?—A. Yes, sir.

Q. In other words, there is no special officer charged with executing the law, and the result is, it is not generally executed at all?—A. No, sir. It is left to the milk inspector to do as he sees proper.

Q. You think these ordinary internal-revenue laws and this system of licenses and the other provisions contained in the bill would enable people to determine absolutely what they are buying?—A. I think so

Q. And that is the reason you advocate this bill, I suppose?—A. Yes, sir.

Q. Is there any other matter you desire to state?—A. No, sir; I think of nothing.

Senator BLAIR. I would like to have some gentleman present give us some information in regard to the alleged bad quality of this merchandise, at some time during the hearing.

The CHAIRMAN. I understand there will be a chemist before the committee who will speak upon that point.

Mr. JAMES HUGHES, of Baltimore, Md., then addressed the committee.

Mr. Chairman and gentlemen, I appear before you to-day as the president of the Produce Exchange of Baltimore City, to urge the passage of this bill in the interest of every one who is in favor of the sale of pure butter only. Before I proceed to speak upon the merits or demerits of the bill, I will state that ten years ago, in conjunction with some Baltimore merchants, I was successful in having a State law passed in Maryland, and I have listened with considerable interest to the questions which were propounded to the gentleman who preceded me, and think I probably may be able to clear up some of the difficulties that surround the question of a State law.

Our Maryland law was passed in 1876, and at that time we thought it comprehensive enough to deal with this subject. But the trouble is that we did not at that time forecast the future success of oleomargarine. We thought it was just simply an innovation that would probably die out in a very short time, and we had a fine attached to the violation of the law, but did not think of having an imprisonment clause.

Now, this bill that is before you is so comprehensive that it will take in everything in the nature of oleomargarine. At that time oleomargarine was considered to be just simply the substance on which Mr. Mege received his patent in Paris, in which it was provided that he should make it of the caul of fatted beeves. No one supposed it would assume the hydra-headed proportions it has developed into within the last ten years. Now it is made of everything almost. And before I leave this part of what I am saying, I want to state that it would be impossible even under the strict surveillance of the Internal Revenue Department for any one to detect some of the articles now made. It is my province as president of the Produce Exchange of Baltimore to be the chief prosecutor of offenders under the law of Maryland, and to analyze, before I put it into the hands of the officers of the law, all the compositions that are brought before me. Latterly there has appeared a case which has puzzled me to this extent that I cannot find proper occasion to have this man prosecuted, for the simple reason that the article in question is not butter and is not oleomargarine. It is some gelatinous compound that can be made even cheaper than oleomargarine, and when we put it in the testing tube, instead of showing the color of oil or butter, it shows this opaque fluid, and we cannot say it is anything that has been presented to us before. I have heard it testified to before the House committee that there are two factories in Chicago which solidify substantially this oily matter and produce an oleomargarine which is sold at 7, 8, or 9 cents a pound. But this cheap compound presented to me was the cunning product of some German, who has found out that he can solidify milk. He has there a gelatine or butter, and is working on the old theory that a gallon or more of milk can be converted into 10 or 12 pounds of butter, and he is doing that, and it is one of the most

attractive things you have ever seen. All the lines are well defined; he brings it in in ice, and it is as pretty as print butter. It is absolutely sweet, attractive to the palate and to the olfactories; and what are we going to do in such a case as that unless we have some comprehensive law like this to carry it out, some zealous organization like the Internal Revenue Bureau? Our State laws are incompetent to deal with this thing. Since I have been prosecuting in Maryland I suppose we have had more than fifty—yes, one hundred—people arrested for selling oleomargarine. What is the outcome of it? The fine is paid gladly and that is all, because they make more in a week for selling it than they have to pay in fines in two weeks. We have had persons who have been indicted four times within a year, and the officers will not take hold of the matter with any spirit at all. Therefore we ask the Internal Revenue Bureau to take hold of it, because we know they are a zealous organization, and you cannot get it under the control of the Internal Revenue Bureau unless you put a tax on it. Why should they interfere if they gain nothing by it? You can brand it oleomargarine, if you please, and they will not care; but put a tax of 10 cents a pound on it, put it in the proper plane of competition, and let the Internal Revenue officers come and collect their tax, and I guarantee there will be none sold, except as oleomargarine, from that time on.

The farmers demand the passage of this law. This interest was existing at the time of the Christian era, and people made and sold butter then. It is an artificial taste I will admit. But if you throttle this measure you will kill one of the greatest industrial interests of this country. I claim here that it is the mainstay of the farmer. The manufacture of butter is his sole dependence in times of drouth when other crops fail him; and, furthermore, after his land has been worn out, as described by my friend, Mr. Seaman, of New York, after this natural dairying tract has been worn out, he has no way of recuperation whatever, unless you give him the dairy to recuperate with and upon. Land that is worn out for farming purposes and is useless for grain can be used for dairying interests; it can recuperate and be put to farm work again, and the farmer can get support from it.

The claim of the oleomargarine manufacturers that they are the poor man's friend is false from the beginning and a delusion. They have held that up every time they have appeared before legislative bodies. They say, "We appear for the poor man. We want to make butter cheaper. The laboring men want cheap butter, and we are their friends." What is the fact in the case? I defy any living man to say that he ever saw a housewife or a man or child go to the market-house or store and ask for a pound of oleomargarine. I never did, and I defy any man to say that he ever did. But what are the facts? The facts are that tons of it are being sold daily in our city, tons and tons are being sold, and when we have these men arrested—which we can seldom do, because, as a gentleman has stated to you, we have all sorts of difficulties thrown around us—they say, "Are you willing to swear to this and that? Are you willing to conduct the prosecution?" And when we go to the State's attorney and ask him to come down to the station-house with us he says, "It is not my business; I am not paid to go to the station-house. Make your charge and have it sent before the jury as best you can." State laws are powerless to deal with this subject. It has to be a national law, otherwise we are left to the mercy of these people, who are seeking to destroy the dairy interest for their benefit.

The fact has been presented to me since I came here that nineteen creameries located on one short road in Iowa have had to suspend because of this unhealthy and illegal competition.

These gentlemen have only touched upon the violations of the law in their discussion of the subject. That is really one of the gravest considerations for you, Senators, to consider in this matter. Take the man in Baltimore or elsewhere who has a dread of the law, of the fine and imprisonment—because we have a splendid law in the State as far as it goes. That man will not lay himself personally liable at all. He goes out and hires little boys and little children and girls, if necessary, and places them on the outskirts of the markets and the outskirts of the city with baskets of this print oleomargarine, and when they are arrested, they do not know who put them there. How can they inform upon anybody? But if they are not arrested, along comes the employer, and says to them, "How much did you sell; what amount?" And he takes the proceeds of what they have been selling of "this pure country butter which my mother made out in the country where we keep nothing but Alderney cows," and they are as rural and innocent in their appearance as anybody could hope for. That is the unpleasant feature of the thing; they do not do it honestly at all.

Another thing that we fear, if this thing is not taken hold of by the strong arm of the National Government: we fear there will be a total discontinuance of the use of butter. I admit it is an artificial taste, as I said before, but people who have been fooled time and again do not want to place themselves in that position so many times, and so they say they cannot get any butter, there is no use to send to the markets or stores for it, and they conclude they will discontinue the use of it. What are the facts in relation to that? They are, as I can point out, that many of my acquaintances have no butter on their table; they have ceased using butter, and every pound that is taken away in that form is that much of a blow at this great agricultural interest, and there is no interest in this country that can approach it in magnitude. You may take the combined sales of the dairy and its correlative the poultry yard, and everything that belongs to it, and you will find it amounts to more in value than the wheat crop, more than the corn crop, or more than is received from the sale of our pork or almost any product you choose to mention. Cotton is no longer king when compared with the results obtained from the dairy, and that is a fact which cannot be controverted.

When this matter of oleomargarine was first presented to us we thought we would let it go, and see if we could not starve it out by making good butter. But they do not allow us to accumulate enough good butter for the simple reason that these men are very shrewd, and where they appear at the points of production they put up the price of the fine butter upon us and take the bulk of our fine product and do not let us have that at all. What is the consequence? The consequence is that they not only put up the price of this creamery butter, but buy this fine creamery butter to use in their compounds, and that makes it so scarce that we are forced to ask a fictitious value for it, and poor people and everybody else are driven from the consumption of creamery butter, and are compelled to buy oleomargarine, which is presented to them in an attractive form and which they say is "good enough for us."

I do not wish to occupy your attention any longer. I could talk on the subject for two hours, but it would simply crowd out other people who wish to speak. I thank you for your attention as far as I have gone, and hope I have touched on some salient points of interest to you in the consideration of this bill; and I urge upon you the importance of this matter, and hope and pray that these gentlemen who are to address you will show the necessity of the action that is sought. There

is one thing which I think is in point, however, which I will speak of before closing, and that is that if you will tax any compound that seeks to imitate butter, it will give us all that we require, and will put the sale of oleomargarine upon a proper plane of competition. We do not ask to shut it out entirely, but we ask that you will place such a tax upon it that it will be brought in proper competition with butter—that is, a tax of 10 cents a pound. With such a tax upon it, we will try to make creamery butter all over the land; and if you will give us that advantage, we will make butter and compete with them on that level. But we cannot get along in that effort without the tax. The balance of the bill is good in every particular, but the tax is absolutely necessary; it is essential to the prosperity of this great industry. I thank you for your kind attention.

VICTOR E. PIOLLET, representing the State Grange of Pennsylvania, then addressed the committee.

Mr. Chairman and gentlemen, I hardly know where to begin, or how to introduce the brief remarks that I suppose I ought to make before this committee. I am here with the worthy master of our State Grange organization to represent the farmers of Pennsylvania. Perhaps it would be proper to state that we have within a fraction of 800 township organizations—subordinate granges, we call them—and some 40 county granges, and a State Grange, the membership of which is composed of the subordinate granges. We number about 40,000 members in our State, and the whole purpose of the organization is to take care of agricultural interests.

We are very anxious, indeed it is a matter of importance to the whole country, that this counterfeit butter be exterminated and driven out. There is no room for difference of sentiment in our State upon this question. We have a law in Pennsylvania, that has been pronounced constitutional, that prohibits the manufacture or sale of these articles; but we labor under this difficulty: When we made our constitution in 1874 we prohibited the legislature from appointing any commissioners. We have been "commissioned" in all directions until we have not enough money to pay for the numerous commissions authorized, and we interdicted them. Therefore we have no process of executing this law except the ordinary one through our constabulary and district courts. But the proper source of this power, as we think, is the National Legislature.

I presume that the statistics in regard to this subject have been recounted to you, and I need not go through with them. The extent of the dairy interest of Pennsylvania is second to that of New York only, and is one of the most important industries. We are forced to go into market and sell our product in competition with these hog and mule dairies that have been established in our principal centers of population, and it is an unfair contest. I am not one of those who advocate the establishing of the creamery system for the making of butter. The best butter that was ever made is to be found in the cellar of the farmer. We have now one very important improvement, and that is submerging the milk at a temperature of 38 to 40 degrees, which gives us all the cream within twelve hours, and gives us the sweet milk by which we can raise the offspring of our cows. And I want to say to you gentlemen just here that there is one very important reason for the interdiction of the counterfeit butter, or for placing it in such a position that the community shall know it under all circumstances, and those who make it shall be under the same surveillance that we are when

we distill our fruits or grains or dispose of our tobacco. The great point is this: if this is not arrested, the fear is that there will be a wholesale adulteration of butter all over the country. I myself dairy on three farms; have about seventy-five cows. I rear all the offspring on the milk mixed with a little oil-cake meal, which is about as good as whole milk. There is nothing to prevent me from standing this imported grease from Italy or this deodorized grease from Chicago in my cellar, and adding from 15 to 30 per cent. to it as we churn; there is nothing to prevent it, and even if I did that I would make a great deal better product than those who put in 10 per cent. If this is allowed, wont it drive the whole dairy community into the adulteration of a product which is of great importance to this country as one of its exports? Shall we be able to hold the business where it used to be before these counterfeits were made?

The CHAIRMAN. I understand that the oleo is produced in Chicago and elsewhere, and sent out in barrels to farmers?

Mr. PIOLLET. Yes, sir; certainly. I can put a cask in my cellar and use 30 to 40 per cent. of it. I have resisted that, and no man who makes butter on his farm but what is proud of it. I care more for my butter than for most anything else. We are scrupulous in having everything neat and clean and in subsisting our cows upon the very best material. The portions of Pennsylvania in which I live borders on the State of New York, and it is a well-known fact that the whole tier of counties on either side is capable of producing the very best butter. We have water and grass that make extra butter and we get extra prices for it. But we are injured by this counterfeiting of our product, and, gentlemen, we are simple enough to think that we have just the same right to have our products protected by the Government that men have who are handling the currency of the country or the coin of the country. Why should not Congress institute laws to punish a man who counterfeits butter as effectually as you would punish a man who counterfeits money? Any one who has paid any attention to that subject is certainly aware of one fact, that there is no compound of which this bogus butter is made that does not show in its process that it contains ingredients which are injurious to public health, and so persistent is the effort now made all over the country to adulterate human food that there must be some stop put to it.

The manufacturer is protected in his trade-mark, the banker in his money, and the Government sends out its constabulary, its whole police force, to ferret out the man who is counterfeiting money, and, when discovered, it destroys all his processes. Now that is just what the Government ought to do in regard to these fellows who are making butter out of hog grease and mule grease; who are making it out of dead substances throughout the country, putrefying substances even, that they can deodorize and palm off as butter.

I come here before you at the instance of our farmers all over the State. The gentleman who is with me and myself left home yesterday at 3 o'clock, and we are here in the hope that we may be able to say a few words that may influence the action of our national legislature. We want this compound taxed. You tax our rye \$1.80 a bushel; that is, I believe the tax on alcohol is \$1.80 a gallon, and a bushel of rye will make a gallon of alcohol certainly. Our tobacco is also heavily taxed, and I think that this product ought to be heavily taxed as well. I think it should be taxed 10 cents a pound, and the whole execution of this law should be placed under the same machinery that you have instituted to protect the revenues of the country, and in that way it will

not add anything to the expense of the Government, but will be of great service to the public. Certainly it will help the dairy interest. Our exports, as you know, have fallen off very greatly because of the manufacture of these fraudulent substances and imitations of butter.

By Senator BLAIR :

Q. Is oleomargarine and these other articles of a similar character manufactured to any extent abroad?—A. They have for many years in those thickly-settled countries been using substitutes for butter, as near as I can learn.

Q. What has been the effect in regard to public health; has there been any actual demonstration of its effect? It seems to me that much depends on the primary question of whether it is detrimental to the public health.—A. From all I can learn about the matter in foreign countries, I understand they are taking steps to suppress it, and to prevent and discourage its manufacture. I do not think that on the other side of the water, however, they care very much about the health of the people.

Senator BLAIR. I do not care so much about their health over there, but I wanted to get at the effect of it upon our health over here.

The CHAIRMAN. I do not know that this gentleman wishes to speak on that part of the question.

Senator BLAIR. He seemed very intelligent in regard to these matters, and I thought he would know.

Mr. PIOLLET. I can answer you as far as I know, but it would only be my own view of the case.

Senator BLAIR. I asked you the question because I thought you seemed to know about it, and I supposed you had some knowledge whether this oleomargarine, or these various compounds, contained ingredients which are recognized as actually deleterious in use.

Mr. PIOLLET. They do, and analysis shows it, and they are becoming numerous. The sulphuric acid that is used now in the making of glucose, according to my observation, has produced all these kidney diseases that are becoming so prevalent. I am an old man now, but when I was a young man such diseases were hardly known in all the region of country where I live, or in my State for 300 miles up and down the Susquehanna River. I was intimately acquainted with the people, and such a thing as diabetes and these kidney complaints was rare indeed, and now they are very common, and I attribute it to the use of sulphuric acid in our sweets, and I think that these compounds used in the place of butter are equally injurious. I did not come here with a prepared analysis, but that will be presented to you in proper form, so that you will see what it is composed of and how they make it, and you will be shown, as a matter of course, that it is injurious to the public health.

The CHAIRMAN. We understand that you intend to produce testimony of that kind before us, but that you yourself appear only as a dairyman.

Mr. PIOLLET. Yes; I appear as a practical dairyman to represent the farmers of our State, and I want to say to you that they feel they have the same right to be protected by the National Government that any other class of people engaged in any other business have. The business of banking is a very extensive business in this country, but its magnitude and capital is not equal to that employed in our vocation of dairying. Not only that, but this protection will assist in increasing the exportation of our products. Our export products, as you know, are chiefly agricultural. Last year 79 per cent, of them were agricultural

products, and we feel that we have a right to receive some attention at your hands.

It is true that we are not represented as a class in Congress, but we are making some attempt in that direction and think we shall have men who will represent us in the future, and we shall be organized hereafter in such a way that we shall be heard in person, if we cannot be through attorneys. We feel that Congress ought to step in and protect us against this counterfeit imitation of our product that is as injurious to us as the counterfeiting of coin or bank bills is to the banker. We feel that we have the same right to protection that he has, and that the ægis of the law should step in and protect our industry as it does his.

Senator BLAIR. I see you have been misled by my question. What you say is very true, it seems to me, but there is another question upon which I desire information, and that is as to whether oleomargarine or these other compounds are hurtful and detrimental to the public health. If so, not only should this manufacture be taxed and regulated, but it should be absolutely prohibited in the same way you would destroy the manufacturing of counterfeit money; that was the only point. I wish to guard you against misunderstanding. I think I know as much about farming as almost anybody of my age. I have done as much hard work on a farm up to the time when I left it as any one, and I know what these gentlemen say about the condition of farms in New Hampshire is true. I ride by those desolate places every year of my life, and I have seen in some cases where the buildings have rotted and gone to waste by reason of the competition in this industry, which has grown up under these circumstances which have been detailed here. I also know that the best butter I have ever seen in my life was made on these New Hampshire hills, and that the industry has very largely disappeared.

Mr. PIOLLET. I do not admit your last statement about the quality of butter. I think you have to come to my place to get the best butter.

Senator BLAIR. No; the very best butter was made at Campton, N. H., where I was born.

Mr. PIOLLET. We all know that a better quality of butter is made in Pennsylvania than in any other part of the United States.

Senator BLAIR. You may succeed in competition with us in some other articles, but your butter does not compare with ours.

Mr. PIOLLET. I do not know that I have anything more to say to the committee, except that I want to impress you with the idea that we have discussed in our subordinate granges. I do not know whether the committee understands the purposes and objects of these granges, but they are organizations composed entirely of men engaged in agricultural pursuits.

The CHAIRMAN. You need not spend any time upon that point; I think the committee understands it. I will not go into a dissertation upon what I know about farming at present, but will leave that for private conversation.

Mr. PIOLLET. In our weekly meetings we have talked this thing all over, and we think it is not unreasonable that we should ask the national legislature to give us some protection similar to that given to those engaged in banking and other pursuits. You all very well know that if you protected the manufacture of counterfeit money that it would be very apt to get into circulation, and therefore the most stringent means are taken to prevent its manufacture. And although we would be satisfied now with a 10 per cent. tax upon it, yet we think

that in other respects the Government should control its manufacture and sale. When I am traveling about I do not eat any of the butter I find at these hotels because these compounds are so largely sold everywhere that there are hardly any of these creameries but what get more or less of this stuff in them. The pure butter is to be found on the farms, and it is made by our wives and daughters, and they want to be protected, and it is that class of our people who should make the butter of the country.

Beyond this, I do not know that I have anything to say. I have gone into this matter of the analyses that have been made of the material used in suine and oleomargarine and these butter substitutes, but I will not detain you by relating them. I simply come here representing forty thousand farmers from my State, who have talked this thing all over, and who feel that at the hands of the national Government they have the right to ask protection to the same extent that any other class of people are protected by the laws of our country.

Mr. W. H. DUCKWORTH, of New York, then addressed the committee.

I do not want to frighten you, gentlemen, by exhibiting the papers I have in my hand, but I hastily got together some of the facts relating to this subject, and perhaps I can answer some of the questions that members of the committee have asked.

I have noticed that at almost all these assemblages or meetings it seems to be a great point with parties representing the dairy interest to state that they represent the farming community. Now, I am a commission merchant of the city of New York, but I can also claim to be a farmer, inasmuch as I have a little place in Iowa, where I have a dairy of about 150 cattle, only 25 of which are milch cows. But in regard to this question of the manufacture of oleomargarine it is unnecessary to go into the history of it more than to say that when it was first introduced it was supposed to be made from the caul of fat beeves. To-day it is made of hog oil or lard rendered at a temperature of 110 degrees, mixed with vegetable oils, such as cotton-seed oil, sesame oil, and a friend of mine made the assertion once, or rather inferred that horse oil had been used, and there is more truth than poetry in that, although there is one link missing to carry it right straight out so that we can absolutely prove it.

In speaking of the operations of his department recently State Dairy Commissioner Brown, of New York, said:

The venders and dealers in bogus butter have deliberately and persistently represented in every possible way that there is now no law in our State to prevent the open manufacture and sale of these adulterated goods in face of the fact set forth in the opinion of the court of appeals in the Marx case that there are several unpealed statutes relating to this subject, besides our present law, which the court more than intimates is operative and constitutional.

That decision in the Marx case repealed one section in our law and a few words in another section, and there was a great deal of money spent by the oleomargarine men in sending pamphlets out, claiming that the law had been entirely repealed in the State of New York.

In Ohio there is a strong move made to protect the dairymen there against fraud, and they claim there, as they say in their address:

Oleomargarine, butterine, suine, and other compounds fraudulently sold under the name of butter, have made an investment in land and cattle of over \$200,000,000 devoted to dairy purposes and an annual production of \$500,000,000 per year almost valueless, not by honest competition, but by deception of the most criminal kind, while the consumer has been swindled correspondingly.

The CHAIRMAN. Allow me to suggest that as our time has nearly expired, if you will tell us briefly, as representing the trade of New York, how this affects the produce trade in New York, or anything in regard to the export trade, we shall be glad to hear it.

Mr. DUCKWORTH. One of the committee asked a question in regard to the subject of the effect of these compounds upon the public health. I can read an extract upon that subject which will answer that point.

The CHAIRMAN. You need not go into that at this time. I understand Mr. Reall will produce a chemist and other people who can speak upon that subject, and as we are limited for time, if you will speak of the effect of the sale of these articles upon the produce trade of New York, we shall be glad to hear you. Please confine yourself to that subject at present.

Mr. DUCKWORTH. On that point I will state that by the reported exports from the year 1880 to the year 1885, according to the figures which I have in detail here, it is shown that the export of butter has decreased 18,609,276 pounds, and oleo has increased over 17,000,000 pounds.

Now, in regard to the receipts in the city of New York, the great loss may be approximately shown by the following reports of receipts and value of butter at the city of New York during the years ending November 30, 1882, 1883, 1884, and 1885. The total receipts in the year 1882 were 79,864,840 pounds, at an estimated value of over \$23,000,000. In 1883 the total receipts were over 90,000,000 pounds, valued at \$22,627,579.60. In 1884 the total receipts were over 88,000,000 pounds, valued at \$20,342,000. In 1885 the total receipts were 93,566,850 pounds, valued at \$19,502,977.

These figures show that while in 1885 the receipts were 13,702,010 pounds in excess of 1882, yet the market value was \$3,522,313.05 less. Taking the receipts of 1885 at 93,566,850 pounds at the same value as in 1882, we have \$26,793,723.25, and deduct the value of the product of 1882, amounting to \$23,025,295.05, and it will show the difference in compared value of \$3,768,428.20, or a loss to the whole United States of over \$40,000,000 per annum. Or, taking the receipts of 1885 at the average price of 1882, it amounts to \$26,793,723.25, and deducting amount actually received, which is \$19,502,977, it leaves a balance of \$7,290,746.25, or one-tenth of the whole United States, and the difference shows a loss to the United States alone in butter of over \$70,000,000.

I want to say in regard to this matter of public health that it is a thing that cannot be proved as to whether it is healthy or unhealthy by chemistry. That is a physiological question. If I had time I could read from some authorities upon this subject.

The CHAIRMAN. We shall have to ask gentlemen to confine themselves to one particular branch of this subject. I understand that Mr. Reall will produce some testimony upon that subject at another time.

Mr. DUCKWORTH. Very well; I will not trespass further upon the time of the committee.

Mr. JAMES H. SEYMOUR, of New York, then addressed the committee:

Gentlemen of the committee, I was informed yesterday by a merchant of our city that the honorable chairman of this committee said to him over three years ago that the only way to regulate this bogus-butter question in the United States would be to put it under the internal-revenue department and place a tax upon it. I was very much pleased to know that, and I think he has repeated it several times. I presume,

Mr. Chairman, that you wish me to speak upon this subject from the commercial standpoint.

The CHAIRMAN. Yes.

Mr. SEYMOUR. I hold in my hand an editorial from one of the leading journals of the city of New York. It is headed "It lives by fraud alone." I also hold in my hand a little pamphlet issued by the bogus-butter trade of New York City, which reads thus: "The truth. Read it. A large proportion of the citizens of New York and vicinity have been using for years past oleomargarine and butterine as butter. At a safe calculation there has been consumed in this vicinity at least seventy-five million pounds, or a fifty-pound tub to every man, woman, and child. This is a terrible figure."

This, gentleman, is from their side of the question. That has gone to the consumer as the genuine product. New York has been the most active State in this matter, and the first State to enact a law to regulate the sale of this product and so brand it, and in the early years, at the inception of the manufacture of oleomargarine, it was fairly obeyed, I think, for one or two years. Later on, when the butterine interest sprung up in Chicago, since the branding law was passed, so that there might be no deception perpetrated upon the people, the law has been a dead letter from that day to this. And I say it without hesitation, that no class of men in the United States have done so much to demoralize the integrity of the merchants as those men dealing in this bogus product. They have used every effort from the beginning, from the manufacture of it through to the consumer, to put it upon the basis of pure butter and no other. And when they make the claim, which they will make before this committee, that they do not deceive, that they sell it for what it is, they are as false as false can be, for they cannot truthfully say they are not guilty of any deception.

But, gentlemen, we are here to ask you to place this on a basis so that fraud and deception can be taken out of the business. We are here to ask you to place it on such a basis that, if it is a competitor, it may be an honest competitor with the dairymen. Ten cents a pound (as the argument will be used before you) will not take it away from the poor man. If a tax of ten cents a pound is put upon it, they can give it to the poor man, if he wishes to buy it for what it is, and it will not be out of his reach. I have been told by men who sell it that they dispose of it to the retailer from 18 to 20 cents a pound, and the retailer sells it from 35 to 45 cents a pound to the consumer. We ask, gentlemen, that this be placed upon a business basis. As to the question of its healthfulness, that you will inquire into. We are not here to talk on that point, as we are not chemists. We talk from a commercial standpoint entirely. There has been no business carried on in this country more demoralizing. It has demoralized the farmer and it has demoralized the merchant. It is encouraging more fraud and more deception than any other one article in the United States, and they know it. The farmer can meet competition at any time, and so can the merchant. It is not competition that we are asking legislation to protect us from, but we are asking to be protected from fraud and deception, and we have a right to call upon the national legislature to protect us in this interest. If we are not protected against this fraud the honest dairymen will be driven out of the business, and the merchant also, if he is disposed to be honest, will be driven out. He has got to become dishonest, the same as those who are engaged in that business, if he expects to remain in it. So we have brought it to the national legislature, and we say to you to-day, gentle-

men, shall we be honest or shall we be dishonest in order to prosper in business?

Mr. Chairman, there is a package of resolutions here, passed by the Retail Grocers' Association of New York, which I will leave with you, in which they state what they think of these goods from experience in trying to sell them for what they are, with the whole fraud standing at the consumer's door. I thank you, gentlemen, for your kind attention, and the time you have given me, and trust that this bill will pass, and that the tax will not be less than ten cents a pound, for the reason that that will not destroy the product if it has any merit.

Mr. B. F. VAN VALKENBURGH, assistant dairy commissioner of New York, said:

Gentlemen of the committee, I desire to speak upon one point in regard to this matter which has not been touched upon, I think, and that is that it is an absolute necessity that we have a United States law controlling the manufacture and sale of these goods in order that we may effectually enforce our State laws. The idea seems to be carried here that if we get this national law to tax these goods that is going to accomplish all that is needed. That idea is a fallacy. The national law only proposes to bring these goods under a stamp tax or some other system. Now, then, there is nothing in that law to prevent the grocer from selling those goods for butter. At that point the State law must come in to protect the citizen against fraud. But as the matter now stands it is utterly impossible to enforce the State law thoroughly, for the reason that these goods are manufactured in all the different cities of the United States. Therefore any butter tubs that are branded creamery butter and shipped and way-billed on the railroad as butter are delivered at the different points as butter. The wholesale merchant takes them in his store, and no man can tell, except by actual inspection, which would require a large corps of officers, what they are. The wholesale grocer turns them over to the retailer, and up to the time they reach the retail grocer there is no mark or brand on those goods to show that they are not butter. The consequence is, that to enforce the law of the State of New York effectually it would require at least a thousand detectives to be employed the whole time. But if these goods are put under United States supervision, under a law that stamps the goods, the grocer must take out a license before he can sell them, and there is no fear that the grocer will sell them without a license, for they know what the Internal-Revenue Bureau is, and they will not take that risk. Consequently the State officers, in enforcing the State law, have only got to go to the United States bureau and get a list of the merchants who have taken out a license to retail these goods, and those men who take out that license have to put up a sign, and I will wager that they will put up the small sign required in their store, and will sell more goods with the sign than they are selling of oleomargarine now. I know that to be the fact, for I have been prosecuting the law in New York State for nearly two years. I have made something over three hundred arrests, and we have convicted something near one hundred persons for selling these goods. What do they do? They turn right around to me in the court and say, "Well, that is all right—with an oath—I can pay that \$100 and make it before Saturday night. Go ahead; I can make it as fast as you can get it out of me." On that point, the question was asked a moment ago if the penalty was adequate. The penalty of \$100 is too large to successfully prosecute these men. The courts look upon the offense of selling 10 cents' worth of oleomar-

garine as butter as a small misdemeanor, and it is very difficult to get juries and courts to convict when the penalty is \$100. That is the great trouble we have had in New York State; our penalties are too large. If our penalty was \$50 instead of \$100 we should convict nearly every man we prosecute, while now we convict only about two out of three.

The main difficulty is to get a law that is effective in such a manner that we may know who deals in the goods. Then there will be no great trouble in following the goods to the consumer. The State defective must begin at that point and track the consumer. There are probably 100,000,000 pounds of these goods consumed here in the United States, and in my experience in prosecuting the law I have not found the first person who ever used it in his family as an article of food knowingly, except it be the boarding-house keeper, a restaurant keeper, or a hotel keeper. There are any number of people willing to buy it to feed to others, but they will not buy it knowingly for themselves to eat. They are afraid of it, and they have reason to be.

This tax of 10 cents a pound set upon it will gradually bring these goods up in price, so that the grocer will pay for them about the same money that he has to pay for butter that will retail at the same price, and it will not cost the consumer any more for the goods under a 10-cent tax than it does now.

Our samples of oleomargarine which have been purchased in the last two years, amounting to five or six hundred samples, have averaged as high a price as the average price of butter that it retails for. The grocer has that incentive of buying these goods at from 9 to 13 cents a pound during this past winter, and retailing them at from 25 to 35 cents a pound. He is making a larger percentage on the goods than any shover of counterfeit money makes. The third party who "shoves the queer" does not make 50 per cent., which is what the grocer makes. This tax will take away this incentive from the grocer to commit this fraud. He is a middle man who commits the fraud, and the basis on which these goods are made is this, that in value, compared to the value of butter, it is the same as the value of the metal used by the counterfeiter compared with silver, except the difference is greater. And yet it will retail as high as good butter.

The CHAIRMAN. If it were sold for what it is, and if everybody knew what it was, would the grocer not be compelled to sell it at about what it cost, with a fair profit added to it?

Mr. VAN VALKENBURGH. My candid opinion is that if sold for what it is in every case there would not be one pound sold where there is now one thousand pounds sold. At a penny a pound oleomargarine would not sell to the American people as an article of food; they will not have it knowingly. But it would sell to the boarding-house keeper to feed her boarders, and to the restaurant keeper for his customers, and to the hotel keeper; but those are the only persons where it would sell for what it is, and they are the only places that it ever has sold for what it is. I have, for the past two years, offered from \$50 to \$100 to the oleomargarine men if they would produce one citizen who was using it in his family as an article of food, if that person was not interested directly or indirectly in the manufacture of oleomargarine, and they have never produced a man yet.

Senator BLAIR. If you do not demonstrate that it is an evil thing of itself, so that its prohibition can be made legal, will not this vast army of boarding-house keepers and hotel-keepers and that kind of patronage still be liable to be imposed upon? I see butter upon the table in a hotel, but these provisions in regard to the marking of the butter pack

age do not help me out. You will hardly be able to persuade the American people that they can tax a healthy food, but if you demonstrate that it is hurtful you may prohibit it.

Mr. VAN VALKENBURGH. I do not think in order to tax it that it is necessary to demonstrate the fact whether it is unwholesome or not. But we have spent a great deal of money in New York State investigating that question. By chemistry you cannot prove it to be unhealthy. If you take the blood from a small-pox patient, a chemist may decide that it is not unhealthy, and yet if it is put in the veins of a healthy man, that man will have the small-pox. Physiologically you can prove it to be unhealthy, but by chemistry you cannot.

Commissioner Brown (and other chemists and physicians as well) has spent a good deal of money and time investigating this subject during a few past years, and he claims in his annual report, which is not printed yet, to have thoroughly and fully established the fact that physiologically it is unwholesome. But by chemistry we cannot establish that fact by any known process we have discovered. That report of Commissioner Brown is indorsed by many eminent physicians of the State of New York, although it is not in print yet, and consequently it is not where it can be referred to. But he makes that claim.

The CHAIRMAN. How soon is that report likely to be printed ?

Mr. VAN VALKENBURGH. Very soon. I cannot say how soon.

Senator BLAIR. This matter of demonstrating the fact chemically does not strike me as of importance, but to demonstrate it physiologically, I think, is important.

Mr. VAN VALKENBURGH. I want to ask you this: It is a provable fact that the animal fats or oils they use cannot be made into oleomargarine and make an article which will sell successfully unless they are kept in their raw state—I mean absolutely raw—from the animal. Now, is there a gentleman in this room who would dare to give his family raw fat from the hog, promiscuously, to feed on three times a day? No, sir; there is not one who would give it to them, if you would give him a large sum of money.

Senator BLAIR. They prove that it is unwholesome. It has been demonstrated that it is hurtful. Physicians prove it.

Mr. VAN VALKENBURGH. You cannot prove it by chemistry.

Senator BLAIR. I do not say that it can be proved by chemistry, but physiological demonstration is what we want.

Mr. VAN VALKENBURGH. You will have that before you get through. It will be here in a few weeks.

Senator BLAIR. When that point is established, you have not only the right to tax it to any extent you desire, but you have the absolute right to prohibit it under the general policy that the Government has assumed with regard to the protection of the public health. We enact laws to exclude epidemics like yellow fever, and we exercise general control over the public health of the nation; that has always been asserted and exercised.

Senator PLUMB. What about the vegetable oils; are they demonstrated unwholesome as well?

Mr. VAN VALKENBURGH. The demonstration proves this point. I have not seen the report and only take what Mr. Brown says is demonstrated; I have not read it myself. They prove that butter will digest in less than one-half the time that any other oil that can be found will digest, and in less than one-third of the time that many of these oils will. That is one point, and certainly that is a strong point. That is only one, however; there are many others.

Senator PLUMB. Do you regard it as unwholesome because, as you say, it will not digest as rapidly as butter?

Mr. VAN VALKENBURGH. I do not wish to make any statement on that point. I am simply making a statement of what Mr. Brown claims in his annual report.

Senator PLUMB. I want to get at all the facts about it.

Mr. VAN VALKENBURGH. I will read you a few words about what Professor Clark, who has studied this matter, says: "In view of the digestive and microscopical experiments made for the dairy commissioner by Professor Clark, of Albany, and detailed in his report, this is likely to prove an up hill task. Professor Clark made a specialty of the physiological features of his subject, making experiments in digestion and microscopical investigations, and in other ways showing the importance of public health by a thorough knowledge of what enters into any food product. As a result of his researches he arrived at the conclusion that oleomargarine is unwholesome and dangerous to health for four reasons. First, because it is indigestible; second, because it is insoluble when made from animal fats; third, that it is liable to carry the germs of disease into the human system; and fourth, that in the eagerness of manufacturers to produce their spurious compounds cheaply, they are tempted to use ingredients which are detrimental to the health of the consumer." Those are the points he has made in an interview.

The CHAIRMAN. That will be brought out more fully, no doubt. Our time has expired, and we shall have to adjourn in a short time.

Mr. VAN VALKENBURGH. There is one question I would like to ask Senator Blair. He speaks of the difficulties in taxing these compounds unless they are proved unwholesome.

Senator BLAIR. I say, if you concede it to be a healthy food, the people of the country might find fault if we put a tax upon it. But our policy has always been to tax luxuries and hurtful articles.

Mr. VAN VALKENBURGH. We only ask to have these goods taxed to cover that point of fraud. We can and have demonstrated to a certainty that these goods are retailed at a profit of from 10 to 20 cents a pound, and therefore the public are not benefited by them.

Senator BLAIR. Is not that the reason for their being sold under false pretenses? If you remove the false pretense and you concede it is a healthy food, why should it not go into the market for what it really is, a healthy food?

Mr. VAN VALKENBURGH. Because it will not be taken and eaten as healthy food. The people will not take it, and it will require more machinery to enforce the law to have it where it is than—

Senator BLAIR. I do not wish to press it upon you. You do not see the point I make, but it is in my mind that this evidence you speak of will be important evidence to sustain that law before the country, you will find.

The CHAIRMAN. We will give the gentleman from New York, Mr. Miller, five minutes to state his views, and then the committee will have to adjourn.

Mr. H. K. MILLER, of New York, then addressed the committee.

Mr. Chairman and gentlemen, five minutes is a very short time in which to speak upon this important subject, but questions have come up here in regard to the healthfulness of this commodity, and I will simply say a few words upon the subject. I will not detain you long. I recollect when I was a boy that our shoemaker told me that instead

of using tallow to grease my boots with, to have my mother give me some fresh butter without salt to put on them, and he said my boots would last as long again. He said the impurities of the tallow helped to rot the leather. If you take this stuff that is made from these commodities, of course it is full of impurities. I speak from experience and have the means of knowledge after being thirty-four years in the commission business in New York. We have sold a great deal of tallow, and that tallow would sometimes be moldy and not fit for anything but soap as a general thing, and that is what we sold it for. But that day has gone by. We do not get any tallow now, because it is picked up by these people who work it into this bogus butter. There is no question about it; I know it to be the fact. Not only that, but they take all our grease butter. Within the past two months I have sold a large quantity to a house for $4\frac{1}{2}$ cents a pound. I did not know what I was selling it for, but it was not fit for anything but soap. That went into one of these mills and has gone into oleomargarine. Now can anybody say that that is a proper article to put into anybody's stomach, or that it can be a healthy article of food? Of course, it is very injurious and should not be used in that way, especially after it has gone through the cooking process.

Senator PLUMB. You think the cooking of the tallow is what makes it injurious?

Mr. MILLER. Yes, sir. My boots would wear as long again after I adopted that plan I mentioned as before. I think it is unhealthy. Then, again, in regard to this lard that is used, I believe that very much of the lard produced is unhealthy, and in fact pork itself. I know a family living at not a great distance from me who are troubled with scrofula, and in my opinion it is chiefly caused by their using pork as a principal article of diet. Therefore I say it is an injurious compound when lard oil is used in this way.

I want to say one word in regard to the exporting of butter. We exported about \$5,000,000 worth of butter during the past year. In the report of the Chamber of Commerce it says that we exported 3,450,000 (?) and some odd pounds during the past year, and I have every reason to believe that two-thirds of that amount was oleomargarine.

Now, when we strike at anything like the dairy interests of our country, the agricultural interests of our country, which we all know is the wealth of our country; when we impoverish the farmer, we impoverish the whole body-politic. I cannot find a man in New York who would not rather pay 40 cents a pound for butter than 10 cents a pound, or \$10 a barrel rather than \$5 a barrel for flour, when he takes into account the general prosperity of the country. I hope the members of this committee will give this subject their most attentive consideration, and that you will press the matter home to your brother Senators, so that they will pass this bill and give protection to the agricultural classes of our country. We need protection. As I go up through Chenango, Broome, and Delaware Counties during the past few years I find that such a man who has had his farm partly paid for has had to give it up, as this competition has been too much for him to contend with. Therefore, I say, the farmers need whatever protection you can give them in this matter. I will not trespass further on your time.

The CHAIRMAN. The committee will have to adjourn now, but there will be a meeting to-morrow morning at 10 o'clock to hear further statements upon the subject.

WASHINGTON, D. C., *Thursday, April 29, 1886.*

The committee was called to order at 10.15 a. m.

The CHAIRMAN: Mr. Richardson, of New York, the president of the Orange County Milk Association, will address the committee.

Mr. W. P. RICHARDSON, of Goshen, Orange County, New York, said:

Mr. Chairman and gentlemen of the committee, I propose at the present time to show you the injury that has been caused to a specific industry by the manufacture and sale of oleomargarine, butterine, &c. And in order to do that I desire to explain the condition of the milk business of Orange County and the surrounding counties. Seventeen out of fifty-one counties in the State of New York are engaged in this business more or less. For fifty years it has been a leading industry in Orange County, but for a number of years prior to the year 1883 business had been depressed, from the fact that the men with whom the farmers were dealing were sharp and unscrupulous in their business ways and had succeeded in reducing the prices of milk to a figure that made the business unprofitable. In 1882 we formed an organization of the producers of milk for the New York market, an organization of farmers in that particular section, for the purpose of mutual protection. We succeeded in 1883 in forming a strong association of some eight hundred members, and became an incorporated body, and succeeded by the withholding of milk, or by what was known at that time as the Orange County Milk War, in increasing the price of milk to the farmers of our county so that they received in the years 1883 and 1884 nearly a million dollars more for their product than they had received prior to that time—that is, in Orange County alone—or in the entire district nearly three million dollars. We held our prices during 1883 and until the latter part of 1885, when we found we were liable to be swamped. And it is at this particular moment that I desire to refer to the effect that the sale of oleomargarine and butterine had upon our business. The prices we were obtaining had placed all our farmers on the road to prosperity. They were paying their debts, repairing old buildings, and putting up new ones. The farms in the adjoining counties which surrounded this milk district were devoted to the production of butter, and many persons found that we were obtaining prices much better than they could obtain in the manufacture of butter. They therefore turned their attention in this direction and commenced in 1883 and shipped a small quantity of milk to the city, in 1884 a much larger quantity, and by the year 1885 they had begun the shipment of milk to New York in such quantities that they completely swamped us and reduced the prices we were obtaining until we are to-day selling milk upon a poverty basis.

I will give at this time a few facts and figures to back up the statements I have made in regard to this depression. The amount of milk shipped to New York from Orange County, and also sold to the creameries there, amounts to about 400,000 quarts a day. The difference in price obtained between the year 1883 and the year 1885, caused by this depression in the butter counties, amounted to two-thirds of a cent a quart, which, multiplied by 400,000 quarts, amounts to \$2,666 a day, or for a year it amounts to over \$973,000. Taking the whole amount shipped to New York from the entire seventeen counties, which amounts to an average of 15,000 cans a day, and taking the amount held back in the creameries and used in the condensers, it amounts altogether to 1,100,000 quarts a day produced in this district. That amount of milk, at a re-

duction of two-thirds of a cent a quart, amounts to a total of \$2,776,545 for the entire district a year. That is the amount of depression that has taken place in this territory from the effect of the butter counties being compelled, from their low prices, to turn their product into our market.

Now, in the other form we consider that on an average 100 acres will carry twenty-five cows, which will give an average of 200 quarts of milk a day. The difference to the farmer between what he had received and was receiving was \$486 for the year, a loss, per cow, taking the twenty-five cows, of about \$20 each.

In order to show the competition that comes from this butterine, I will say that in Oxford, Orange County, a butterine factory was established, the building itself costing not to exceed \$500. They made in that building a ton of butterine a day. Taking 12 quarts of milk to a pound of butter, which I think is a fair average (in some of our counties it is called 10 quarts and in some 11, but I call it 12), it will take 24,000 quarts of milk a day to produce this same amount of butter in the place of this butterine. Allowing 200 quarts to every 100 acres, it will require 12,000 acres of land to produce the same quantity, and 12,000 acres of land, at the average prices of our land to-day, \$75 an acre, amounts to \$900,000.

In other words, we have on the one side a butterine factory, in which the plant has cost \$500 or \$600, and it is producing a product sufficient to offset the product of 12,000 acres of land, worth nearly \$1,000,000. That is about the ratio or proportion that the production of butterine has to the production of butter, so far as the farmer is concerned. I could make, in the same way, on my farm, enough butterine to supply a whole township. These are the facts which I desire to present.

There is one other matter which I am reminded of in looking over this bill. I would say that I have had some experience in the State of New York in connection with the passage of skim-milk bills and bills of similar purport, and we have been misled sometimes in finding our laws evaded by men whose interest it was to evade them. I know we passed a skim-milk bill at one time in which it was said that every can should be marked "skim-milk." Our cans contain about forty quarts and stand so high [indicating]. The law said that the letters should not be less than an inch in length, but they evaded that requirement by making the letters about the width of a hair mark and using material the same as the can, so that it required a microscope, almost, to discover the letters. I find by looking at this bill that it is provided in section second that the full name and address of the owner shall be "in letters not less than six inches in length," but saying nothing about the width of the letters, which will allow them to make a hair mark six inches in length, provided they see fit to do so. I would suggest that the words be added to the requirement, that the letters shall not be less than six inches in length and "one inch in width."

Senator BLAIR. Suppose the provision should read "plainly legible to the naked eye"?

Mr. RICHARDSON. This bill provides that the letters shall be printed in white on a black ground or in black on a white ground, so that I suppose it would be legible provided you had the proper width.

In closing my remarks I would urge upon the committee the fact that any amendment to this bill which reduces the tax less than 10 cents a pound would be an injury to the bill and a benefit to the producers of imitation butter. I understand that at the present time they are making an effort to introduce a bill or bills putting the tax in one case at

1 cent a pound, in another bill at 2 cents a pound, and in still another at 5 cents a pound, in order to divert attention and try to secure the passage of a bill which will be sufficiently low so as not to interfere materially with their business. If this bill cannot be passed by the National Government, then the State governments must pass bills prohibiting the sale of it, or in any other form they see fit; but a bill of this kind will be of great help in aiding the different State governments in shutting out this entire product.

I am very much obliged, gentlemen, for your attention.

Mr. S. P. HIBBARD, of Boston, next addressed the committee.

Mr. Chairman and gentlemen of the committee, I wish to make four points in what I have to say before the committee. The first point is the injury that is being done to the dairy business of the country; second, the damage to our own business; third, the fraud; and fourth, how it affects health; for yesterday, I believe, the committee wished to know something in regard to the latter point.

The CHAIRMAN. Your second point is "the damage to our own business." Will you please state what that business is, otherwise the record will not show.

Mr. HIBBARD. I am a commission merchant—a butter and cheese dealer in Boston. I was brought up in the northern part of Vermont, and am very familiar with the dairy business and dairy interests there. I think it will be conceded that the dairy interest is the greatest and largest, and has the most money invested in it, of any interest in our country, or at least that was the case ten years ago. Fifteen years ago, Saint Albans, Vt., was, as far as I know, one of the most enterprising and flourishing country towns in existence. The farmers in Franklin County, Vermont, and back further, bordering on the time of reciprocity with Canada, produced a very superior article of butter, which was brought into the Saint Albans market weekly and sold for extremely high prices. No higher prices were obtained in the country for that product, with the exception of Orange County, New York. Farmers were in a prosperous condition, and it was considered to be the wealthiest county in the State.

In 1879, dairy products reached a very low point in price, as low as I have ever known them to be. Farmers became somewhat discouraged, but yet not completely so; they believed that better times were coming. In the fall of 1879, dairy products advanced, and the farmers took hold of their dairies with renewed energies and interest, and for the balance of the year 1879, and during 1880 and a part of 1881, they did a prosperous business. Then came along these various imitations.

The CHAIRMAN. You say that prices reached their lowest mark in 1879?

Mr. HIBBARD. Yes; we bought butter lower in the first part of the summer of 1879 than at any other time within recent years.

The CHAIRMAN. According to my information, products were cheaper last year in New York than they have been for twenty-five years.

Mr. HIBBARD. We bought butter cheaper in 1879 than we have since I have been in the business at any time, and I have been in business twenty years.

The CHAIRMAN. Cheese and butter have not sold as low in New York, as last year, for twenty-five years.

Mr. HIBBARD. We bought dairy butter in Vermont, in 1879, for 12 and 14 cents a pound, and I never have bought it as low during the twenty years I have been in business as in that year. In 1880 and 1881 came along this competition from imitation butter, and that com-

petition has grown until to-day the number of cows in Franklin County, Vermont, is but a little over 50 per cent. of what it was from 1870 to 1880. Farms also have depreciated in value fully one-half. I want to state right here that there are peculiarities about the lands in Franklin County, Vermont, and, in fact, all over Vermont and in certain parts of New Hampshire, so that the farms are not adapted to any other branch of industry except dairying, and they are more adapted to the butter interest than to the making of cheese. And from this competition, which we have no hope of ever being reached, although State laws have been tried, I say this business has been depressed until the farms have depreciated in value and there is a feeling of depression which I cannot liken to anything else than that of a community seized with a contagious disease from which they think there is no possible escape, and it is simply submitting to a fate that is worse than death. I wish this committee to feel and to know the condition of affairs as regards the dairy interests of New Hampshire (I think Senator Blair knows something about it) and Vermont, as well as Northern New York. Right across the line into Canada they do not feel it at all. These articles are not used, sold, or made there.

I do not wish to go into figures to any extent, but I have looked into this matter pretty carefully, and I am quite well satisfied that 15 per cent. of the product made in the United States is imitation butter. Of course farmers consume a great deal of their own product, and the local towns, villages, and cities in the country consume generally pure butter. But as near as I can come at it, 60 per cent. of the product goes to the markets and to the large cities. Now, all the imitation butter goes to the large cities, which makes it very evident that from 25 to 33 $\frac{1}{3}$ per cent. of all the butter consumed in our large cities is imitation butter. Take that same amount of money which is paid for it, and put it into the hands of our dairymen in the country, and you will restore to that extent their prosperity. And I think you will all agree with me that the business prosperity of the country depends more largely upon the success of the farmer than most anything else. The farmers are the consumers, to the largest extent, of our manufactured goods. When farmers are getting good prices for their products, business all over the country is good. It costs the farmer in these sections I have mentioned, New Hampshire, Vermont, and New York State, from 15 to 20 cents a pound to manufacture his butter, taking into account the capital invested. With prices ranging as they are, with the competition of oleomargarine and these imitation butters, it brings his product at just about the cost, and there is nothing left for him. I believe that if this law is passed, it will bring imitation butter up on a level with the price of pure butter, that prices would range about 25 per cent. higher, from 20 to 25 cents a pound, and the farmers would get a good living profit. All that we can add to what they have been obtaining for the last three or four years is simply profit, and it would put this large amount of money into the pockets of the producers of dairy products.

Now, one word in regard to the injury to our business, and I will endeavor to be brief on this point. As my associate stated yesterday, it is impossible for men to compete with the dealers in imitation butter and make an honest living. I am intimately acquainted and associated with one of the largest exporters of butter from Montreal. There are two or three times in the year that he can come to Boston and buy from our cold storage butter at a less price than he can buy it in Montreal. He came there in 1884 and in 1885, and bought several car-loads of butter

at each time. He will buy no butter that is branded to locate it. The last time he was there he bought creamery butter made at Louisville in New York State. It was branded "Louisville Creamery," nothing more. If it had been branded "Louisville Creamery, New York," he said he would not have bought it. Freights are as cheap from Boston to Glasgow or Edinburgh as they are from Montreal. Yet he bought all that butter, several car-loads each season, and put it into the cars at Boston, and was at the expense of icing it, shipping it to Montreal, and exporting it from Montreal to Glasgow.

The CHAIRMAN. You say that no oleomargarine is made in Canada?

Mr. HIBBARD. It may be, but only to a very limited extent.

The CHAIRMAN. Is there a Dominion law regulating it, or what is the cause of it?

Mr. HIBBARD. I do not know how that is, but they do not have any competition there from it, and the people in Scotland and England, particularly in Scotland, are very jealous and fearful of American butter, fearing it is adulterated, and, as far as they possibly can, they avoid it. But this Montreal dealer takes his butter from Boston to Montreal and exports it.

Now, perhaps, some friend may try to catch a point there on the clearance papers. I will state that in regard to butter coming from the Boston market in bond, shipped in bond, we have to get a landing certificate in Scotland or England before our bond can be canceled in Boston. But the law is different in Canada. The clearance papers of a steamer clearing from Montreal or Quebec will cancel the bond, so that they do not need a landing certificate from the other side to cancel that bond.

The CHAIRMAN. They cannot tell, then, in Edinburgh or Liverpool that the butter came from the United States, because there is nothing to show it on the other side; it passes for Canadian butter.

Mr. HIBBARD. It is shipped from there, and is supposed to be Canadian butter.

In regard to this matter of fraud, I wish to say a few words. I have drawn a little diagram to illustrate what I have to say upon the subject. We have a State law in Massachusetts which provides that oleomargarine shall be sold for what it is. One of our Boston detectives was notified that a certain party was selling oleomargarine or imitations of butter, and was sent out to detect him. He said he went in a store and saw the man, a retail grocer, selling these goods. In one part of the store was a tub marked "oleomargarine," and near by was a tub of ordinary dairy butter. In one place was a sign reading, "Oleomargarine, 15 cents a pound," and on the other side the sign, "Your choice of this butter at 25 cents a pound." He stood there and saw several persons come in and taste of the different kinds, and they would select one or the other of them, and the grocer would get a piece of paper marked "oleomargarine" on it in small letters, and he would wrap it up in that paper and they would take it away. And the detective stood there and saw that thing going on, and he said he could not touch them. The tub was branded "oleomargarine," and it was done up in a paper marked "oleomargarine." I asked the grocer, he said, "Don't those people suppose they are getting pure butter?" "Yes," he said, "they do; but they are getting imitation butter."

Now, that is the condition our State law is in; it fails to reach them. This bill, as I understand it, proposes to tax oleomargarine and these other compounds 10 cents a pound. It costs 9 to 12 cents a pound to manufacture it, and that brings the price of it right up to that of aver-

age butter. Under the provisions of this bill there would be no inducement on the part of the retailer to deceive people. He could not afford to retail it any less than he could retail butter, and there would be no fraud practiced, and if this article is what they claim it to be, it will stand on its merits and be sold for what it is, and if people want it they will pay for what they buy and know what they are buying. That is my ground for taxing it.

I do not come here asking that special legislation be enacted to protect me in my business alone, but I ask that the community may be protected from this fraud, that the dairy interest of our country may be protected from it. I bear with me a circular letter addressed to the representatives and members of the senate from Massachusetts, and we state in that letter our grounds for making this appeal. It is signed by seventy-seven persons engaged in our trade, and every one who was asked to sign this letter signed it except three, one of whom was interested in the manufacture, and the other two said they had become tired of trying to legislate on the subject and did not care to do anything about it. Many of those are dealers. Before coming on here Mr. Chapin and myself went to see them to ask them how much of that butter they supposed was retailed as imitation butter, and how much as pure butter, and they said that from 80 to 90 per cent. of it was sold as pure butter. Talk with the retailers and they will tell you that they cannot and do not sell it to anybody but boarding-house keepers, restaurant, and hotel-keepers for what it is. They sell a large amount of it, and if they are caught and fined they make it up by their profits before Saturday night comes around. I think our friend from Chicago covered this ground pretty well when he said that the manufacturers of oleomargarine had stolen the livery of heaven to serve the devil in. I believe that every conceivable grease of the very filthiest kind in our country is manufactured into imitation butter and sold to consumers. Large pork dealers in Boston tell us that all their scrap fats are sent back to Chicago. If they come in occasionally, as they do, with 4 or 5 dead hogs in the cart, they are not given to the soap-dealers, as was formerly the case. In 1880, while at one of our largest hotels at Nantasket Beach, where I was then stopping, there came out a lengthy article in one of our daily papers in regard to the subject. It was when they first commenced to manufacture butterine. I think it was in 1880. As we understand it, butterine and suine are lard products, while oleomargarine is the term applied to tallow products. As I happened to be the only dealer in butter stopping at the hotel, of course I was assailed continually for several days in a joking way by people, and the hotel-keeper afterwards told me that the consumption of butter for one month after that article appeared dropped off 50 per cent. in his hotel.

Speaking of myself personally, I have been troubled a great deal with scrofula, and have paid a great many doctors' bills, and the doctors have positively forbidden me to eat pork in any form whatever. What am I going to do? I am a butter dealer and regard myself as a pretty good judge of butter. But, as our friend from Chicago says, they imitate this perfectly, so that I cannot always tell the genuine from the counterfeit, and when I am away from home, or am at a hotel or restaurant, and have placed before me what is supposed to be butter, but which is probably three-quarters lard, and I think that the hog from which it was made may have died of some disease, it is not very pleasant, to say the least. We sell to a party who supplies the homeopathic hospital with butter, and I asked him why they did not use oleomargarine there. He said there is not a hospital in Boston that would use it, and he did not be-

lieve there was one in the United States, and there ought not to be one in the world that would dare to use it. I have had a great many physicians tell me that they believe that Bright's disease is produced to a very large extent by the adulterations used in the manufacture of imitation butter. I do not know how true that may be, or how far they may go, but still I believe it. I do not believe it is possible to do anything in the way of legislation that will suppress or stamp this thing out that is going to injure but a very few people who are making money, and making it with a knowledge that they are deceiving people. In all our legislation—and I think all the gentlemen present will bear me out in this—in all our State legislation since this question came up, and I have spent days and days at our state-house endeavoring to get a State law, these manufacturers have been there in a body opposing every step we have ever taken. Why? Because they wanted the privilege of selling their compounds as pure butter.

My associate from Boston, Mr. Chapin, alluded yesterday, in his remarks, to a particular creamery that had been on our market—the Good Luck Creamery. They had a representative in our market this winter, and I heard of it a good many times. People have said, "Do you know about the Good Luck Creamery? It is a fine article, being sold here exclusively." After awhile it was found out that it was butterine, but there had been thousands and thousands of pounds of that product sold as pure butter. The parties were arrested and fined \$100, and I have no doubt they had made \$5,000 during the time they had been selling it. If this law had been on our national statute-books taxing it and putting it in the hands of our Internal Revenue Bureau to collect the tax of ten cents a pound, there would have been no desire on the part of the retailers, or the dairymen, or any one else to have represented it falsely, because it would have sold at the price of pure butter. That is my object and desire in having this tax, that it will stamp out the injury to the dairy interest, and that it may protect the community from the great fraud being perpetrated upon it. I thank the committee for listening to me so long.

Mr. G. W. MARTIN, of New York, then addressed the committee.

Mr. Hibbard covered the ground to which I wish to call your attention in part. I desire to speak first as to the importance of our export trade. On Tuesday, before I left New York, the purchasing agent of the Co operative Association of the United Kingdom came into our store and told me personally that their sales per annum were 20,000,000 pounds of butter in the United Kingdom alone from their various stores. Their sales of cheese are about ten times this amount. They purchase the largest proportion of their cheese in America, but it is impossible for us to sell them butter. While we have sold them bills of cheese aggregating twenty seven to thirty thousand dollars at one time, it is impossible for us to sell them any butter, because his people are fearful of getting adulterated goods. One of the largest manufactories of imitation butter in America, that of Messrs. Armour & Co., through their agent at the Chicago convention last year, declared openly that they were supplying thirty-eight creameries with their oleo oil to adulterate their butter with. The public declarations of these manufacturers have gone abroad, and they have become so distrustful of our butter, which at one time was exported largely, that it is almost impossible for us to sell it for export. When they do take our butter they take it at the price of the imitation goods. There was a time in my business experience when I was selling a thousand packages of butter a week at good fair average prices for export. We do not sell that much now in two or

three months' time. I have sold as high as 30,000 packages of New York State butter in a month's time to export to England, but it is utterly impossible to do so now. That has been brought about by these adulterations. Some of our largest firms are doing nothing at all in the way of exporting butter, because the people on the other side are using oleomargarine, and thousands of packages of oleomargarine are being shipped every week to Glasgow and Liverpool. The Glasgow market at one time took a large quantity of our butter, but it has been superseded by oleomargarine, and that trade driven entirely out of the market.

The question was asked yesterday as to what effect this has on our exports. I wish you to take note of this fact. Mr. John Gledhill, the buyer of this co-operative association, one of the largest co-operative associations in the world, which supplies goods to what are called the laboring classes in England, says they wish for butter, and they wish for butter alone. But they distrust our butter on account of the large amount of oleomargarine that is manufactured. It is just the same way with all our manufacturing towns. We had a large New England trade, but we have none to-day. I was doing business amounting to half a million of dollars a year in New England, but I am doing nothing now, comparatively, because they are using these artificial goods. Last week I received a letter from a customer in New Haven and filled his order of five small packages of fresh butter. I wrote to him and said I was glad to receive his order and hoped it would soon be larger. The next day I received a letter saying that he had received the package of butter and at the same time he had received forty-two packages of Chicago butterine. Those parties are selling two or three hundred packages of butter a week.

I was born in Saint Lawrence County, New York, and spent the first nineteen years of my life on a farm. I spent the next four years in the Army of the United States. I have not been in Washington since I left the Army until this year. My father is a farmer, and my mother and sisters are farmers' wives. One sister is a farmer's wife in Jefferson County, and one sister is a farmer's wife in Dakota. My sister came down to Watertown yesterday, no doubt, with a 50-pound tub of butter which she probably sold at 15 cents a pound, and is obliged to sell it at that price because the Jews of New York turned out last week six thousand pounds of oleomargarine, at a cost of 9 cents a pound. A million farmers to-day find their business depressed and taken from them for the sake of putting money in the pockets of a few manufacturers. The benefit to the country of the purchases of the farmers who make our butter is ten thousand times greater than that of these manufacturers of oleomargarine. The farmer buys all the products of the manufacturer of New England. And yet it was impossible for me to get the ear of a New England Senator yesterday because he was listening to the debate on the subsidy bill, and also expected to have the Chinese affair come up. We think as business men that the best subsidy is that gained by encouraging our commerce. One of the arguments used on the floor of the Senate yesterday was that this subsidy bill would enable our people to export two or three hundred thousand dollars' worth of manufactured articles every month. Now the direct loss to this country every day from the depression brought upon the dairy interest is infinitely greater than the loss which would ensue to us from the loss of the export of these few manufactured articles to South America. I only desire to call your attention to this matter for the reason that it seems to us who are interested in the matter that there is an apathy on the part of Senators in regard to it, and we feel that we are

in the hands of this committee, so to speak, and we do want your sympathy and hearty co-operation. But unless you can make it a personal affair with all these other Senators, and explain the matter to them, we feel that we cannot get any favorable action. This committee does not need instructions from any of us. You are better posted than we are. But unless this committee, which is interested with us in this matter, brings it personally to the attention of these other Senators, we shall not be able to get this bill passed. But if you will do that, and take hold of it as heartily as you take hold of other questions that come up in this body, the bill will be passed. Unless it is passed, my people who are in the northern part of the State of New York, and who are in Dakota, have got to succumb. My brother-in-law purchased a farm eight years ago, but has found it utterly impossible to pay for it since the depression of dairy prices, and has lost his farm; and it is utterly impossible for any young man to-day to purchase a farm anywhere in the dairy belt and pay for the farm by the labor of his hands and what he can produce from it. He cannot do it. Farmers do not get more than 15 cents a pound on the average in the United States for their butter. They did not get 9 cents a pound on the average in the United States during the last year. They could have gotten 20 cents a pound for that whole product if we had not been forced to the wall by these imitation products. Within three weeks five thousand packages of Chicago butterine have come into the market in the city of New York, and at the same time they were flooding all the New England towns with it. We were selling new dairy butter at 25 to 28 cents a pound. We were getting under way when they flooded us, and that broke the price in ten days' time 10 cents a pound. We were paying farmers in Northern New York 22 to 25 cents a pound for their dairy product. To-day I utterly refuse to buy butter for 15 cents a pound, because I don't know but what I might have to put it down to a shilling a pound. Now these young men cannot make farming pay under these circumstances. They will be driven from their farms. You ask why don't the young men stay on the farm. Why don't I stay on the farm—you ask me that question. I could not stay on the farm and get a living, and to-day no young man who undertakes to buy a farm and pay for it from dairying can succeed in doing so; he will go to the poor-house unless he is protected.

I advocate this tax because I want to see my people protected from the sale of these fraudulent goods. I believe that legislation that protects the greatest number results in the greatest good. I believe that is what we should do. I have no sympathy with those people who say that we should not legislate in the interest of the farmer, that it is class legislation, and that we should not tax a few manufacturers. Why, you can count all the manufacturers of these goods on your two hands to-day. Armour with his millions stands behind them, because it puts more money in his pocket, while our brothers and sisters are compelled to go barefooted, wear coarse clothing, go without carpets on their floors, and work from five in the morning until nine at night to gain a bare subsistence. I hope the members of this committee will make this a personal affair. The facts are before you all, before you, Senator Miller and Senator Blair, and all the rest of you, and I hope you will explain them to those Senators who do not understand the matter as you do.

The CHAIRMAN. You probably understand that the Senate cannot originate a tax bill like this, but that it must first pass the House of Representatives before we can act upon it.

Mr. MARTIN. I understand that.

The CHAIRMAN. We granted this hearing as a preliminary matter so that we could be ready to act in case the House of Representatives passes such a bill.

Mr. MARTIN. The gentleman who preceded me called your attention particularly to the injury done to the dairy interest, that is the great injury that comes to the farmers. I notice by the papers that you had a big meeting in this city the other night, which was addressed by nearly all the prominent men in Washington, sympathizing with the Irish people. We shall have a class of peasantry in the United States worse off than the peasantry of Ireland in five years' time, if we allow our dairy interest to be driven to the wall. Go to the New England States to-day, where we can produce the best butter in America, and you will find the land there growing up into bushes and brambles. The old farm of my father in Vermont is nothing but a wilderness to-day, and his farm in Jefferson County will be a wilderness in ten years more if he is not protected, but is driven to the wall. That is why we want this tax imposed. If we do not have the tax we cannot have anything.

Mr. J. H. REALL. Allow me to make a suggestion as to why more farmers are not here to address the committee. I wish to say that the gentleman who has last spoken is one of the largest dealers in the country. He handles the goods for the farmers, from which he gets a profit of from 3 to 5 per cent. He comes here to represent the farmers and butter producers from all sections of the country. The farmers have not the money to spare to pay for the expenses of their coming here. I want you to regard yourselves as representing the farmers of the whole country; they are your direct constituents.

Mr. LEONARD RHONE, of Pennsylvania, said:

Mr. Chairman, as stated by Colonel Piollet yesterday, we are here as a committee of the Pennsylvania State Grange, representing an organization of farmers, with a membership of probably over forty thousand. The people connected with this organization are engaged in agriculture. Some are dairymen, others are stockbreeders, and others again are engaged in the cultivation of cereals. Perhaps in no State in the Union is agriculture so diversified as in ours. Consequently our interests are varied. It is but seldom that farmers come to the National legislature to ask for legislation, and I think if you will look over the records of the history of legislation at Washington, you will find fewer committees appearing here from the agricultural class than from any other class in this country. There are several reasons for this. Farmers have always been the pioneers in every country. Before it was possible for towns and cities to be built, before governments existed, and before manufactures could be established, lands had to be cleared of their forests and brought under cultivation to make it possible for those industries to exist. Thus by long training have they become self-reliant, and they would not be here to-day were it not that their industry is imperilled by a fraudulent counterfeit that proposes to take the place of their products. It takes months and years to build up a dairy farm. It cannot be done in a day, and when you have it properly stocked it is an expensive operation. But it is much easier for capital to combine and establish a manufactory to make this counterfeit product and throw it upon the market, and they can do it at a very much lower price than it can be done by engaging in agriculture or in the dairy business.

With these preliminary remarks, I simply want to lay before you the memorial which we have been instructed to present to you. As Colonel

Piollet made an elaborate argument before you yesterday in behalf of our committee, I do not propose to detain you or burden you with any lengthy argument.

As I have stated, we come here duly authorized to address your honorable body, and we respectfully petition you for the adoption of some measure that will suppress the manufacture of imitation butter, or protect our dairy interests by placing the manufacture and sale of all imitations of butter under the control of the Commissioner of Internal Revenue of the United States and taxing it ten cents per pound. The reasons which impel us to ask your honorable committee to approve such legislation may be briefly summarized as follows :

Our exports of butter have fallen off in the last five years from 40,000,000 pounds to 21,000,000 pounds, while the exports of imitations have exceeded 37,000,000 pounds. This decline, your petitioners are satisfied, is due to the destruction of public confidence in American dairy products, brought about by the exportation of an impure and unwholesome compound which is frequently sold in the foreign market as genuine dairy butter. The sale of the butter product of the farm is in this manner reduced by one half, occasioning a corresponding depreciation of farm lands, as well as entailing an incalculable loss upon the farming industries of the United States. Such legislation is absolutely necessary to save the dairy industry of the country from ruin and protect the consumers of butter from fraud and imposition. We therefore hope this honorable committee will favorably report a measure productive of these beneficial results.

Senator BLAIR. Where do you get the statistics which you have just quoted ?

Mr. RHONE. From the report of the Commercial Exchange, and also from the reports of the daily exports from New York, Philadelphia, and other cities.

Senator BLAIR. And they show this distinction between the real and the counterfeit article ?

Mr. RHONE. Yes, sir. I have been credibly informed that in Philadelphia the products of lard are sold there purely to oleomargarine manufacturers, not being rendered, but being treated with nitric acid, and in that way deodorized, and afterwards converted into oleomargarine by a chemical process. I have also been credibly informed that in many of the slaughter-houses of the West diseased and dead animals are put up under the pretense of being used in soap factories, but the better part of them are used for oleomargarine purposes. It is also on record by the medical profession that there are cases where persons have been inoculated with trichina by the use of suine and butterine ; and if this is the case in trichina, is it not possible also to endanger the public health by the inoculation of cholera when oleomargarine, suine, and such products are made out of animals of a diseased character ? There is no chemical process by which we can determine these diseases. It is only after the persons using them become inoculated with it that the physicians can determine that such sperms of disease exist in these products. Hence the public generally are as much interested in this subject as the farmers. But it is only in behalf of our people that we are here, and that we have presented this memorial before your committee. We believe you are disposed to do what is right to the agricultural interest and thereby also preserve the public health of this country.

Thanking you for your attention, not deeming it necessary under the circumstances to say more, as Colonel Piollet made an argument on behalf of our committee yesterday, I conclude my remarks.

Mr. J. H. CRANE, of Washington, D. C., addressed the committee, as follows:

Mr. Chairman and gentlemen of the committee, as a disfranchised citizen of the District of Columbia, last evening I ventured to put a few thoughts and facts on paper in regard to this subject, which if the committee care to hear I will read. I will only occupy a short time in so doing.

While passing through the Center Market in Washington the other day my attention was called to a most singular sign, over what seemed to be a butter stand, though from the quantity of flowers displayed I was led at first to infer that it was a floral exhibition. The sign is in large letters, painted on muslin, and reads as follows: "Prejudice is a thief and will rob you of many good things and dollars." Over this sign is another, painted on wood, reading "National Butterine Association." I was presented with two tracts. One is headed "Plain facts about butterine." The other, "Higher wages and cheaper food; honest words to honest men; the Knights of Labor and the consumers of the United States." Both tracts are anonymous. It struck me as somewhat remarkable that the author, if he or she has facts to give the people or is really the friend of the poor and desirous of aiding the Knights of Labor, did not make these statements over his or her own signature. Also that the name of the agent of the National Butterine Association does not appear on their sign. People that really have a good thing are generally willing to have the credit of it.

Their first circular commences by giving a tabular statement of the price of best butter on the 1st of January and 1st of July each year from 1857 to 1861, and from 1877 to 1885. They make the average price for the five years ending July, 1861, 20 2-5 cents, and the average for the past four years ending June 24, 1885, 29 1-8 cents, or 45 per cent. higher than before oleomargarine was known. This is not a fair or a truthful statement. In 1857 and for nearly fifteen years afterwards no such article as creamery butter was known, the markets of the world being supplied with dairy butter, which was mostly made in summer and packed away for winter use, rarely varying more than five or six cents per pound. The difference in winter, the past few years, between fancy fresh creamery butter, and fine old dairy butter has averaged from 10 to 15 cents per pound. The highest price to-day, for fancy fresh creamery butter, as shown by this morning's New York wholesale price current is 24 cents per pound, and of best old dairy butter 14 cents per pound, showing the average to be 19 cents per pound, or 1 2-5 of a cent per pound less than in 1857, instead of being 45 per cent. more as they have it. The only fair way of getting at this question is to take the average price of all grades of pure butter to day, and contrast it with the average price of all grades of pure butter before any such articles as oleomargarine or butterine were known. If we do this we will find that butter is cheaper now than then. Their statements are not only illogical but untruthful. In one breath they claim to be the farmer's friend by causing the price of butter to advance, in the next, they claim to be the poor man's friend by giving him a cheap substitute for butter. They claim that by buying pure butter to mix with grease they have caused butter to advance, and by buying grease to mix with pure butter, they have caused grease to advance, thereby playing into the farmer's hands in two ways, while at the same time they are the benefactors of the poor by furnishing them with a cheap article of food. Let us see how this works. The farmer whose dairy butter once brought from twenty to thirty cents per pound, finds his butter, owing to

the great sale of oleomargarine, languishing for a market, and finally sold at from ten to fifteen cents per pound, while the poor man pays at retail from twenty to thirty cents per pound for grease—oftentimes deodorized soap grease flavored with butyric acid—that costs the manufacturer from five to seven cents per pound. They started in here by paying the butchers seven cents a pound for their grease. To-day they are paying $2\frac{1}{2}$ cents for suet and two cents for mutton tallow, that after being manipulated with chemicals they offer the poor man at retail, at from twenty to thirty cents per pound, an advance above first cost of raw material of 1,000 per cent., and then have the audacity to claim to be his friend. They first took suet from the farmer's beeves, at 7 cents per pound. They now pay $2\frac{1}{2}$ cents per pound, and yet claim to be the farmer's friend.

They quote in their circulars from some twenty different chemists in favor of oleomargarine, all of which proves nothing, as most of the opinions were given years ago on a good article of oleomargarine, a very different thing from the compounds sold to-day as butterine. The professors speak of an article such as was once sold by the Thurbers and the Seymours, but which, owing to the disgusting materials now used and the injury to the dairy business, has caused those gentlemen to quit selling any kind of imitation butter and brought them into the front ranks of those who are waging war on this bogus article.

This circular winds up with Prof. C. Gilber Wheeler, who closes a most extravagant eulogium of imitation butter, by saying "The statements that acids are used in its manufacture is absurd, as there can be no possible use for such chemicals." I have procured from the Patent Office copies of all the patents granted for making imitation butter, or purifying animal fats for this purpose. Nineteen are for making artificial butter, eleven for treating animal fats, two for purifying butter, two for coloring matter, one for artificial cream, and one for artificial lard. I have made a few excerpts from some of these patents, which prove that the professor is not very well posted on the bogus butter question, to bolster up which he has loaned his eminent name.

First, I quote from Patent No. 263,199, granted to Mr. Nathan I. Nathan, of New York, August 22, 1882. Messrs. N. I. Nathan & Co. are the firm that recently donated several tubs of butterine to sundry wholesale produce dealers here, accompanied with a circular (the same that was recently published in the Star), in which they say their butterine is made under the said Nathan patent. After giving a long and minute description of his process, Mr. Nathan closes by saying, "What I claim is: The within-described process of manufacturing artificial butter by uniting oleomargarine with leaf lard, the latter having been previously cleansed, fused, strained, and subjected to washing action in a solution of water, borax, and nitric acid, then rewashed, and the united mass heated and subjected to the ordinary churning operation, all substantially in the manner described." Mr. Nathan uses no butter in making his compound, as is evident he could not, for he only asks 10 cents per pound for it, but he uses borax and nitric acid, thereby giving the lie to Professor Wheeler.

Here comes another who uses neither butter, cream, milk or butter-milk.

Patent No. 236,483 was granted to Otto Boysen, of Buffalo, N. Y., January 11, 1881. Mr. Boysen describes his invention as follows:

I first separate the olein and margarine from the stearine by any known method—for example, by mincing and melting the fat and then pressing it in bags of open texture. I next place the oleomargarine thus obtained with an alkaline solution,

preferably in the following proportions: To 80 pounds of oleomargarine 20 pounds of water and 8 ounces of bicarbonate of soda. I next agitate the oleomargarine and the alkaline solution together until the oil globules of the former are thoroughly mixed with the alkaline solution and partly saponified by the action of said alkali. I then add to the oleomargarine thus partly saponified a small quantity of butyric acid, preferably in the proportion of 1 dram to every 100 pounds. This gives to the article such a fine flavor that even an expert can scarcely distinguish it from excellent dairy butter. Of course the butyric acid thus added may be varied to suit the requirements of each particular article, or the tastes of certain classes of purchasers. This process, as above described, avoids the use of milk, and consequently the use of caseine.

It will be observed that Mr. Boysen hides a part of his process from ordinary readers under the high-sounding word "saponified." What is the meaning of that word? "Saponified," according to Webster, is the conversion of grease into soap. Mr. Boysen's meaning, when stated in ordinary English, would read about as follows: "I then add to the oleomargarine, thus partly made into soap, a small quantity of butyric acid. This gives to the article partly made into soap such a fine flavor that even an expert can scarcely distinguish it from excellent dairy butter." What is "butyric acid?" Webster describes it as "an acid found in butter; an oily, limpid fluid, having the smell of rancid butter, and an acrid taste, with a sweetish after-taste like that of ether."

Mr. Boysen, it would seem, joins Mr. Nathan, in giving the lie to Professor Wheeler. It does seem as if the great Patent Office might be in better business than granting patents to men for such an abominable mixture as is described above—the conversion of soap into butter by means of an acid obtained from rancid butter. There is no "35 per cent." of pure creamery butter here, or even an ounce of butter, cream, milk, or even buttermilk. Nothing but fat, water, bicarbonate of soda, and butyric acid.

Patent No. 265833, granted to Henry Lanfertz, of New York, October 10, 1882, consists of treating ten gallons milk with six ounces prepared sal-soda and 200 pounds oleomargarine oil, with 8 ounces prepared sal-soda, then churning them together with coloring matter. The cost of this mixture would be about as follows:

| | |
|---|--------|
| 10 gallons milk, at 4 cents per quart | \$1 60 |
| 200 pounds oleomargarine oil, at 6 cents per pound..... | 12 00 |
| 14 ounces prepared sal-soda, say | 14 |
| Coloring matter..... | 26 |
| Total cost..... | 14 00 |

As the prepared sal-soda thickens the milk so that when churned with the oil there can be little, if any, loss in weight, the added ingredients should weigh about 300 pounds, making the cost, exclusive of labor, about $4\frac{2}{3}$ cents per pound. Where is the "35 per cent. of pure creamery butter" our butterine friends say so much about? It don't appear here. It should be stated that Mr. Lanfertz was granted a patent for making oleomargarine on the 19th of September, 1882, in which he seemed to think he had reached the climax of perfection in the making of artificial butter, but in twenty-one days new light dawned upon him, the result of which was the birth of the invention I have cited.

Patent No. 173591 was granted to Garrett Cosine, of New York, February 15, 1876. Mr. Cosine makes a bid for immortality by presenting to a wondering world the following:

"My invention," he says, "relates to the manufacture of butter for table use from oleine and margarine, as obtained from animal fats, fruits, and vegetable nuts, with lactic acid and loppered cream or milk."

After giving his process for obtaining oleomargarine oil, which he calls No. 1, Mr. Cosine proceeds as follows:

To obtain the vegetable oleine and margarine I use any of the following articles of commerce, viz: Oil peanuts, oil sweet almonds, and oil of olives. To produce the lactic acid I take 14 parts cane sugar, 60 parts water, 4 parts caseine, and 5 parts chalk. This mixture is kept at a temperature of 80 to 95 Fahrenheit for eight or ten days, or until it becomes a crystalline paste of lactate lime. This is pressed in a cloth, dissolved in hot water, and filtered. The solution is then concentrated by separation. The acid is obtained from the lactate by treating it with the equivalent quantity of sulphuric acid, and filtering from the insoluble gypsum. The solution of lactic acid I make as follows: One dram of lactic acid and 16 ounces water. The solution of lactic acid assists digestion; it prevents the product from becoming deteriorated before use, and it assists also in giving the product a butyraceous consistency. By the use of lactic acid all putrefaction and catalytic action is arrested, which action would take place if such acid were not added, and by this means there is prepared an article which is fit for use at any time and which will preserve its original state and flavor. To obtain the loppered cream or milk, I take the cream as obtained from the surface of milk or milk as obtained from the cow, and place it in open vessels, and allow it to remain until the putrefaction and catalytic action has taken place. When in this state it will be ready for use. To manufacture butter for table use in winter I take 9 parts oleine, one part fruit or nut oil, 1 part solution lactic acid, 1 part loppered cream or milk. I then cause the same to be rapidly agitated with a revolving skeleton beater, until the whole assumes the consistency of butter, after which add coloring matter, and salt to taste, &c.

The proportion of loppered cream or milk in this compound is only 1 in 12, and that small proportion is in a putrid condition. In fact, the whole concern would seem to be in a condition of putrefaction, which, according to the inventor, is only arrested by the use of lactic acid, "which action would take place if such acid were not added." There is no "35 per cent. of pure creamery butter" in this mixture, but it contains not only lactic acid but sulphuric acid. Mr. Cosine takes his place by the side of Mr. Nathan and Mr. Boysen in arraigning Professor Wheeler as certifying falsely when he said no acids were ever used in the manufacture of oleomargarine.

I might go on through the whole list of patents before me, but think I have cited enough to show that pure butter, cream, or milk have but very little to do with any of the patents for imitation butter. Only two among all the patents before me make any allusion to butter. Even the great Mege, the father of oleomargarine, used only 10 per cent. of cream or milk, and if the butter is to be preserved, he says, "It will be better to mix the oleomargarine at animal heat with 10 per cent. of its weight of water instead of milk or cream." Mr. Mege uses in his invention, which was sold to the United States Dairy Company under patent No. 8424, dated September 24, 1878, the following ingredients, viz: Oleomargarine oil, 10 per cent. of cream, milk, or water, sulphate of soda, stomach of pig or sheep, biphosphate of lime, cow's udder, and bicarbonate of soda.

It may be that the National Butterine Association, now located in our great Center Market, as they claim, are selling butterine composed of 35 per cent. of pure creamery butter. If so, it is not made from the formula of any patent on file in the United States Patent Office. It is no exaggeration to say that not one-tenth of the imitation butter sold in this country to day or exported contains one particle of pure butter. It is made up from all kinds of grease which is generally rendered into oil in soap factories, shipped away to the great cities, and purchased in open market by the manufacturers of bogus butter, as many of them state in their applications for patents.

The anonymous little books which are being left at every house in the District seem to be a compilation of misrepresentation, bold falsehood, and slanders of the hard-working industrious men and women

who are engaged in the dairy business of this country. The cool impudence and insolence of these men who, after having run the gauntlet of the law by selling their counterfeit goods here as genuine for seven years, and who now that they see Congress acting in the matter, have boldly hoisted up their black flag over the Center Market, is astounding.

It seems a little singular that the Washington Market Company should allow these counterfeit goods to be sold in the market in competition with pure goods, and against men who have been paying rent to the company ever since its organization. It is true that if those bogus articles are to be sold it is best that they be sold under their true name, if we can tell what that name is. Who knows of what these goods as made to-day are composed? We only have the word of the seller as to the ingredients of what he is selling. The certificates of learned professors amount to nothing. They have not examined the butterine being sold in this city to-day. It may be made from the fat of mad dogs for all they know. Neither do the makers of butterine know of what their material is composed if they buy their oil in open market. They may not intentionally use anything wrong, and yet be using the vilest material. If counterfeit food is to be sold in the Center Market, why not allow counterfeit money to be sold there? The dealer in bogus coin might get a few professors to certify that his money is composed of 65 per cent. of pure copper and 35 per cent. pure gold, with a little coloring matter to give it the color of pure gold. Then he might put a sign over his place on which he might paint in big letters "Prejudice is a thief and will rob you of many good things and dollars." No doubt prejudice against passing counterfeit money, combined with fear, has deprived many a man of good things and dollars. Some very good people say that they can see no objection to selling bogus butter so long as it is sold for what it is. There is the trouble. No one can tell what it is. The counterfeiter might say the same "What harm in selling counterfeit money so long as I tell people what it is?" Such a man would very soon find the strong arm of the Government hold of him. The Government is very watchful over its coins and justly so, but when it comes to the question of adulterated or counterfeit food on which the people are being swindled, it is slow to act.

It is amazing that Congress should have so long failed to act in this matter. The making of any article of bogus food and the selling of the same, whether by its true name or not, should be prohibited by law. Congress clearly has the right to pass such a law under that section of the Constitution authorizing it "to provide for the general welfare." Things have come to a pretty pass if the people have no power to prevent soap-grease being palmed upon them for butter.

It should be made a penal offense for any hotel, boarding-house, or restaurant to set before their guests imitation butter or to use it for cooking purposes, as is being done in this city to-day. More than one Congressman eats butterine every day. Those hotels who do not use the vile stuff in any way owe it to themselves and their guests to come out with a card to the public and say so. In traveling these days, one is in constant anxiety on this subject. Many will not touch butter when traveling, from fear of being imposed upon by the counterfeit article.

In conclusion, I would say that I have no personal feeling in this matter towards any one. I know none of the manufacturers and but few of the dealers in bogus butter. I am sorry to see so many respectable men engaged in such disreputable business. I will not deal in bogus butter, and intend to do all in my power to prevent others from making it or selling it.

There are two or three other points which, if there is time, I would like to call attention to. In regard to the exports of oleomargarine. I noticed in taking up a New York paper a day or two ago, what surprised me, that in one manifest there were one hundred and ten packages of oleo oil imported into this country. It seems it is exported as butterine and imported here as oleo now.

In regard to hotels, boarding houses, and restaurants in this city, I find oleomargarine is used everywhere, and I have been utterly surprised in sending men around to the hotels in this city with the report brought back of their finding butterine in the store rooms which was used for cooking purposes. They do not admit that they use it on the table. I will just relate one instance that came under my notice. The other day a lady who keeps a boarding house on F street came to my store. I had sold her some old dairy butter at 25 cents a pound. She came back and wanted another lot of it. My old butter was gone, and I said to her, "I have some fine New York dairy butter (it was just before the fall in the price of butter) that I can sell you for 33 cents." She would not pay any such price and said she was buying the best butter for 25 cents. I showed her the quotations, but it did not do any good. A gentleman who had a package of this so-called New York butter sent it over to me and I had sent a sample to Professor Taylor to analyze, and he pronounced it a very poor sample of butterine. I called this lady's attention to that butter, and said, "Perhaps this will suit you." She tasted the butter and said I might send it to her house if I would sell it for 25 cents. I then told her it was nothing but the poorest kind of butterine, and that I could sell her that and make fifteen cents a pound on it, while on the other butter I only got my commission of 1½ cents a pound. She did not thank me for the information, but went away and did not buy any butter. That is what we have to contend with here.

There is another matter that has not been called to the attention of the committee, I think, and that is where this oleomargarine oil is now made. It is notorious that it is made in soap factories. A few weeks ago a Pittsburgh house sent to a gentleman in my care a sample of soap and a sample of butterine. It staid there in my place; he did not take it away. Letters came there for him, and finally I notified the man to send somebody there to take it away. What did he do? He wrote me a sarcastic letter, saying that he knew it was of no use to talk to me, he knew how I stood; but he would make a present of the butterine, and I would do well to eat it; that it was better food than I was accustomed to eat, he thought, and I had better use the soap to keep myself clean. That was the reply I received from him. Now, right here in this city there is a soap factory trying out this grease for which they pay 2 and 2½ cents a pound, and shipping it away. Now, the butchers will tell you that they deliver them in the summer season suet that is all alive with maggots, and that it is actually put in and tried out there.

There is another matter more serious than this, and that is this dead animal business. Formerly they were buried, but now proposals are invited, and they are auctioned off every year to the lowest bidder. The man who gathers up the dead animals, the dead dogs and mad dogs in with the rest, whenever they have a dog killing they send him notice and he goes and gets the dogs. He told me that himself. He takes them to his boiling establishment and skins the dogs and all the other animals, sells the hides, and sells the bones for fertilizers, and the grease is all tried out and barreled up and shipped away and sold to dealers in grease in other cities. I asked him if he put any special mark on it, and he said he did not; that it looked well and smelt as

well as any other grease. Now, what becomes of the grease? Who knows but what it finds its way back here as butterine? Where does it go to? There is the difficulty with this question. We do not know what this article is made of. They say in the market that it is made of such a per cent. of pure butter and so much suet. But you will find if you read these patents I have spoken of that most of them say that they take oleomargarine oil, which is now a commercial article, which can be obtained in any city, and combine it with other things so that we cannot tell what they are really using, and do not know anything about it. They take that oleomargarine oil to their factory and manipulate it and flavor it and then ship it to us as butterine.

Dr. THOMAS TAYLOR, Microscopist of the Department of Agriculture, addressed the committee.

Mr. Chairman and gentlemen, about ten years ago I accidentally became acquainted with the fact that boiled butter on the cooling became crystalized. I observed its general appearance with the microscope at that time, but failed to look into it very closely as to its structure. But sometime after that, the oleomargarine business came up, and it became necessary for me to make a close examination of the subject of both as to the general character of butter and oleomargarine. I was called upon by the oleomargarine people in Baltimore frequently to give analyses of their product to ascertain its condition. They were very anxious to show that it was a pure article. They brought me many samples of it, and I assured them at that time that it was full of the tissues of animals, blood-vessels, and other filthy material. They were very much surprised at this, but acknowledged it was so. They afterwards, by more careful manipulation, by taking and skimming off and leaving in the tanks about 2 inches of the settlings, were able to get pretty well rid of these coarse materials. They then made it so very fine that they supposed they could deceive me, and really it was a very difficult thing to define the difference between oleomargarine and butter just for a little while. But two samples were sent up from the Committee on Labor of the House to Commissioner Le Duc to see if I could decide what the substance was, whether butter or oleomargarine. I was not informed at the time where the material came from. I simply received a little paper from Commissioner Le Duc on which the words "butter or oleomargarine" were written. I then found I was in a critical position, because it was a test of my skill. I had said before this that I could at all times decide between oleomargarine and butter. But here was a case in which of course my very official head, I might say, depended upon my correct diagnosis of the thing. I gave it a full consideration, and concluded to test it in this way. I attached a prism under the microscope here [indicating] and another prism over it, and by putting some of the butter in position I found I had an exhibition of all the colors in the rainbow—that is, the prismatic colors. I also knew that poor butter would not show the prismatic colors, as the oils in it have not the power to give these prismatic colors. I reasoned this matter out first before I commenced my experiments, and, after preparing for them, I found I had instantly, as I supposed I would have, two samples of the colors of the rainbow. I had more than that; I had the crystals of the respective fats of which it was made. I found it was made of beef fat—at that time they were using beef fat—and that the crystals of beef fat were well defined. I also found that the beef fat crystals looked like beautiful flowers in a group; whereas pure butter which has been boiled will show a St. Andrew cross on every crystal, and after a

time we will get a crystal, in the center of which is a body of a roseate character, and this roseate character will float off, and the entire field will be covered with this roseate or similar color. Those are the characteristics which belong to pure butter. This is no exaggeration at all. The colors are just as beautiful as they can be.

Swine's fat, of which butterine is made, is composed of a star-like object, is blue at the top and bottom, and red at the side.

(Dr. Taylor then exhibited to the committee some enlarged diagrams showing the location of these various colors, and continued:)

If upon an examination through the microscope I find the material contains a crystal of that character [indicating], I say it is a beef crystal, and if, on the other hand the crystal is of this description [indicating], I know it is a butter crystal. These cases are frequently submitted to me, and I am called upon to give my opinion before courts and juries, and the result in every case has been a conviction on the evidence I have been able to give; and it is remarkable that in every case the parties themselves have acknowledged that the evidence I gave was correct; that they knew they were selling these counterfeit compounds for butter.

The chairman asked a question of one of the speakers, if there was any oleomargarine made in Canada.

I have received a letter from the assistant secretary of agriculture on that very subject. There is no oleomargarine manufactured in Canada, but there is a company being formed, with a capital stock of \$500,000, at the present time, with the expectation of manufacturing it. There has been a discussion in the Canadian Parliament upon this subject, and I think a tax is proposed of 10 cents a pound by one side, and a lesser tax by the other side, and it would certainly seem as though they were going to impose a tax upon that product.

The CHAIRMAN. I wish you would state whether you have made any experiments or have any knowledge in regard to the healthfulness or unhealthfulness of these various compounds, and the power of the stomach to digest and assimilate them.

Dr. TAYLOR. In regard to that, it is laid down in our medical books, in all the standard works, that solid fats are less digestible than butter. Butter, however, may be called a solid fat, inasmuch as it stands up or does not fall down like oil, but it is a product, an oil, and when placed under the microscope, it is transparent, not translucent. Before a fat of a solid character is absorbed into the system it has to be dissolved in the digestion by the action of the bile, by which the fat is converted into a soap, and in this condition it is absorbed. But it cannot be absorbed until it has passed through that condition. That is evident from the fact that nature supplies oil globules in milk. Persons who have weak digestive powers, such as elderly persons, cannot of course supply that amount of digestive solvent to dissolve the fats that might be necessary. One thing is certain, that in the case of oil, it is absorbed without any chemical agency. It is very evident that pure butter is much more digestible. In fact, you may say, it is not digested at all, but is absorbed as pure oil at once into the tissues of the body. With regard to bacteria, it is laid down by the most scientific authority, that it consists of vegetable spores, and they are no doubt in some form or other in every substance that is undergoing decomposition. There are certain contagious spores found in the fats of swine, and doubtless in the fats of dogs in the case of rabies; but what the effect of those may be upon the human system has not yet been developed. For my own part, from my knowledge of the nature of bacteria, which is one of the constant studies of microscopists, I would be afraid to take an oleo-

margarine made from the fat of animals—say of hogs which have died from hog cholera—for this reason, that it is a matter of importance to those who manufacture oleomargarine and butterine to melt their fats at the lowest possible temperature. They told me at Baltimore, where they were manufacturing oleomargarine, that it was important for them and a necessity to melt (not boil) their fats at the lowest temperature, because when the temperature got high it gave it an odor which they could not get rid of, and then they had to sell it to tallow chandlers to make candles of. With regard to butterine they do not boil it, but melt it at a temperature of 104, and combine it with fats which are heated and mixed up in that condition. If they boiled it I could detect it at once under the microscope, as it would show the cross of Saint Andrew upon the crystals of butter. So that there is no evidence whatsoever that it is ever boiled or brought to a high temperature, even to 212 degrees, which would destroy the bacteria. It is found that bacteria is not destroyed at a temperature of less than 212 degrees, and even then there is no certainty of the destruction of bacteria unless that temperature of 212 degrees is continued for several hours. It is found that the gelatine in which the bacteria are cultivated will become contaminated by putting into them a fluid which has been boiled, containing bacteria boiled but a short time. So that you have to keep it in even for hours to be sure that there is no contamination.

The CHAIRMAN. It would not be possible, then, to destroy them in the manner in which it is prepared, so that it could not be transmitted from animals into the human system?

Dr. TAYLOR. No, sir. In typhoid fever, all medical men agree that the spores come from drinking water containing the typhoid germs. There are certain other contagious diseases that may be taken into the system by the breath, and it is necessary in others to obtain them through inoculation. You might swallow many infectious forms of spores along with your food without doing harm. But there are others again, like typhoid fever, which are communicated by drinking water. You may go into a room or hospital where typhoid fever is and remain there for weeks without injury, and cannot possibly take the disease. But if you should drink water in that room, you would be very apt to contract the disease; while in another contagious disease you might drink water under the same circumstances and it would not affect you, because in that case it requires to come in contact with the injury and to be absorbed in the system in that way.

The CHAIRMAN. Your statement, then, would lead to the conclusion that the use of these compounds would be very injurious to children, or to people who are diseased or weak in constitution?

Dr. TAYLOR. I have no doubt of it that it is not a proper food for them. It is a subject which has not been discussed in that light. I was invited to the Academy of Sciences in Philadelphia to attend a lecture on the subject of butter and fats, and Dr. Hunt, at the close of the lecture, spoke to me on the same matter and agreed with me that it was not a proper food.

Senator GEORGE. Are you a medical expert, a doctor of medicine?

Dr. TAYLOR. I am.

Senator GEORGE. Have you ever known of any injury done to any one by the use of oleomargarine?

Dr. TAYLOR. No, sir.

Senator GEORGE. It is a pure theory, then, that you go on, in supposing it to be injurious to health?

Dr. TAYLOR. I have not supposed it to be injurious; there has been no theory about it. I have simply been stating some facts without theorizing. I said it was possible or might be possible.

Senator GEORGE. You do not assert the fact on your opinion as a medical expert that it would be injurious to health?

Dr. TAYLOR. No, sir.

Senator GEORGE. You know nothing on that subject?

Dr. TAYLOR. I am speaking of bacteria. I do not make it a question of theory, but of fact.

Senator GEORGE. I am speaking of oleomargarine.

Dr. TAYLOR. I say it is not so digestible as butter, and I say that distinctly, and every medical man will agree to it.

Senator GEORGE. You say it is less digestible?

Dr. TAYLOR. Yes.

Senator GEORGE. Is that the only ground you have for supposing that it would be injurious to health?

Dr. TAYLOR. So far as supposition is concerned, I think it might be injurious to health if it contained injurious spores, because it is not brought to a high temperature enough to kill them.

Senator GEORGE. You have no medical statistics on the subject, and there are none, so far as you know, to show that the use of oleomargarine has proved deleterious to the health of the person using it?

Dr. TAYLOR. No, sir; I do not think there are any statistics of that kind.

Mr. REALL. Will the gentleman allow me to answer that question?

The CHAIRMAN. It is not necessary to do so at this time. The matter will be brought out fully before we get through with it. Dr. Taylor is telling us precisely what there is in that fat, what he has found, without any theory at all, simply the actual facts as to what the microscope shows to be contained in these fatty substances. He has not undertaken to offer any theories concerning it. He is telling that certain substances which everybody knows to be injurious are found in it. That is as far as his observation has gone, as I understand it. I will inquire whether there are any deleterious substances found in butter injurious to health—I mean in good butter obtained from a country dairy.

Dr. TAYLOR. No, there are not.

The CHAIRMAN. The elements of butter are perfectly healthful, I understand.

Dr. TAYLOR. Yes, sir; I speak of normal butter.

The CHAIRMAN. I understand that. I was speaking of butter made from the milk of the cow.

Senator BLAIR. Let me ask you whether this bacteria from which the germ of disease springs is to be found ever in healthy grease that is taken from the animal while living or immediately after death, from an animal killed for the purpose by a butcher in the ordinary way?

Dr. TAYLOR. Bacteria is found everywhere, in the blood of every tissue of the body.

Senator BLAIR. But it is never found in good butter.

Dr. TAYLOR. So far as that is concerned, the fact is there has not been that investigation made with regard to butter, because it is generally supposed that butter is made from healthy cows. But in the case of butterine and oleomargarine we do know and can testify and can give you evidence from Department reports that large amounts of money, \$30,000 at a time, have been spent within the last month for the purchase of dead hogs that died of hog cholera.

Senator BLAIR. That information is in possession of the Department?

Dr. TAYLOR. Yes, sir; and we have the information direct from the statistician, Mr. Dodge, that \$30,000 has been paid for that purpose. He got that information incidentally from a correspondent. The Chairman of the Committee on Agriculture showed me a letter last week which stated that a large number of sheep had been drowned and the carcasses were bought and the parties were watched to see where they were taken to, and it was found they went directly to an oleomargarine factory. You can also get information from the Treasury Department to the effect that in the distilleries where they keep thousands of hogs to eat up the swill, they make up the soap grease from dead hogs which have died of disease, and that is sold, they say, for making axle-grease. But they do not know where it goes to. I have that from the officers in charge, and persons who know about it. The fact is that it is sold in open market.

The committee then adjourned.

WASHINGTON, D. C., *Tuesday, June 15, 1886.*

The committee was called to order at 10.15 a. m.

The CHAIRMAN. We have a quorum of the committee present. The committee has met this morning by appointment to hear the opponents of the bill of the House of Representatives, No. 8328, defining butter, also imposing a tax upon and regulating the manufacture, sale, importation, and exportation of oleomargarine. A number of gentlemen from the West desire to be heard against this measure, and also some gentlemen from New York City.

Senator GEORGE. These gentlemen appear here against this measure, do they?

The CHAIRMAN. Yes; they are opposed to the measure.

Senator GEORGE. I would like to hear testimony rather than arguments.

The CHAIRMAN. I suppose we had better let them make their statements first.

Senator BLAIR. This is the bill which came from the House?

The CHAIRMAN. Yes.

Senator GEORGE. As there are a great many gentlemen here and we cannot listen to everybody, I would suggest for the consideration of the committee and the gentlemen present, that they select one or two of the most intelligent members who have been posted about this matter and let us examine them. I think the country wants facts now rather than arguments; that is my view of it; at least I want them.

The CHAIRMAN. It is facts that we want, but I suppose the gentlemen desire to make their statements in their own way.

Senator SAWYER. I think they should be allowed to do so. I do not think we should interfere in that matter.

The CHAIRMAN. When they have made their statements, if any gentleman desires to ask questions he can do so. I understand the gentlemen have agreed among themselves who shall speak for them. We are ready to hear them, and if the gentleman who desires to present this case will take his place at the end of the table, we will proceed.

Mr. F. R. COUDERT, of New York, said:

In behalf of some of the parties living in the East, in New York, we ask permission to put Prof. Henry Morton on the witness stand, if it is

agreeable to you. May I ask, for information, whether the Senators will not themselves take the examination in their own hands?

The CHAIRMAN. Professor Morton can make such statement as he desires, and, as he proceeds, if any Senators desire to ask him questions, of course they will do so. He may make his statement in his own way first, if he desires to do so.

STATEMENT OF PROF. HENRY MORTON.

Prof. HENRY MORTON, of the Stevens Institute of Technology, Hoboken, N. J., said:

I appear at the request of Mr. Coudert to state facts within my own knowledge chiefly in regard to this matter, and it may not be improper for me to state, in the first place, how it comes that I should know about it.

Senator GEORGE. That is not material, if you will just tell the facts.

Professor MORTON. The subject is one which has been of great interest to all scientific men from the time of the original discovery by Mège, which was made, as you are aware, during the siege of Paris. Many persons have been interested in it and have followed it up. I have been frequently called upon to examine processes and superintend operations where modifications in the manufacture have been suggested, and so on, and specimens have been brought to me as a chemist, to examine from time to time microscopically and chemically. When the substance was first introduced, the question was raised as to whether it could be distinguished from butter by any test, and I was led in that way to investigate the subject, and to examine as to all the properties which it exhibited, as well as to compare different samples of it, and I have in my experiments in this line examined great numbers of specimens of oleomargarine prepared as butter, and of oleomargarine oil for the preparation of butter, from all parts of the country, and also have visited factories very frequently and spent long periods there. I have remained as long as a week in one of these factories continuously, sometimes spending the night as well as the day there in order to watch the process completely and see the operation from beginning to end—to see what was put in and what was not, and to observe what was done and what was not done.

In the course of these examinations I have reached the conclusion, founded on these observations, that the material is of necessity a pure one, and cannot possibly be unwholesome, and is, in fact, in that sense, thoroughly desirable and safe article of food. I will express as briefly as I can my reasons for this opinion, and state the facts on which they are founded.

In the first place, I have found, as a matter of observation, that fat which is to be used in the manufacture of oleomargarine, if it is in the slightest degree tainted before the manufacture begins, if it is not strictly fresh, if it is not taken almost directly from the slaughtered animal, if it is allowed to stand in a barrel for a few hours in ordinary weather or in cold weather, if put in a barrel with any animal heat in it for a few hours, then an incipient change begins which, in the succeeding process, is exaggerated so that an utterly offensive material is produced which could not be used for any such purpose.

Senator GEORGE. Offensive to the smell and taste?

Professor MORTON. Offensive both to the smell and taste, so much so that no one could eat it or endure it; it is very disagreeable. The only

way to avoid that is to use extreme care in the collection and preparation of the material, and in the subsequent processes, after it has been cleaned and washed, by melting it carefully and then allowing it to settle and straining it so that all the animal fiber of every sort is removed. It is next submitted to a treatment by which the stearine is removed, and what is left is almost identically the same in composition as butter made from milk and cream. Now if in that process, after the melting has been gone through with, the slightest portion, even a microscopic portion, of the animal tissue, of the fibrous tissue, or anything else but the pure fat is left in the material in the oil, then in this process of crystallizing by which the stearine is removed (which has to be done at a temperature of about 80 degrees), the result will be that the material will become putrid and utterly offensive. I have seen that done over and over again where there has been a little carelessness in the filtering or cleaning, or want of proper treatment where the fat has not been heated hot enough during the rendering, so that there may be a little fiber left in. Under these circumstances, during this process of crystallizing, a fermentation takes place which is very offensive, almost unendurable, and they have to throw the entire mass into the tanks used for the refuse to make tallow of, as it would not be food fit for use at all.

Senator GEORGE. Is there no way of counteracting this offensive condition ?

Professor MORTON. No way whatever, except to take the fat and purify it in a manner that would make it a very expensive process.

Senator GEORGE. Can it not be clarified ?

Professor MORTON. No, sir; there is no way of doing that.

The CHAIRMAN. Would putrefaction take place if the material was kept at a temperature of 45 degrees, the usual temperature for keeping butter ?

Professor MORTON. It will not take place after the butter is manufactured. That putrefaction of necessity takes place during the manufacture. One of these processes involves the keeping of the material for ten or twelve hours at a temperature favorable for fermentation or putrefaction if there is anything in it to putrefy. If it has gone so far as that without injury, it is because there is nothing in it capable of establishing putrefaction.

The CHAIRMAN. Have you never found any of these tissues in oleomargarine after it was manufactured, under the microscope ?

Professor MORTON. Never. This statement I make is important as to the effect of the process; that is, the putrefying effect which would result from a neglect to thoroughly separate the fatty matter from the fiber. This is important because it bears upon the question which has been raised as to whether the germs of disease could in any way be carried from the animal into the product. These germs, in the first place, have never been found. There is no scientific testimony anywhere that they have ever been found in the fat of animals. They are always found in the muscles and tissues, but never in the fat.

Senator GEORGE. Then, the germs of disease from diseased cattle are never found in fatty substances ?

Professor MORTON. No, sir.

Senator BLAIR. You spoke of stearine; what is that ?

Professor MORTON. Stearine is one of the three constituents of all fats, including butter. All fats, butter, and all other animal fats, consist mainly of three chemical compounds, one of them stearine, another palmitin, and the other olein. The stearine by itself is solid at ordinary temperatures and is used in the manufacture of candles. It is a hard fat and is very abundant in mutton fat, which shows a great deal of

stearine. Palmatin is a soft fat by itself, very much of the consistency of butter, but a little harder than butter. The third compound, olein, is a liquid fat at ordinary temperatures. Olive oil is nearly pure olein, although it contains traces of the other matters. Mutton fat is particularly rich in stearine, but contains relatively less of palmatin and olein. Beef fat has not so much stearine, but more olein and palmatin.

The process first consists in getting rid of the animal tissue or little fibers or sacks distributed through the fat by which the little globules of oil which constitute the fat of the living animal are held. In the living animal the fat is fluid and each of the globules is inclosed in a sack like a bunch of grapes, and that is surrounded by the thicker fibers that enclose the mass of fat which constitutes the fat of the living animal. When the animal dies and the body becomes cold, these little globules become solid. The first process is to break and cut up these masses, then to melt out the fat so that the fat again becomes liquid as it was in the living animal, and the fibrous sheathes are removed by straining.

Senator GEORGE. The little sacks that hold the oil?

Professor MORTON. Yes, the little sacks which hold the oil, those are all gotten out. It would be those which if left (being putrescible in nature), which would become offensive and decompose and injure the fat which remains in contact with them, if exposed to the temperature to which it would be exposed ordinarily, keeping it at a common temperature. The process then consists, first, of melting the fat and getting this oil again in that fluid state as when the animal was alive, and then bringing it to the consistency of butter fat by taking out a portion of the stearine which is in it. In butter there is stearine, palmatin, and olein, just as in mutton fat, but there is much less stearine in proportion to the other two substances. Therefore to get this fat to the same consistency as butter, we have to take away some of its stearine. That is done by allowing this fatty mass to partially crystallize, keeping the temperature at such a point that a large part of the stearine will crystallize in little tufts or bunches of crystals all through it, and then we have an oil which looks just like olive oil, with little crystalline particles floating all through it which resemble white sugar.

Senator BLAIR. Is stearine an unhealthy substance, that you wish to get rid of it?

Professor MORTON. It is not unhealthy except in this sense—

Senator BLAIR. I mean in the proportion in which it is found is it unhealthy.

Professor MORTON. It would be less digestible undoubtedly. It would be the difference between the digestibility of butter or a fat like butter and mutton fat. As it exists in the mutton fat, there being an excess of stearine, the fat is harder when it enters the stomach, and is not broken up so readily and absorbed by the digestive organs. In that sense it is less digestible, just as one kind of bread would be less wholesome than another because not so digestible. Very light bread would be more digestible than bread not so light. There would be that difference. A person with a delicate stomach might be able to eat beef and beef fat and yet not be able to eat mutton and mutton fat. There would be a difference of that sort. By allowing this melted fat to crystallize out this excess of the stearine, there is produced an emulsion, a matter of about the consistency of half-melted snow, and that is put in canvas bags, which are pressed, and by that means the fluid parts are all driven out and the stearine is left in solid cakes, which are taken away and sold to candle manufacturers or others. The liquid or fluid part then has almost identically the composition of butter; that is to say, it

has in it now just the same proportion of stearine, palmitin, and olein which exists in regular dairy butter. There is, however, in butter, in addition to these, about 5 per cent. of a peculiar fat which is found only in butter, and which is known as butyrene. There are, besides butyrene, in butter very small quantities, less than 1 per cent. altogether, of caprin, caproin, and caprylin, and two or three other similar bodies, which are also found in minute quantities in mutton fat, goat's fat, and so on. They are extremely minute in quantity and contribute only a little towards the flavor of butter. The flavor of butter is due to the presence, first, of butyrene, which has a slight flavor of its own.

Senator GEORGE. And which is found only in butter?

Professor MORTON. Yes; that is a fat peculiar to butter. Butyric acid is found in vegetables sometimes, but butyrene is found only in milk and consequently in butter. Caprylin has a slight flavor also. There is in butter some caseine or cheesy matter or albuminous matter related to the white of eggs, though of course different in other respects, and that also gives a flavor to butter, although being very easily decomposed when butter is to be kept for a long time, it is the effort of the manufacturer to get rid of it as much as possible. You have probably come across what is known as cheesy butter. That may be the case with fresh butter kept only a few days if it has not been well worked. The working of the butter gets rid of this caseine which otherwise remains in the milk from which the white cheese comes—"smear case" it is called in the markets about Philadelphia. Ordinary cheese contains a large proportion of caseine, but it is worked out of the butter after the butter is churned, working with a ladle, washing it with water, and so on. The presence of the caseine in these fatty substances is undoubtedly in part the cause of the peculiar characteristic taste, just as the presence of some of these particular things gives a flavor to mutton fat and when in excess (as in goat fat and goat meat) one which is not admired; in fact an extra mutton flavor. In this way, then, the oleomargarine comes to be, as I have said already, almost identical with butter. There is a difference in these flavoring matters to a small extent, the maximum being perhaps a little over 5 per cent. found in butter which are not found in the oleo oil.

The oleomargarine oil, as I have so far described it, is not yet in a condition exactly resembling butter as regards its structure; that is, it is a fluid which, when allowed to cool, becomes a solid which is homogeneous throughout; it is a compact mass of fat.

Senator GEORGE. Is that altogether from the beef fat?

Professor MORTON. Yes, from the beef fat. Oleomargarine is made from beef fat. There is a difference in this respect from butter; butter is made from minute fat globules existing in cream which, by the action of churning, have been hammered together until the minute globules adhere to each other and make larger globules, and they are packed together and solidified, making an emulsion. You are familiar with that in salad dressing. You take oil and vinegar and mix them together and make a pasty mass. In the same way cream is an emulsion of minute globules of fat with little films around them of the watery portion of the milk which contains a little sugar of milk, caseine, albumen, and so on. When the churning is done to the cream it puts these little particles together and the same process may be accomplished by grinding instead of churning. You may make butter by putting the particles through a mill and rubbing them together until they adhere and form larger ones, and then by squeezing out the fluid portion you get ordinary butter. But butter, however, is an emulsion. It consists of particles of fatty material with little interstices between them. To get oleomargarine into the same con-

dition so that it could be used as an article of food with equal comfort, the structure must be broken up in a similar way. To do that this oleomargarine oil is put into a churn with a quantity of sour milk or cream, such as we use in the manufacture of butter. The milk for this purpose, as in making butter, must be sour. You could not make good butter with fresh milk, neither can you oleomargarine. The whole of the milk is taken except that instead of skimming the cream off the milk and bringing that together with a certain amount of sour milk left with it, the whole of the sour milk, cream and all, is placed in the churn with an appropriate amount of this oleomargarine oil and a little harmless coloring matter, exactly the same coloring matter that is used sometimes in making butter.

Senator GEORGE. What is the coloring matter which is generally used ?

Professor MORTON. It is sometimes saffron and sometimes annatto. They are both vegetable coloring matters which are entirely harmless, the same as cochineal which is used for coloring confectionary. They are perfectly harmless coloring matters and have been used for ages.

Senator GEORGE. It is put in for the purpose of affecting the appearance of the butter ?

Professor MORTON. It is put in to give a color resembling that of certain varieties of butter, just as they put it in butter at certain seasons of the year.

Senator GEORGE. Dairymen use the same coloring matters ?

Professor MORTON. Yes; just the same. Sometimes the dairymen pursue a little different plan by applying the color through the cow. They do it by feeding the cow on carrots or some other colored material, and they can get the color in that way. But however it is done makes no difference. It produces a color which pleases the consumer, and it has no effect one way or the other, makes it no better or worse.

The material having to be brought into this condition, a mechanical process, the churn, is set going and does exactly the opposite to what it does with the cream. In the case of churning the cream the object of the churning is to mash the little particles together and make the small ones larger, so that they would be sufficiently large to pack together and squeeze out the mass of aqueous liquid and make a solid emulsion. In the case of oleomargarine oil the object is to break up the homogeneous mass of oil into minute particles, to emulsionate it the same as you would do in making a salad dressing. You put certain things in a salad dressing to make an emulsion which, if of sufficiently hard substances, would become solid like butter. But this in the salad dressing never becomes hard. The oleomargarine is well beaten up, and when beaten to the right extent, so that it is thoroughly emulsified, it is then poured out on ice, so as to cool it quickly and not give time for the particles to run together or crystallize, as they might do from their melted condition, which would give it a granula character. Under these circumstances we get an article which contains, from the sour milk and cream used in it, a portion of this very butyrine, and this and caproin, and so on, and casein found in butter. But there is not as large a proportion as there would be in natural butter, of course. Instead of there being 5 per cent. there is not probably more than 1 per cent. as a rule.

Senator GEORGE. The object of that churning is to get the butyrine and casein ?

Professor MORTON. Yes; and to reduce the homogeneous fat to a fatty emulsion; that is to say, the minute particles separated by little

layers of an aqueous fluid, to reproduce the natural condition of butter. In other words, if it were not for that it would be like melted butter. If you melt butter and allow it to cool again (which is often done to preserve it because melted butter will deposit the casein, which will all settle in a layer), you can thus get the pure butter fat, which will keep longer in a warm climate. But when you come to eat that butter so prepared you will find it is not so pleasant to the taste; it has not the softness of ordinary butter. It has a sort of hardness and a lack of this plastic condition which makes it agreeable. Therefore, to make the oleomargarine like unmelted butter, it is necessary to churn it to break it up into these minute particles; or, to describe it in a word, to produce a solidified emulsion.

The CHAIRMAN. At what stage of the process—I do not think you have told us that—is the milk, cream, sour milk, or butter mixed with the oleomargarine?

Professor MORTON. In the act of churning.

The CHAIRMAN. What is it put in for?

Professor MORTON. It is put in for the purpose of enabling us to convert a homogeneous mass of fat into an emulsion of minute particles of fat with little layers between them of aqueous liquid, which it gets from the milk.

The CHAIRMAN. Is that the only object of using pure milk and cream in connection with it?

Professor MORTON. And to give it also the flavor of butter. That is where the flavor comes in.

Senator GEORGE. You get the butyryne then?

Professor MORTON. You get some butyryne and all the other flavoring matters, and some casein. You get enough casein, and butyryne, and so on, to give it a fair butter flavor, not a rich flavor. Oleomargarine never compares with rich fine butter, but is superior to strong or disagreeable butter, because it has no bad flavor.

The CHAIRMAN. What is the object of giving it a butter flavor?

Professor MORTON. The object is to make it palatable.

The CHAIRMAN. Taken as pure oleomargarine, then, it would not be palatable or salable?

Professor MORTON. Oh, I think it would be. But it is more palatable, and of course more salable when it is more palatable.

The CHAIRMAN. That is when it is made more like butter.

Professor MORTON. Yes; like butter or something that we are used to. In other words, our tastes depend very much on habit, and if we had been brought up to eat marrow instead of butter, or if marrow were the common food, then it would be undoubtedly desirable, in preparing a fresh article for consumption, to make it something like what the people were using and tasting, for the appetite seeks what it is accustomed to in these things rather than a new thing for which a taste is to be acquired.

The CHAIRMAN. Then you think an appetite could be created for pure oleomargarine?

Professor MORTON. Yes, sir.

The CHAIRMAN. You have been telling us about the fat of beef cattle used in making oleomargarine. Did you make any investigation of those establishments where large percentages of lard are used in the manufacture of butterine?

Professor MORTON. I have; I have also seen those. The difference is simply this, that at the time when the materials are put in the churn

there is mixed with the oleomargarine, strictly speaking, a certain amount of lard—

Senator GEORGE. Thus far you have been talking about the manufacture of oleomargarine from beef fat exclusively?

Professor MORTON. Yes; that is the first. I am giving it chronologically.

Senator GEORGE. Is the complete product ever made without the introduction of lard?

Professor MORTON. Yes; it is made without the introduction of lard.

The CHAIRMAN. That was the intention of the Mége patent?

Professor MORTON. Yes; that was the original idea; but when it came to be used extensively it was found that consumers objected to it, especially at some seasons of the year, in that there was a lack of the peculiar stickiness, if you might call it so, of butter; that it was a little more granular. It would break; in cutting, it would fracture; and in eating it there was not exactly the same smoothness that is found in butter. It was found that by adding a certain proportion of lard, that this greater smoothness was given to it, and accordingly it became common in many places—I do not know that it is universal at the present day—especially in the winter, to add a certain proportion of lard which had been prepared in substantially the same way, with proper care as to its purity, and for the same reason that the slightest carelessness utterly ruins the product. If the fat from the pig is allowed to stand any length of time and get in the slightest degree sour, or is not treated with extreme care and cleanliness, and the whole process conducted with scrupulous care, with nothing offensive left about, it is utterly ruined. It has been found that all fat has a wonderful property of absorbing odors of various kinds. Many of you are doubtless familiar with that fact. You cannot leave food with it in a small place in close proximity, without its acquiring the smell. If a pat of butter is put in a refrigerator alongside of a herring, and you take it out an hour afterwards, and eat it, you will think you are eating herring.

It is the same way with fruits. If you put butter in a refrigerator with a basket of strawberries, in a short time it will have a strong strawberry flavor. Many of our delicate perfumes are extracted in that way. The pure fat is spread in layers and then the leaves of flowers are spread over it and allowed to remain for some time, then they are taken away and other leaves are spread in the same manner and the fatty substance will absorb the odor of the flowers. When the fat so charged with the smell of these delicate flowers, like heliotrope, geranium, &c., which cannot be extracted in any other way, is treated with alcohol which washed out from the fat all these delicate essences, and this alcohol is used to make the fine perfumes, such as jockey club, &c., which we buy in bottles, are produced in that way, the flavoring having been absorbed by the fat and then again taken out by the alcohol. That indicates how delicate a substance fat is when exposed to anything unclean or offensive.

The CHAIRMAN. Will you explain to the committee the difference, scientifically, between the fat of the hog and the fat of the beef?

Professor MORTON. Scientifically there is just the same difference as there is between beef and mutton fat. The fat of mutton contains a great deal of stearine compared with the other compounds. Beef fat contains an intermediate proportion, and hog's fat a greater proportion of palmitin and olein. Otherwise they are identical, except that in each case there is a very minute quantity of different flavoring substances, a matter which has never been thoroughly studied or examined

into. I do not know exactly what it is, it is in such minute quantities, but it enables us in raw fats, by the smell, to tell which one it is. But it is almost like the perfume of the flower—evanescent. Otherwise all fats are the same, or differ only in the proportion of those three ingredients.

The CHAIRMAN. In the manufacture of oleomargarine, the stearine, you say, is nearly all extracted.

Professor MORTON. A considerable amount of it is extracted.

The CHAIRMAN. If so, and the result is that it is firmer and harder than that which is produced when a large amount of lard is used, why is it necessary to use lard in order, as you say, to soften the material? Why is not the result of the stearine when oleomargarine is made as full and complete as from lard?

Professor MORTON. For two reasons: First, it appears by this process, in the practical way of working it (we might if we could work at it with a great deal of time and care, but not in practical work), we cannot get the stearine out as perfectly as would be necessary to bring it down to the consistency of butter. There is too much stearine left in. I had no intention of saying it was all removed; that would be incorrect. The proportion of stearine left is quite a large one. But the intention is to remove it so as to get it down to the consistency of butter; but that intention cannot be practically carried out, and the oleomargarine oil as prepared contains a little stearine above that of butter, and the addition of lard corrects this. It also appears that there may be slight difference in the ultimate structure of the fat globules, in their physical structure, by reason of which one of them is more tacky than the other—has a little more stickiness. One is more plastic and the other more friable, just as in the mineral limestone we find some in a more friable condition than another. But there is no difference beyond this that science can reach.

The CHAIRMAN. You state that all this fat in the animal is maintained in its position by minute fibers surrounding globules of fat, and that all that fibrous matter is removed from the oil by straining it. Is that straining through cloths, sieves, or how is it done?

Professor MORTON. I did not intend to say that it was all removed by straining. It is removed by the process of rendering in this way: The fat is hashed up very fine indeed, then it is heated, and this heat does two things—it melts the fat and it dries these little fibers. The result is that the fibers which inclose the fat shrink in drying. There is also a quantity of salt thrown in during the melting, and this tends to abstract the water and to dry these fibers and to load them with salt—to salt them, and salt to a very slight extent only is soluble in fat, but is freely soluble in water and in the aqueous liquids which pervade this film. The result of that is that there is a shrinking, and it is made dense and heavy and sinks down to the bottom of the tank, and this tank being allowed to stand, it settles into two layers, one into salt water, holding in it all this fibrous animal matter, and on top of that is a layer of oil, which, after it has stood a little while, is just as clear as olive oil. That is carefully drawn off into a clean tank and allowed to stand for several hours more, so that it may be perfectly certain that every atom and particle of fibre settles, and in the drawing off the drawing is managed by a strainer with minute holes in it, and that is placed at the top of the oil and gradually lowered down as the level sinks, so that they never get at all close to the water layer. They stop drawing it off while there is still an inch or more of oil over the watery layer, and that much is thrown aside because it might contain a little scrap or fiber. This lower part of the oil is thrown into the tanks in which they make tallow. In

the second place a second settling occurs, and then the material is crystallized, and there it undergoes a subsequent filtration through canvas bags. Everything that is used has to be squeezed out through this thick canvas cloth in which the mass of stearine crystals is retained. The oleomargarine consists of a liquid oil which is strained, and it is only the liquid which is used. Anything solid settles with the stearine and is used for tallow.

The CHAIRMAN. How long does this rendering or melting process continue?

Professor MORTON. The actual melting occupies four hours usually, although that differs according to the size of the tank. It may take six hours, but usually I believe only four hours.

The CHAIRMAN. At what temperature is it conducted?

Professor MORTON. The temperature in the center of the tank is about 130 to 140 degrees, but the temperature at the edges of the tank is very nearly that of boiling water; the water in the jacket of the tank is almost at a boil. Sometimes it is much hotter. Sometimes they use steam. But generally the water is kept almost up to the boiling point, and this fat as it gets melted is constantly, by a stirring apparatus, brushed around, and the entire mass is heated a great deal more thoroughly than meat is ordinarily in cooking, for the material in that case is not as hot in the interior as it is where the material is swept around against this hot iron surface.

The CHAIRMAN. Is this scrap again heated during the process you have described?

Professor MORTON. No, sir; that scrap is at once thrown off with the oil belonging to it, and it is carried into a different part of the establishment, where they make a crude grease which is used for lubricating purposes, the manufacture of candles, or anything of that sort, and there it is melted and pressed, the scrap itself is heated and pressed in hydraulic presses along with the fat it contains, and the fiber is used for manure or something of that sort, but that has nothing to do with the oleomargarine part of the manufacture.

The CHAIRMAN. Is the oleomargarine ever heated at a higher temperature during any other process, or is that the end of it?

Professor MORTON. That is the end of the high heating. It is kept at about the same temperature. It does not do it any harm after that to heat it—there would be no objection to heating it, because when the scrap is once removed the heat is not liable to give any bad odor; but if heated very hot with the scrap in it, then it gets the flavor of roast meat, which is pleasant enough in roast meat, but not in butter.

The CHAIRMAN. You have stated that none of this scrap was left in the oleomargarine, but that it was all absolutely extracted, as I understood you.

Professor MORTON. That has been my experience in all the cases I have examined.

The CHAIRMAN. What would you say then to a sample of oleomargarine which was still sweet, but which under the microscope did show fibrous material?

Professor MORTON. I should like to know a good deal about its origin; what the history of it was. Of course, if it was some one's object to make such a thing, there would be no trouble in making such a sample. In other words, all you have to do is to make good oleomargarine and then take a little fat with scrap in it and stir it up together.

The CHAIRMAN. Would it be possible to make in any oleomargarine factory, if they were not extremely careful but anxious to make a large profit by selling it and working carelessly, an unfit article for food?

Professor MORTON. It would never be done but once. They would make one such large product and send it out, but it would all be sent back to them. They would lose their money, and they would not do it again.

The CHAIRMAN. If it was sold to consumers it would not be sent back to the oleomargarine factory, but would be pronounced bad butter.

Professor MORTON. It would be recognized at once, because the stuff would be detected immediately.

The CHAIRMAN. Have you any knowledge as to the percentage of lard now used in the manufacture of oleomargarine in comparison with the amount of oleo used?

Professor MORTON. I do not now recall it. I have heard, but I have forgotten. I think it is something like 20 per cent.. Some such proportion as that is frequently added, although that differs with the season of the year; in winter they need more than they do in summer.

The CHAIRMAN. Have you examined any of the oleomargarine factories lately where they use lard at all?

Professor MORTON. Yes; within a few weeks I have visited two of them in New York.

The CHAIRMAN. Then they were using lard mixed with fat?

Professor MORTON. Yes; they were using pure lard.

Senator GEORGE. What about the use of cotton-seed oil?

Professor MORTON. Cotton-seed oil has been used for the same purpose—that is to say, where the oleomargarine oil, as I have described it, has not had as much of its stearine removed from it as is required to bring it to the consistency of butter, then the same result can be obtained by adding more olein, more oil. Cotton-seed oil is like olive oil, almost pure olein. There would be another way of doing this thing. You might take the pure rendered fat, and instead of getting rid of the stearine, if you had some other material which would add the palmitin and olein by themselves, you might thus bring it to the same consistency or proportion by adding this instead of removing the stearine. The process, as I have said, is not entirely under control as to the amount of stearine to be removed. But when not enough is removed you can get the required consistency by adding olein or cotton-seed oil.

The CHAIRMAN. In the factories you have examined, do they use much cotton-seed oil?

Professor MORTON. They were not using it at either of the factories I examined. At one of them they were using all the winter what is known as benne oil or oil of sesame. Sesame is a grain very well known in the East. You may remember in the Arabian Nights in the story of the forty thieves, where the robbers opened the cave by saying "Open sesame." It is the name of a grain, a grain which is made into bread and eaten in that way, and by pressure there can be extracted from it an oil which is largely used in that region for cooking, and also as a salad oil. It is nearly pure olein, something like olive oil and cotton-seed oil.

The CHAIRMAN. You have stated that the pure fats of animals do not contain, or that it never had been discovered that they contain, germs of disease. Would it not be possible that the tissues surrounding the fats of these animals could contain germs of disease?

Professor MORTON. They have never been found in the fats—that is a scientific fact. There is not an instance recorded or a reliable statement made of their having been found in the fats, although there is abundant evidence of their being found in the muscles or muscular tissues.

The CHAIRMAN. I speak simply of the tissues that surround the fat; as to the oils I understood your statement.

Professor MORTON. No, sir; they have not been discovered.

The CHAIRMAN. Are you prepared to make the statement that they could not be found there?

Professor MORTON. They never have been in the history of science. With all these microscopical examinations, nobody has been found to make the statement. No one having the slightest show of authority has ever recorded the fact. Such things may have been stated in the newspapers.

The CHAIRMAN. There are blood vessels running around that portion of the animal, so that when it is cut up and washed the water becomes bloody from it?

Professor MORTON. Certainly.

The CHAIRMAN. There must be blood vessels, and whatever there is in the blood must be there.

Professor MORTON. Very possibly, before the fat is washed; but it is thoroughly washed before it is hashed, and then all this animal matter is extracted from it. If there was anything in the blood, it would not leave it to go to the fat; it would be embraced in the membranes if it was ever there. But there is no record of its being found in the fatty tissues; it is in the muscles. The fatty tissues used for this purpose are caul fat and not the fat distributed in the muscles of the animal. It is the fat located around the digestive and vital organs.

The CHAIRMAN. Do you know of any factories now in which pure oleomargarine is manufactured, made entirely from the fat of beef cattle mixed with milk or cream or anything else?

Professor MORTON. Where there is no lard used?

The CHAIRMAN. Yes; where there is no lard used—no oil.

Professor MORTON. No, sir; I do not know. I have not examined the Chicago factories, and therefore I do not know what they are doing there. As to the two I have seen lately in New York, in the one case they use lard only and in the other the oil of sesame as well. But those that were in New York some years ago which I examined there, used nothing but beef fat.

Senator GEORGE. Messrs. Armour & Co., of Chicago, write that they use lard.

Professor MORTON. I so understand.

Senator JONES. Would the product be in any sense more objectionable with lard than without it?

Professor MORTON. I cannot see that it would if it was pure.

Senator JONES. This process that you speak of, for separating the animal tissues and the stearine, is it accomplished in one or two processes?

Professor MORTON. Substantially in one; although if there be any little fragments of animal tissue left after the fat is melted, then they would be strained out in the press.

Senator JONES. The material is heated for each process?

Professor MORTON. Yes; it is heated but less in the first process for removing the animal tissues.

Senator JONES. Is that the process you spoke of when you said the temperature was 130 degrees?

Professor MORTON. Yes; the highest heat is in the center of the tank. The highest heat that the fat is submitted to is that nearly of boiling water where the fat is brushed against the sides of the tank.

Senator JONES. At what temperature is the product kept when the stearine is separated?

Professor MORTON. Between 80 and 90 degrees.

Senator JONES. And that is continued for how long?

Professor MORTON. It is continued from 12 to 24 hours.

Senator JONES. And that is the process in which you say putrefaction would be developed very quickly?

Professor MORTON. Yes, sir.

The CHAIRMAN. In the use of lard do they go through with the process of removing the stearine from the lard?

Professor MORTON. No, sir.

The CHAIRMAN. There is not enough there to require that. So that that part of the process is not adopted when they are using lard instead of beef fat?

Professor MORTON. No, sir.

Senator JONES. When cotton-seed oil is used, what process is that submitted to to clear it from impurities; is the ordinary market product put in just as it is?

Professor MORTON. The ordinary clear market product is put in; there is nothing done to it—at least I never have heard of anything of the kind.

Senator GEORGE. You mean the refined oil?

Professor MORTON. Yes, sir.

Senator JONES. At what stage of the process is that added?

Professor MORTON. Just before the churning—in other words, it is mixed up with the other oils.

Senator JONES. Is the oleomargarine cooled before the churning?

Professor MORTON. No, sir; on the contrary it is heated to make it fluid.

Senator JONES. After the process of taking the stearine from it is completed it is churned immediately?

Professor MORTON. Not immediately. After the stearine is taken from it it is usually run into a tank, and then if the churning is done in the same building, that tank is kept heated by a steam pipe, and it is kept as a fluid in that tank. If it gets cool it is solid. Otherwise it is allowed to run into barrels and become hard, and when they are ready to churn it it has to be melted.

Senator JONES. At what temperature is it churned?

Professor MORTON. I do not recollect the exact temperature, but it is the same temperature at which butter is churned, about 60 degrees.

The CHAIRMAN. The mixture of cotton-seed or sesame oil is a mere mechanical mixing?

Professor MORTON. It is mixed with other oils and it makes an indissoluble mixture—if you get them once mixed you cannot separate them again.

The CHAIRMAN. Do you desire to make any further statement?

Mr. COUDERT. Will you kindly ask the Professor what the effect of cotton seed, benne and sesame oil is on the wholesomeness of the product, and what the functions of butyrin and butyric acid are in the butter?

The CHAIRMAN. You can answer that question, professor.

Professor MORTON. In the first place, those materials are, in themselves, perfectly wholesome. They are exactly analogous to olive oil. They are used constantly and largely in the place of olive oil in many countries. Sesame oil is used abroad in the same way that we use olive oil. It is an article of food. The people who use it know exactly what it is, and it is largely used.

Senator GEORGE. Are you speaking now of cotton-seed oil?

Professor MORTON. Not exclusively. I say that the oil of sesame is used in Turkey and Asia, where it is largely raised, and it is also raised in the South to some extent. Cotton-seed oil is also used in that way. In fact, the larger part of the olive oil that we use on our tables is made of cotton-seed oil.

Senator GEORGE. Cotton seed oil is a healthful product, then ?

Professor MORTON. Yes, it is a perfectly healthy product. In the next place, with regard to butyrine. Butyrine itself in butter, of course, while it remains as butyrine is a source of no inconvenience, and it gives a flavor to the butter. It is quite as digestible, perhaps a trifle more digestible, than the other fats. But it is present in such small quantities that it makes no practical difference. It would be the difference between the digestibility of mutton, veal, beef, and other kinds of meat. To some persons one might be more digestible than the other. It is, however, liable to decompose, and in fact is one of the most readily decomposed bodies present in the fat. When butter becomes rancid and disagreeable, when it has that sharp, biting taste, it is simply because the butyrine is separated into glycerine and butyric acid. Butyric acid in perfection, one might say, is an intensely strong acid. It is an acid which, if pure, would be a deadly poison. If you should swallow half an ounce of pure butyric acid it would have a fatal effect, just as a half an ounce of acetic acid would. It comes from butyrine, and is intensely strong, and will displace some of the strongest mineral acids in chemistry. You all know the peculiar flavor of Roquefort cheese, how sharp it is. That sharpness consists in a mere trace of butyric acid. Therefore you can imagine that butyric acid, pure and simple, is quite a powerful acid, and really a corrosive agent. But of course it is present in that form in a very minute quantity only. When butter becomes rancid even that small quantity is highly irritating to the stomach. It is not only disagreeable, but very unwholesome. In this way the presence of butyrine is objectionable, because it makes the butter liable to undergo that change, which it is not liable to undergo without it. Therefore oleomargarine will keep much longer than ordinary butter, as it contains less butyrin.

Senator JONES. In how many factories have you ever seen this substance prepared ?

Professor MORTON. In about six factories.

Senator JONES. Is the plant and machinery of this process expensive ?

Professor MORTON. It is rather expensive.

Senator JONES. Can it be manufactured in a small way and by small establishments profitably ?

Professor MORTON. Not with profit. It must be done, I should say, on a fairly large scale to be profitable.

Senator JONES. Have you any idea how many establishments of this kind there are in New York and Philadelphia, for instance ?

Professor MORTON. I have only heard of one in Philadelphia, and in New York, at present, I only know of four.

Senator JONES. In those which you have examined are there any tricks of the trade resorted to—if I may use a vulgar expression—by which a cheaper product is made which is more deleterious or objectionable than a product honestly made ?

Professor MORTON. None whatever. There is very little temptation to do such a thing. In other words, anything that will cheapen the product spoils it. You can only make a good product. Any attempt to use fat that is really old and stale is unprofitable. An ounce of stale fat put into a ton of good fresh fat will spoil the whole thing before the

process is completed. So that so far from their being any temptation to use anything impure, the object is to use the very best material, in order to make a good salable product.

The CHAIRMAN. Do you think the lard is used because it is cheaper than beef fat?

Professor MORTON. No, sir; I think the motive is to improve the structure.

The CHAIRMAN. What would you say of oleomargarine which contained 90 per cent. of lard and 10 per cent. of oleomargarine?

Professor MORTON. I should say it was a very poor article. Of course, it may happen that some man may make a foolish experiment, thinking he is going to make it cheaper, but he will find out that he has cheated himself. He could not make a good article that he could sell twice to the same customer, unless he is honest and cleanly in the manufacture.

Senator JONES. We have been told about the vile compounds that are used in making the oleo—the fat of cats and dogs and animals which died of disease.

Professor MORTON. To any one who knows about it these stories are simply absurd. It is utterly impossible to do any such thing. As I have said, if the animal has been dead a short time the fat cannot be used. For instance, you could not use fat from the meat which is hung up and exposed for sale in market for the purpose of making oleomargarine. Although such meat is not hurt for ordinary use, and can be cooked and eaten, the fat of it would be utterly ruined for the purpose of making oleomargarine. The exposure of the meat in the market would give the product a strong tallowy odor, different from a putrid one, but the moment you tasted it you would say that it was not butter. No one would eat it. It would not have a butter taste. The very same taste in beef to which we are accustomed would be considered offensive if observed in butter. The very same flavor that I have defined as tallowy does not offend us at all in connection with cooked meat, because we are used to it in that connection. But if you try this experiment—if you take from a piece of beef you are eating a piece of the fat and chop it up fine and mix it with butter which you have on your table, and taste it, you would say it was very bad butter. It tastes good enough as beef fat, because you are accustomed to it in that way, but you object to that flavor in butter. It is just the same way with cheese. If you know you are eating a piece of Swiss cheese with its peculiar odor, your sense is not offended. But if a piece of that cheese gets on the side of the table or on your coat, and you smell it, you think there is something very nasty about it.

Senator JONES. Then you think that animals which have died a natural death could not be used in this way, because a putrefaction would be produced in the manufacture?

Professor MORTON. Yes, a change would be produced which would render the product tallow and not oleomargarine.

Senator JONES. That you say would be unavoidable?

Professor MORTON. It would be unavoidable. It could not be helped.

Senator JONES. You do not think you could make good oleomargarine out of a dead cat or dog?

Professor MORTON. I will stake my reputation on that—that it could not be done, because I have tried an analogous experiment to that very thing. I have taken fat which was put in a barrel and left over night, and in melting it down I found that the product was perfectly offensive and could not be used for one moment.

Senator BLAIR. I want to ask you a question in another direction. As I understand you, the object of this complicated process you have described is to produce something as much like good butter as possible?

Professor MORTON. It is to produce something that shall be an efficient substitute for butter, that people can use as they do butter.

Senator BLAIR. To make it as much like it as possible and get a healthy food?

Professor MORTON. Yes; that is the idea.

Senator BLAIR. You have spoken of various coloring matters put into butter as well as into oleomargarine—and right here I will ask you if you use the soft g in the word “oleomargarine”?

Professor MORTON. Yes, sir; I do.

Senator BLAIR. I understand you that none of these coloring matters are either expensive or hurtful?

Professor MORTON. That is true.

Senator BLAIR. They are used in candies, butter, and various other articles?

Professor MORTON. Yes, sir; used in confectionery.

Senator BLAIR. What different colors are there used for the purpose of distinguishing articles one from the other? You have red in candy and yellow in butter. What other colors are used in that way?

Professor MORTON. In candies they use very nearly every color, such as blue, red, green, and so on.

Senator BLAIR. This is the point I desire to make: Is not the one great difficulty about this thing that the man who eats it does not know whether it is butter or oleomargarine—I mean the consumer, the man who puts it on his piece of bread and eats it. I am not talking about the purchaser, the hotel-keeper, or the landlord. But the consumer does not know what he is doing; he understands that he is eating butter. Now, suppose the law should require all oleomargarine to be covered with some red substance and that all oleomargarine not of that particular color should be forfeited. It never could be mistaken for butter then, could it?

Professor MORTON. No, sir.

Senator BLAIR. Do you see any reason—I observe nothing of the kind in this House bill—but do you see any reason why oleomargarine, if it is to be manufactured and sold, should not by law be required to be of some definite color which nobody could mistake for the color of butter, so that it could never be mistaken for butter unless butter was colored like oleomargarine. Can you see any reason why that should not be done?

Professor MORTON. I see many reasons why it would not be proper.

Senator BLAIR. That could be left to those who make the laws on the subject; they could deal with that. But is there anything in that suggestion by which any harm would be done to any article of food, not oleomargarine alone?

Professor MORTON. It would not affect its wholesomeness, but it would affect it greatly as an article of food in the manufacture and sale of it, because the value of an article of food depends a great deal upon the idea of the person who purchases it, and such a requirement would tend to disgust the purchaser with the article.

Senator BLAIR. But if I want to eat butter and have all these prejudices in favor of butter, do you think it is right that anybody should come along with a substitute which I think is butter and compel me to pay for it and eat it as butter. Is that right?

Professor MORTON. It is not right that no guards should be thrown around butter, so that you do not know what you are eating.

Senator BLAIR. For instance, you are going to sell me oleomargarine and I am going to eat it. You can paint that oleomargarine red, or the color of the violet, or any color but the color which has been appropriated to butter ever since it was made the buttercup color. You can make it any color you please and appropriate that color to oleomargarine by law and it will be just as wholesome as before.

Professor MORTON. It would be just as wholesome, of course, but it would be destroyed, almost, as an article of food.

Senator BLAIR. But if I am the man to consume this product and pay for it, whether it be butter or oleomargarine, is it not fair that I should know what I am eating?

Professor MORTON. I think so—if you wish to.

Senator BLAIR. Is it fair for an oleomargarine man to put into it the color of butter when he can use anything else, and so sell me the product as butter?

Professor MORTON. As regards that single point that is correct.

Senator BLAIR. That is not one that means simple dollars and cents.

Professor MORTON. I cannot quite agree with you about that.

Senator BLAIR. In what way will it interfere with the cost of the manufacture and the consumption of oleomargarine to paint it red and not allow it to be made of any other color?

Professor MORTON. By creating a prejudice and disgust in the minds of many men against it.

Senator BLAIR. Why should not oleomargarine tell the truth? Why should it be allowed to lie itself into my stomach? Should I pay for it under those circumstances?

Professor MORTON. No, sir.

Senator BLAIR. That is all I want to ask you.

Professor MORTON. It should certainly be sold for what it is, and every guard should be put around it so that everybody may know what it is.

Senator JONES. But the man who chooses to eat it ought to be allowed to have it of the color of butter, if he finds out what that is.

Senator BLAIR. Yes, if he chooses to eat it himself; but if I want to eat butter, has he any right to make this article like butter so that I cannot tell the difference, and say it is butter so that I pay for it as butter?

Professor MORTON. That assumes that the artificial color does make it so that it cannot be distinguished from butter.

Senator BLAIR. What is the object of putting the color in?

Professor MORTON. To give it the same general appearance.

Senator BLAIR. You tell me in the first place that the object of the coloring process and everything else is to produce a healthy article of food just like butter to, take the place of butter in the market.

Professor MORTON. Yes, and if you color it differently it will not take the place of it.

Senator BLAIR. But it will be just as good and wholesome as an article of food?

Professor MORTON. Yes, aside from the influence upon the imagination.

Senator BLAIR. That prejudice will pass away very soon.

Professor MORTON. Not in the present state of affairs.

Senator BLAIR. Suppose butter had always been red, would we not have the same prejudice in favor of red butter as we now have in favor of yellow butter?

Professor MORTON. I suppose so.

Senator BLAIR. Suppose you do sell the oleomargarine for just what it is, the public do not know that they are eating oleomargarine; they think they are eating butter, and one reason is because it is yellow like butter. Suppose you made it red or violet, or appropriated some particular color to oleomargarine, or let it go without any color whatever, then it would not be mistaken for butter.

Professor MORTON. All that might be possible if started judiciously; but after all the statements that have been made about it and the public prejudice which has been worked up for years and years, it will take ten years to overcome it perhaps, and by that time the mischief is already done.

Senator BLAIR. But after all should not every product sell under its own color?

Professor MORTON. I do not think so. We have ice cream which is of the same color as butter, and candies also.

Senator BLAIR. But we never understand that we are eating butter when we are eating ice cream.

Senator GEORGE. I have been requested to ask several questions by some gentlemen present. You have probably gone all over this subject and therefore you can answer these questions without making much explanation. I am requested to ask you first to state your age, residence, and occupation.

Professor MORTON. I am 49 years of age; I reside in Hoboken, New Jersey, and am president of the Stevens Institute of Technology in Hoboken, an institute of mechanical engineering.

Senator GEORGE. What attention have you given to the study of chemistry, and for how long a time?

Professor MORTON. For over twenty-five years it has been my particular life study.

Senator GEORGE. What knowledge have you regarding the manufacture of oleomargarine and relative substitutes for butter, as carried on in a commercial scale in this country?

Professor MORTON. From the time the process was first invented and the product first came to this country I was informed about it, and have been called upon to examine various patents and processes continuously from year to year. Hardly a year has passed where something has not come to me to be examined and reported upon in connection with that subject.

Senator GEORGE. What is your opinion in regard to this material as a wholesome article of food?

Professor MORTON. I consider it perfectly wholesome. I eat it myself without hesitation and have it often in my house.

Senator GEORGE. Is it true that this product can be or is made of improper substances or injurious substances, and that chemicals are used in its manufacture? Perhaps you have already answered that.

Professor MORTON. It is not true. It is utterly impossible to make it of tainted materials, and no chemicals are used in its manufacture—that is, nothing in the usual meaning of that term, such as violent corrosives or other injurious materials. Salt, which is in one sense a chemical substance, is used.

Senator GEORGE. Has any injurious substance been found in any specimen of oleomargarine by yourself or chemists of standing and repute, to your knowledge?

Professor MORTON. None whatever; there is no evidence of any such thing.

Senator GEORGE. Is it in your opinion probable or even possible

under the normal conditions of manufacture, that any germs of disease could be introduced into oleomargarine ?

Professor MORTON. I do not believe it is at all possible or probable.

Senator GEORGE. What are the comparative risks of the introduction of disease germs into oleomargarine and pure butter ?

Professor MORTON. They are considerably greater in pure butter. It is easier to get germs into milk, and milk is never heated in the making of butter, so that nothing is done to protect it. The risk of introducing the germs of consumption from cows suffering with that disease would be far greater in the manufacture of butter than in the manufacture of oleomargarine.

Senator GIBSON. What is the point of temperature to which oleomargarine is raised in the process of manufacture ?

Professor MORTON. The individual particles of it come very nearly to the boiling point of water ; just to a good cooking temperature.

Senator GIBSON. Would that destroy the germs necessarily ?

Professor MORTON. It would destroy them under almost all circumstances. There are cases, but very rare ones, indeed, in which germs will resist very high temperature, and in such cases they would not be destroyed by ordinary cooking.

Senator GEORGE. What is your opinion of the relative digestibility of oleomargarine and butter ?

Professor MORTON. I think they are substantially identical. If there is any difference it is only the difference, as I said before, between one variety of meat and another.

Senator GIBSON. How did this product or compound get the name of oleomargarine ?

Professor MORTON. Because at one time the intermediate fat between stearine and olein, now called palmatin, was called margarine from *margaris*, a pearl. But it was afterwards found that it was really a mixture, and when the various substances were separated a new name was given to it and it was called palmatin, because it is similar to palm oil. But at the time it was first made public the old name was used.

Senator GIBSON. Does the name in any degree indicate the elements of which the substance is composed ?

Professor MORTON. Only the proximate elements—that it mainly consists of olein and margarine, which is another name for palmatin.

Senator GIBSON. What is the popular name by which it is known to the trade ?

Professor MORTON. It is known to the trade as oleo.

Senator GIBSON. How is it designated in commerce, for instance in a bill of sale, when it is sold for consumption and distribution ?

Professor MORTON. I have heard it called oleomargarine and butterine. Those are the only names I have known.

Senator GEORGE. What is the difference between oleomargarine and butterine ?

Professor MORTON. There is no real difference. The name "butterine" was introduced in England and the name "oleomargarine" was introduced in France. I do not know that there is any recognized difference between them in the trade.

Senator GEORGE. I have heard that the difference is that after oleomargarine was made it was mixed with butter, and that was all.

Professor MORTON. Perhaps, among dealers. I do not think there is any difference.

Senator GIBSON. Those are the names by which it is known to the trade—oleomargarine and butterine ?

Professor MORTON. Yes, sir.

Senator GIBSON. Do you know whether it is manufactured in foreign countries at all?

Professor MORTON. It is, very largely, and is regulated there by the Government. It is sold in great quantities in England. In Massachusetts it is sold under State regulations under its own name.

Senator GIBSON. And it is sold on the Continent, in France, Germany, and Italy?

Professor MORTON. Yes. I do not know about Italy, but I know it is in England and that a great deal of it is made in Holland.

Senator GIBSON. Do you know what quantity is manufactured in the United States?

Professor MORTON. I do not know the total quantity; I have seen it printed, but I have forgotten.

Senator GIBSON. Do you know the value of the product?

Professor MORTON. I do not remember; it is very large.

Senator GIBSON. Could you furnish to the committee a statement of the quantity manufactured and its market value?

Professor MORTON. I cannot at this moment, but I will see that it is furnished.

The CHAIRMAN. You state that the milk or cream and butter was mixed with it slightly to make it appear and taste like butter. Do you know whether any other materials are used to flavor oleomargarine except the milk and cream and butter?

Professor MORTON. I have heard that on occasions other things have been added with a view of producing flavors.

The CHAIRMAN. With a view to producing a butter flavor?

Professor MORTON. Yes; to produce a butter flavor. But they have been added, I think, by ignorant people, because they would not do it.

The CHAIRMAN. What other things have been used for that purpose?

Professor MORTON. I have heard of butyric acid being put in, but the quantity was so minute as not to be appreciable. It was a foolish thing to do, and probably was never done except as an experiment. They may have been advised that it was a good thing to do, but upon trying it they would discover it was not.

Senator GIBSON. Is oleomargarine manufactured of different qualities?

Professor MORTON. Yes; there are different qualities of oleomargarine as there are of butter, but not within so wide a range.

Senator GIBSON. How many degrees of difference do exist in the actual market?

Professor MORTON. I imagine there are several, in the sense that judges of these things will say, "Here is an oleomargarine with a particularly fine flavor." For instance, if they use an extra amount of cream and milk in making it they will get a richer flavor, and it will be sold as a high grade of oleomargarine.

Senator GIBSON. Do you know what scale of prices exist on the market—what is the product worth a pound generally?

Professor MORTON. I do not know. I have not followed that; but I think somewhere about 20 cents a pound.

Senator GIBSON. There is a difference in the price, then?

Professor MORTON. I presume so, but I could not say. I do not deal in the article at all.

Senator GIBSON. I am asking you as a professor whose attention has been drawn to the article.

Professor MORTON. But my opportunities of learning about these things are very small.

Senator GIBSON. Are there as great differences in the qualities and prices of oleomargarine in the markets as there are in the prices of butter?

Professor MORTON. No, sir; oleomargarine has a very narrow range. If it is not a good article you cannot sell it at all. If there is anything wrong about it, it becomes offensive. Whereas you might have very bad and rancid butter, and sell it at a very low price, you cannot have rancid oleomargarine and sell it any price at all. If it is not quite good, it has to be sold for tallow. Between that and the best of it there is not a very great range, although there is some.

Senator PLUMB. Do you know of any difference in the method of manufacturing butterine and that employed in the manufacture of oleomargarine?

Professor MORTON. Only in this sense, that sometimes they speak of the extracting of this oleomargarine oil as the making of oleomargarine, but they never use the term "making butterine" in that sense. Butterine always means the article finished so that it can go on the table for butter. The word "oleomargarine" may be used to designate the manufacturing of the oil or of the finished product. The word "butterine" refers to the finished product only.

Senator PLUMB. You think what fixes the grade of each kind of butterine is the use more or less of milk or cream?

Professor MORTON. I think so.

Senator PLUMB. Or the use of butter?

Professor MORTON. Yes; I have heard of butter being mixed with it to increase its flavor.

Senator PLUMB. I am told that in Kansas City one concern there buys the entire butter product of a large creamery.

Professor MORTON. They might well do so because of the additional flavor that would give it.

Senator PLUMB. All the milk is brought down from three or four counties there and used.

Senator BLAIR. Do those manufacturers make the article from its elements to its complete preparation for the table?

Professor MORTON. In some cases they do, and in some cases the manufacture is divided. Some manufacture the oleomargarine oil and then put it in tierces and send it to the other manufacturers who do the churning, the mixing of the material, and so on. It is a different kind of process. One process can be carried on very close to a slaughter house, where they want to get the fat as fresh as possible and try it out immediately. The churning part is better done of course at a distance.

Senator BLAIR. That churning process could be done just as well in a farmer's family as anywhere else, in small quantities?

Professor MORTON. Oh, yes, it could be, and has been, and is being so done to some extent.

Senator BLAIR. You say this process is carried on by the farmers themselves to some extent.

Professor MORTON. Yes, I have been told so.

Senator BLAIR. What is there to prevent this coming to be a universal thing, then, with the entire dairy interest, so that the oleomargarine interest will become amalgamated and absorbed the one in the other?

Professor MORTON. I think there is this reason, that the best oleomargarine you could possibly make, with any economy in making it, would never be so fine, in the sense of commanding so high a price, as

thoroughly good butter. It is the peculiar fats of butter that give it a fine flavor, and you never could make an oleomargarine as good as the finest butter.

Senator BLAIR. Do you know anything of the prime cost of the manufacture of oleomargarine as compared with that of butter?

Professor MORTON. It varies. It depends on the price of beef and so on—what they have to pay for the fats. I have really no personal knowledge about that.

Senator BLAIR. You have some idea perhaps or judgment about it?

Professor MORTON. Only from what I have seen in the papers.

The CHAIRMAN. The professor appears as an expert and does not intend to speak on that part of the subject.

Professor MORTON. No, sir; I have no knowledge in regard to it. I have no personal relations to these gentlemen. They simply asked me to come from my professional chair and make this statement to you.

STATEMENT OF CHARLES F. CHANDLER.

Prof. CHARLES F. CHANDLER, of Columbia College, New York, then addressed the committee: I would not, of course, wish to take up the time of the committee by repeating anything that Dr. Morton has said, but I will say at the outset that I agree with Dr. Morton in every statement that he has made.

Senator GEORGE. You were present and heard his statement to the committee?

Professor CHANDLER. Yes, sir; I heard his statement which he has just concluded. I have been called upon officially on three different occasions to investigate this subject. I was first called upon as president of the board of health of New York City, by the State senate of New York, to carefully investigate it, and I prepared a report which was approved by my colleagues of the health department and forwarded to Albany. Afterwards, in 1880, I was called upon by the Committee on Manufactures of the House of Representatives, and at that time I prepared a report with the approval of my colleagues of the health department, and I will leave a copy of that report with the committee.

Senator GEORGE. You indorse the statements therein made?

Professor CHANDLER. Yes, sir; I indorse them at the present time. I have not a copy of the first report sent to the New York State senate, but it is essentially the same. I was afterwards called upon by the New York board of aldermen and made a report which was approved by the board of health and which was printed in the City Record, of which this is a copy.

Senator GEORGE. You reaffirm that statement now?

Professor CHANDLER. I do; yes, sir. In all of these reports I have taken the ground that this is a new process for making an old article, and that article is butter. This is a new process for making butter. It is made of materials which are in every respect wholesome and proper articles of food, whether it be made solely from the oleomargarine extracted from beef fat, or whether it has added to it more or less leaf lard properly prepared, or more or less sesame oil or cotton-seed oil, and whether it be or not colored with annatto or the other coloring matters used. I take the ground that there is nothing in any one of these materials in any sense unwholesome, and nothing in any one of them which makes it inferior as an article of food to dairy butter. I regard the dis-

covery of Mége-Mouries, of a process by which beef fat and hog fat can be extracted from adipose tissue and converted into a wholesome article of food free from any disagreeable taste or odor, as one of the most important discoveries made in this century, a discovery by which it is possible to make a perfectly pure and satisfactory, as well as a wholesome, article of food at a reasonable price. I have visited various factories where this article is manufactured, from the time the industry began down to date. I am perfectly familiar with the materials employed and the different processes, and know there is nothing whatever used either in material or process which is unwholesome or in any way deleterious to the public health.

Senator GEORGE. Or which would be disgusting if known?

Professor CHANDLER. Precisely. On the contrary, the processes by which this kind of butter is manufactured are much more cleanly than the processes by which dairy butter is manufactured. The beef fat or leaf lard is taken out of the animals there, put into cold water, and thoroughly washed and cleansed.

Senator PLUMB. Is it necessary that that should be done?

Professor CHANDLER. It is necessary. It is impossible to make an article that would sell unless this is done. In order to remove and cool the fat at once, it is necessary that it should be washed, and the fat is converted into butter in both stages without being handled in any way. Then it is worked up and melted in vessels in jacketed kettles, and therefore it is much more cleanly because never handled by human beings—all the work is accomplished by machinery. Whereas dairy butter is manufactured in small quantities without—well, it will hardly be worth while to say anything which will tend to disgust persons with dairy butter, and I will refrain from stating what everybody must know, that in some dairies at least cleanliness is not strictly observed. In the majority of the dairies the butter is constantly handled and worked by human hands, which, to my mind, is a process of manufacture far less appetizing than the process by which the oleomargarine butter is formed.

I, of course, have not followed all these proceedings before Congress, but I have read what has been printed, and am quite aware of the scope of this investigation. We had a senate investigation in New York City for the purpose of discussing fully the subject of artificial butter. The person who managed that investigation came and consulted me about it, but very carefully refrained from calling me as a witness, and the evidence taken before that commission is too ridiculous ever to have been printed by so august a body as the senate of the State of New York. The statements that were made there were utterly ridiculous. Stories with regard to offensive processes and offensive materials used in preparing food were rehearsed, and the story of the use of nitric acid was repeated, as well as the old story that the workmen employed in these factories lost their toe-nails in consequence of the acid which was used in working the fat, and many things of that kind. I never could understand how the State senators of New York could permit such testimony to go on record and be printed. But it was done, and that kind of evidence has been manufactured all over the country with the view of disgusting the public with this kind of butter. Artificial butter has never had a fair opportunity to be presented to the citizens of this country, and this legislation with regard to it recalls to my mind legislation which is found in the records of the past.

Some of you remember, I presume, that before the discovery of the passage around the Cape of Good Hope to India the only dye-stuff cultivated to any extent in England was woad, an inferior dye which our

ancestors employed for dyeing their products. When the trade with Bengal sprang up, indigo was brought to England, and immediately there was a great hue and cry made against indigo. It was said it was going to ruin the woad farmer of England, and they called it devil's dirt—Teufelsdröckh was the name in German—and it was made a capital crime in England, France, and Germany for anybody to be caught with indigo on his premises. It was not suggested that it should be colored blue, because that was its natural color and it was not necessary. Soon after logwood was discovered in Honduras, and when it was attempted to introduce it into England as a dye laws were passed against it. We have had that kind of legislation always. It is not many years since a petition was presented to Parliament in England protesting against the use of hops in beer, on the ground that it would destroy the digestion of the English people. There was a similar attempt at legislation in regard to the burning of soft coal. They had used only wood and charcoal in England, and when it was proposed to take coal out of the ground and bring it to London they said it would ruin the industry of the people who cut wood in the forests to make charcoal; that it was unhealthy and would make a smoke that would get into the lungs of the knights who came from the country to Parliament to sit and legislate for the people.

With regard to the statements concerning the unwholesome character of these materials, I have paid particular attention to the subject, and feel competent to speak upon it.

Senator GEORGE. Are you a doctor of medicine?

Professor CHANDLER. I am an M. D., but I am not a practitioner of medicine. I have been a professor in a medical college for twenty years, and have made a special study of this subject of germs—not recently, but I began a dozen years ago. I have a laboratory where I conduct my experiments by the use of the microscope, and I am familiar with all the literature on the subject of any value, and I do not hesitate to say that there is nothing whatever in the assertion that there is any danger of germs in this artificial butter. There is no foundation of fact at all for those statements. It is a bugbear which is conjured up in order to disgust people on the subject of beef fat. I have paid some attention to trichinæ. President Arthur appointed me a member of the commission appointed to investigate the character of swine products of the United States. This committee is aware that in Germany they started a theory that American hog products were unwholesome. Having called them all the bad names they could think of, they then legislated against them and excluded them from that country. In the course of that investigation I found, in the first place, that American pork is remarkably free from trichinæ and other diseases of that character, and in the second place, that if the pork contained trichinæ, those little worms would not be in the fat which is used in the making of leaf lard. That is not the place for them. They go to the muscles and not to the fat, and if they did go there, it would not do any harm, because this fat is put through a hashing machine, the very object of which is to cut up the cells which contain the fat. That hashing process would be fatal to the trichinæ or worms. Then after that the material is heated in the rendering and melting, so that if any life remained it would be destroyed in that process of heating. But if any should be so vigorous as to withstand these two processes, when the butter was salted it would be too much for them.

It was held by the commission that as to trichinous pork, if salted down and left in brine a month or two, the result would be the killing of the trichinæ worms.

Senator GIBSON. Has that report been printed?

Professor CHANDLER. Yes; it was printed by the United States Government.

Senator GIBSON. Will you not make that a part of your statement, as it deals with this subject?

Professor CHANDLER. Yes; I will make the papers I have spoken of a part of my statement.

The papers referred to are as follows:

Report on the Swine Products of the United States, Executive Document No. 106, House of Representatives, Forty-eighth Congress, first session.

Also the following, which were ordered to be printed as a part of this record:

HEALTH DEPARTMENT, No. 301 MOTT STREET,
New York, May 3, 1881.

To the honorable the Board of Aldermen:

At a meeting of the board of health, held this day, a report of the president on oleomargarine was presented and approved, and a copy was ordered to be forwarded to your honorable body as a response to resolution adopted on the 28th ult., and received on that date from your honorable body.

A copy of the report is inclosed.

Very respectfully,

EMMONS CLARK,
Secretary.

NEW YORK, May 2, 1881.

To the Board of Health of the Health Department:

Having been directed by this board to investigate the subject of oleomargarine, in response to the resolutions of the Board of Aldermen, I would beg leave to submit the following report:

The resolutions directing the inquiry are as follows:

"Whereas there is existing at the present time in the minds of the public great alarm and distrust in relation to the adulteration of food products; and

"Whereas the committee on public health of the assembly of this State has been for some time investigating the adulteration of food products, and especially oleomargarine; and

"Whereas this committee have conducted such investigation by calling as witnesses principally dealers in butter, and have not examined as witnesses medical or chemical experts to determine the value of oleomargarine as food: Therefore,

"Resolved, That the board of health of this city be, and they are hereby, requested and directed to take immediate measures to investigate, in the most thorough manner, by medical and chemical aid, the purity, healthfulness, and value of said product as an article of food, and to report to this body the results of their investigation, with such recommendations, if any be necessary, as may relate to the manufacture and distribution of the same as an article of food."

This subject has been before the board on former occasions, and I have little to add to what has been previously stated.

Oleomargarine, invented by the distinguished French chemist, Mege Mouries, is manufactured in New York City in a few large establishments. The material is fresh beef suet, brought directly from the slaughter-houses. It is thoroughly washed, rendered very carefully, strained to remove a portion of the hard stearine, and then churned with milk to convert it into artificial butter, which contains the same constituents as dairy butter. The process is extremely ingenious and simple, and is executed by machinery. Nothing objectionable exists in the original material, nor is anything objectionable added during the process, and the operations are conducted with the utmost cleanliness. The product is palatable and wholesome, can be made of uniform quality the year round, is in every respect superior as an article of food to a large proportion of the dairy butter sold in this city, and can be manufactured at a much lower price. I regard it as a most valuable article of food, and consider it entirely unexceptional in every respect. In this opinion I am supported by the best scientific authorities in the country. The following distinguished chemists, after carefully studying the manufacture, have made the most decided statements in favor of this new article of food:

Prof. George F. Barker, University of Pennsylvania.

Dr. Henry A. Mott, jr., New York.

Prof. G. C. Caldwell, Cornell University, Ithaca, N. Y.

Prof. S. W. Johnson, Yale College, New Haven, Conn.

Prof. C. A. Goessmann, Massachusetts Agricultural College, Amherst, Mass.

Prof. Henry Morton, Stevens Institute, Hoboken, N. J.

Prof. Charles P. Williams, Philadelphia.

Prof. W. O. Atwater, Wesleyan University, Middletown, Conn.

Prof. J. W. S. Arnold, University of New York.

I would further say that this question is one on which there is no difference of opinion among scientific investigators familiar with the chemistry of dairy products and fats. I have never seen a statement emanating from any person having any standing among scientific men in which a contrary opinion is advanced. There has recently been a very strong confirmation of my opinion published in England. A bill came before the House of Commons in England, directed against this kind of butter from America, and, after considerable discussion, was defeated by a vote of 75 to 59. In the discussion the strongest opponent to legislation against it was Dr. Lyon Playfair, one of the most distinguished chemists and sanitary authorities in England. A pupil of Graham and Liebig, he has filled the chairs of chemistry in the Royal Institution of Manchester, and at the University of Edinburgh was appointed Chemist to the Museum of Practical Geology by Sir Robert Peel, represented the Universities of Edinburgh and Aberdeen in Parliament, was postmaster-general in the first Gladstone cabinet, has been member of several sanitary commissions, and is now a leading member of Parliament. In his remarks he stated that "bad butter is a fraud upon the poor, and oleomargarine would sooner or later drive it out of the market"; he "thought that good oleomargarine at one shilling a pound was a great deal better and cheaper than bad butter at one shilling fourpence a pound"; and he said that "as a general rule the former (oleomargarine) did not become so readily rancid as the latter (butter)."

I would further state that as there is nothing unwholesome in oleomargarine, no legislation in regard to this article is necessary to protect the public health.

I append to this report a copy of the resolutions adopted by this Board on February 8, 1878, in response to a resolution of the State senate requesting an opinion; and also a copy of a report which I made on March 27, 1880, in response to an inquiry addressed to me by Hon. M. R. Wise, chairman of the Committee on Manufactures of the House of Representatives.

All of which is respectfully submitted,

C. F. CHANDLER,
President.

[Report to the Senate of the State of New York.]

NEW YORK, *February 8, 1878.*

To the Honorable the Senate of the State of New York:

The Board of Health of the Health Department of the City of New York having been requested to report upon the subject of oleomargarine, by the following resolutions of the Honorable the Senate of the State of New York:

"Resolved, That the Board of Health of the City of New York be requested to report to the Senate at as early a day as possible:

"1st. Whether, in the opinion of said Board, oleomargarine is a good and wholesome article as food.

"2d. That if it is not, what legislation is required to effectually prevent its manufacture and sale.

"3d. That if it is, what additional legislation is necessary to prevent its imposition upon the public as pure butter, the product of the dairy."

—has given to the subject due consideration, and is of the opinion:

1st. That oleomargarine is a good and wholesome article of food.

2d. That no legislation is necessary to prevent its imposition upon the public as pure butter, the product of the dairy, additional to chapter 415 of the laws of 1877. All of which is respectfully submitted.

By order of the Board,

C. F. CHANDLER, *President.*
EMMONS CLARK, *Secretary.*

A true copy.

EMMONS CLARK.

[Letter to Hon. M. R. Wise, Chairman of the Committee on Manufactures, House of Representatives.]

HEALTH DEPARTMENT, 301 MOTT STREET,
New York, March 27, 1880.

MY DEAR SIR: In reply to your letter of inquiry, I would say that I have been familiar with the discovery of Mége Mouries and its application in the manufacture of artificial butter, called "butterine," or "oleomargarine," since the date of its first publication.

I have frequently seen it manufactured, witnessing all the operations, and examining both the material and the product.

I have studied the subject with special reference to the question of its use as food, in comparison with the ordinary butter made from cream, and have satisfied myself that it is quite as valuable as the butter from the cow; that the material from which it is manufactured is perfectly fresh beef suet; that the processes are harmless; that the manufacture is conducted with great cleanliness. The product is palatable and wholesome, and I regard it as a most valuable article of food, and consider the discovery of Mége Mouries as marking an era in the chemistry of the fats.

Butterine is manufactured of uniform quality the year round, and can be sold at a price far below that at which ordinary butter is sold. It does not readily become rancid, and is free from the objectionable taste and odor which characterize a large proportion of the butter sold in this market.

I am informed that there are at present thirteen factories in the United States licensed under the patents to manufacture this butter. The Commercial Manufacturing Company of New York is making at the present from 30,000 to 40,000 pounds daily. In addition to this industry there is a large manufacture of what is known as "oleomargarine oil," which is shipped as such to Europe, to be there converted into butter; so that this product has become an important article of export to foreign countries.

The beef suet which was formerly converted into common tallow, only suitable for the manufacture of soap, is, by this beautiful discovery, now manufactured into oleomargarine oil and stearine of double the value of the tallow formerly produced. The following analyses made by Drs. Brown and Mott sufficiently illustrate the composition of the butterine:

| Constituents. | No. 1, natural butter. | No. 2, artificial butter. |
|-----------------------|---------------------------|------------------------------|
| Water | .11 968 | 11.203 |
| Butter solids | 88.032 | 88.797 |
| | 100.000 | 100.000 |
| Insoluble fats: | | |
| Olein..... | } 23,824 | } 24.893 |
| Palmatin | | |
| Stearine | | |
| Arachin | | |
| Myristin..... | } 51.422 | } 56.29 |
| Soluble fats: | | |
| Butyrin | } 7.432 | } 1.823 |
| Caprin | | |
| Caproin | | |
| Caprylin..... | | |
| Casein | .192 | .621 |
| Salt | 5.162 | 5.162 |
| Coloring matter | Trace. | Trace. |
| | 88.032 | 88.797 |

Last winter a resolution was adopted by the legislature of the State of New York requesting the board of health of the city of New York to investigate the subject, and report, whether in its opinion the butterine is a wholesome article of food. In response to this resolution, the board of health stated that in its opinion there is no sanitary objection whatever to the unrestricted manufacture and sale of this substance.

In support of my opinion herein expressed, I inclose the statement to the same effect made by Prof. George F. Barker, of the University of Pennsylvania; Dr. Henry A. Mott, jr., of New York; Prof. S. C. Caldwell, of Cornell University; Prof. S. W. Johnson, of Yale College; Prof. C. A. Goessmann, of the Massachusetts Agricultural College; Prof. Henry Morton, of the Stevens Institute of Technology, of Hoboken;

Dr. Charles P. Williams, of Philadelphia; Prof. W. O. Atwater, of the Wesleyan University at Middletown, Conn.; and Professor J. W. S. Arnold, of the medical department of the University of New York.

Hoping that this, my reply, contains all the information you desire, I remain,
Very respectfully, yours,

CH. F. CHANDLER, Ph. D.,
President of the Board of Health.

To Hon. M. R. WISE,
*Chairman of the Committee on Manufactures,
House of Representatives, Washington D. C.*

[Letter from Professor Barker.]

UNIVERSITY OF PENNSYLVANIA,
Philadelphia, March 22, 1880.

The United States Dairy Company:

GENTLEMEN: In reply to your inquiry, I would say that I have been acquainted for several years with the discovery of Mège Mouriés for producing butterine from oleomargarine fat. In theory, the process should yield a product resembling butter in all essential respects, having identically the same fatty constituents. The butterine prepared under the inventor's patents is, therefore, in my opinion, quite as valuable a nutritive agent as butter itself. In practice, the process of manufacture, as I have witnessed it, is conducted with care and great cleanliness. The butterine produced is pure and of excellent quality, is perfectly wholesome, and is desirable as an article of food. I can see no reason why butterine should not be an entirely satisfactory equivalent for ordinary butter, whether considered from the physiological or commercial standpoint.

Respectfully yours,

GEORGE F. BARKER.

[Letter from Dr. H. A. Mott, jr., Ph. D., E. M., Analytical and Consulting Chemist, office 117 Wall street.]

NEW YORK, *March 12, 1880.*

United States Dairy Company:

GENTLEMEN: Having been acquainted for the past six years with the process of the manufacture of the product called oleomargarine butter, or butterine, and having made numerous microscopical and chemical examinations of the product, I am clearly of the opinion that the product called oleomargarine butter is essentially identical with butter made from cream; and as the former contains less of those fats which, when decomposed, render the product rancid, it can be kept pure and sweet for a much longer time.

I consider the product of the Mège discovery a perfectly pure and wholesome article of food, which is destined to supplant the inferior grades of butter, and be placed side by side with the best product of the creamery.

Respectfully,

HENRY A. MOTT, JR., Ph. D.

[Letter from Professor Caldwell.]

CHEMICAL LABORATORY, CORNELL UNIVERSITY,
Ithaca, N. Y., March 20, 1880.

I have witnessed, in all its stages, the manufacture of "oleomargarine" and of oleomargarine butter or "butterine."

The process for oleomargarine, when properly conducted, as in the works of the Commercial Manufacturing Company, is cleanly throughout, and includes every reasonable precaution necessary to secure a product entirely free from animal tissue, or any other impurity, and which shall consist of pure fat made up of the fats commonly known as oleine and margarine. It is, when thus prepared, a tasteless and inodorous substance, possessing no qualities whatever that can make it in the least degree unwholesome when used in reasonable quantities as an article of food.

In the manufacture of butterine, since nothing but milk, annatto, and salt, together with perhaps a little water from clean ice, are added to this oleomargarine, to be intimately mixed with it by churning and other operations, I have no hesitation in

affirming that this also, when properly made according to the Mége patent and other patents held by the United States Dairy Company, and when used in reasonable quantities, is a perfectly wholesome article of food; and that, while not equal to fine butter in respect to flavor, it nevertheless contains all the essential ingredients of butter, and since it contains a smaller proportion of volatile fats than is found in genuine butter, it is, in my opinion, less liable to become rancid.

It cannot enter into competition with fine butter; but in so far as it may serve to drive poor butter out of the market, its manufacture will be a public benefit.

S. C. CALDWELL.

[Letter from Professor Johnson.]

SHEFFIELD SCIENTIFIC SCHOOL OF YALE COLLEGE,
New Haven, Conn., March 20, 1880.

The United States Dairy Company :

GENTLEMEN: I am acquainted with the process discovered by M. Mége for producing the article known in commerce as oleomargarine or butterine.

I have witnessed the manufacture in all its stages, as carried out on the large scale, and I can assert that when it is conducted according to the specifications of M. Mége it cannot fail to yield a product that is entirely attractive and wholesome as food, and one that is for all ordinary, culinary, and nutritive purposes the full equivalent of good butter made from cream.

Oleomargarine butter has the closest resemblance to butter made from cream in its external qualities—color, flavor, and texture. It has the same appearance under the microscope, and in chemical composition differs not in the nature, but only in the proportions of its components. It is therefore fair to pronounce them essentially identical.

While oleomargarine contains less of those flavoring principles which characterize the choicest butter, it is, perhaps, for that very reason comparatively free from the tendency to change and taint, which speedily renders a large proportion of butter unfit for human food.

I regard the manufacture of oleomargarine or butterine as a legitimate and beneficent industry.

S. W. JOHNSON,

*Professor of Theoretical and Agricultural Chemistry,
Director of the Connecticut Agricultural Experiment Station.*

[Letter from Professor Goessmann.]

AMHERST, MASS., March 20, 1880.

United States Dairy Company, New York :

GENTLEMEN: I have visited on the 17th and 18th of the present month, your factory on West Forty-eighth street, for the purpose of studying your mode of applying Mége's discovery for the manufacture of oleomargarine butter or butterine. A careful examination into the character of the material turned to account, as well as into the details of the entire management of the manufacturing operation, has convinced me that your product is made with care, and furnishes thus a wholesome article of food. Your oleomargarine butter or butterine compares in general appearance and in taste very favorably with the average quality of the better kinds of the dairy butter in our markets. In its composition it resembles that of the ordinary dairy butter; and in its keeping quality, under corresponding circumstances, I believe it will surpass the former, for it contains a smaller percentage of those constituents (glycerides of volatile acids) which, in the main, cause the well-known rancid taste and odor of a stored butter.

I am, very respectfully, yours,

C. A. GOESSMAN,

Ph. D., Professor of Chemistry.

[Letter from Professor Morton.]

STEVENS INSTITUTE OF TECHNOLOGY,
Hoboken, N. J., March 16, 1880.

United States Dairy Company :

GENTLEMEN: During the last three years I have had occasion to examine the product known as artificial butter, oleomargarine or butterine, first produced by M. Mége, of Paris, and described by him in his patent of July 17, 1869.

I have also frequently witnessed the manufacture of this material, and with these opportunities of knowing exactly what it is, I am able to say with confidence that it contains nothing whatever which is injurious as an article of diet; but, on the contrary, is essentially identical with the best fresh butter, and is very superior to much of the butter made from cream alone which is found in the market.

The conditions of its manufacture involve a degree of cleanliness and consequent purity in the product, such as are by no means necessarily or generally attained in the ordinary making of butter from cream.

Yours, &c.,

HENRY MORTON.

[Letter from Dr. Williams.]

LABORATORY, NO. 912 SAMSON STREET,
Philadelphia, March 22, 1880.

During a period of upwards of two years I have been practically familiar with the details of the manufacture by the Mège method of oleomargarine butter or "butterine." From my experience and observation of the care and cleanliness absolutely necessary in the manufacture of this product, together with my knowledge of its composition, I am satisfied that it is a pure and wholesome article of food, and in this respect, as well as in respect to its chemical composition, fully the equivalent of the best quality of dairy butter.

I will add further, that, owing to the presence of a less quantity of the volatile fats, the keeping qualities of the oleomargarine butter are far superior to those of the dairy product.

CHARLES P. WILLIAMS, PH. D.,
*Analytical Chemist, late Director and Professor Missouri School of Mines,
State University.*

[Letter from Professor Atwater.]

WESLEYAN UNIVERSITY,
Middletown, Conn., March 29, 1880.

I have carefully looked into the theory and the practice of the manufacture of butterine (oleomargarine) by the "Mège process," and examined the product. A consideration of the materials used, the process of manufacture, and the chemical and microscopical character of the butterine, seem to me to fully justify the following statements:

As to its qualitative composition, it contains essentially the same ingredients as natural butter from cow's milk.

Quantitatively, it differs from ordinary butter in having but little of the volatile fats which, while they are agreeable in flavor, are, at the same time, liable to rancidity. I should, accordingly, expect butterine to keep better than ordinary butter.

The best evidence within my reach indicates that just such is the case. The butterine is perfectly wholesome and healthy, and has a high nutritious value. The same entirely favorable opinion I find expressed by the most prominent European authorities—English, French, and German—who are unanimous in their high estimate of the value of the "Mège discovery," and approval of the material whose production has thereby been made practicable.

I am, very truly, yours,

W. O. ATWATER.

[Letter from Professor Arnold.]

UNIVERSITY PHYSIOLOGICAL LABORATORY,
410 East Twenty-sixth street, April 2, 1880.

This is to certify that I have carefully examined the "Mège Patent Process" for the manufacture of oleomargarine butter or butterine; that I have seen and tasted at the factory each and every ingredient employed; that I have made thorough microscopical examinations of the materials used and of the butter; and I consider that each and every article employed in the manufacture of oleomargarine butter or butterine is perfectly pure and wholesome; that the oleomargarine butter differs in no essential manner from butter made from cream; in fact, the oleomargarine butter possesses the advantage over natural butter of not decomposing so readily, as it contains fewer volatile fats. In my opinion, oleomargarine is to be considered a great discovery, a blessing for the poor, and in every way a perfectly pure, wholesome, and palatable article of food.

J. W. S. ARNOLD, A. M., M. D.,
Professor Physiology and Histology, Medical Department, University of New York.

The CHAIRMAN. You stated at the beginning of your remarks that this article of oleomargarine had never been fairly presented to the American people. How would you have it presented, on its own merits, or in what way?

Professor CHANDLER. On its own merits, of course. The State of New York is spending \$50,000 a year to disgust people with oleomargarine and artificial butter. I would have no legislation to forbid the manufacture or sale of it, but I would forbid the sale of it fraudulently. There is no one in the United States who has done more to prevent the sale of fraudulent and adulterated food than I have. The milkmen of New York City alone paid nearly \$50,000 into the city treasury by way of fines while I had charge of that business.

The CHAIRMAN. You think this article ought to be sold to the consumer for just what it is?

Professor CHANDLER. Yes; and we have laws enough to effect that object. Congress has passed a law on the subject of food adulterations, which I took part in drawing up. That law has been adopted in New York and other States. As chairman of the sanitary committee of the State board of health I attempted to enforce it, but while the legislature appropriated \$50,000 to hound down this butter, I could not get money enough to pay counsel to prosecute cases of adulterated food in New York. We tried to stop the sale of adulterated medicines, but could not get an appropriation for the purpose. The State board did what it could, but it was not supported.

The CHAIRMAN. Are not the laws in New York in regard to oleomargarine directed towards the compelling of dealers who handle it to sell it for what it is?

Professor CHANDLER. They are; but the difficulty is that we have State officers whose business it is to disgust people with it, and who print reports and continue to circulate these absurd stories about the unwholesomeness of it. They sell it in Massachusetts for what it is.

Senator BLAIR. I believe you stated that you indorsed everything that Professor Morton stated to the committee.

Professor CHANDLER. I do.

Senator BLAIR. He says that it is admitted everywhere that coloring matter is in it, and that it is innocent in its effects. Do you admit that?

Professor CHANDLER. I do.

Senator BLAIR. And that the yellow color is introduced to make it look more like natural butter than it otherwise would. Now, my question is this: If oleomargarine is to be colored at all, and your object is that it shall be sold for what it is, and stand upon its own merits, and if the coloring matter that is used is not hurtful or expensive, why should not that coloring matter be such as to distinguish oleomargarine from butter, and let the two articles go upon the market of different colors, so that to the consumer the difference may be made one of actual demonstration?

Professor CHANDLER. Because the people who want butter want it yellow.

Senator BLAIR. Do you think that is an answer to my question?

Professor CHANDLER. I do. I think it would be very wrong to compel the manufacturer to color his product red.

Senator BLAIR. Then the people who want to eat oleomargarine could do so, and every one could distinguish it.

Professor CHANDLER. But when they want to eat it they want it yellow.

Senator BLAIR. Do you think that is a perfectly honest answer?

Professor CHANDLER. I do think so, and I think it would be a great hardship to compel people who want to eat oleomargarine to have to have it red when they want it yellow.

Senator BLAIR. You admit that it is just as healthy as an article of food if colored in that way?

Professor CHANDLER. Yes; it is just as wholesome.

Senator BLAIR. Is it not colored yellow for the purpose of making a more complete imitation of dairy butter?

Professor CHANDLER. It is colored yellow because it is butter, just as much as the other is butter.

Senator BLAIR. Is it dairy butter?

Professor CHANDLER. No, sir; it is not dairy butter; it is artificial butter.

Senator BLAIR. Please use the two terms so as to distinguish them in your answer. Do you understand that this is a controversy between butter on the one hand and an article which looks to be actually the same thing?

Professor CHANDLER. Yes; except that it is oleomargarine.

Senator BLAIR. But the public who furnish the money to buy the article understand they are purchasing dairy butter.

Professor CHANDLER. They do not in Boston. They do not where it is properly sold without Government interference.

Senator BLAIR. Do you believe that one man in a hundred who eats oleomargarine understands that he is not eating dairy butter?

Professor CHANDLER. I do not suppose he does in New York State, but the inspector in Boston, where they have a law to prevent its sale for anything but butter, reports that he has found that in almost all cases the article is properly sold, and that all means are used of informing the customer what it is, and it is bought in small quantities by consumers.

Senator BLAIR. And at substantially the same price as butter?

Professor CHANDLER. No; it is cheaper than butter made from milk.

Senator BLAIR. How much cheaper?

Professor CHANDLER. It is sold at wholesale in New York at present for 10½ cents a pound.

Senator BLAIR. I am speaking of the price to the consumer.

Professor CHANDLER. It is sold at retail at 18 cents a pound; that is about the price, as I am told by dealers.

Senator BLAIR. And at about the same price in Massachusetts?

Professor CHANDLER. I presume so; I do not know.

Senator BLAIR. Do you know the price of dairy butter in the same localities?

Professor CHANDLER. The last time I heard my wife say anything about it she was paying 80 cents a pound.

Senator BLAIR. Do you understand that is the ordinary price?

Professor CHANDLER. It is for some grades. That was the Darlington butter.

Senator BLAIR. I do not care to consume more time, but this other question is purely a chemical or scientific one. It is admitted by both gentlemen that the coloring matter is not expensive or hurtful. I would like to know why there is any objection to employing a different color, so that the articles might be distinguished. Dairy butter being naturally yellow, let the oleomargarine be sold with some other color.

Professor CHANDLER. My objection to that is simply this: In my opinion, as soon as poor people find out that they can get an article of

food which is just as good as dairy butter for a considerable less price, they will buy it for what it is. But they will not want it colored red or blue; they want it yellow. We all want to spread our bread with yellow fat; we do not want to spread it with red fat; and I do not see why the poor people of this country should not be permitted to purchase butter made artificially if it is just as good and just as wholesome as the butter made from cream.

Senator BLAIR. And you would add to that, if they have knowledge of what they are purchasing.

Professor CHANDLER. Certainly. We have laws sufficient already, if they are properly enforced, to prevent fraud in butter. They should be enforced. That is the way it is done in Europe. The only country that has a prohibitory law against the sale of artificial butter is Schleswig-Holstein. France, Germany, Russia, Portugal, Sweden, and Spain have no laws against the sale of it. They have strict laws against frauds and adulterations in food, but as I said there is no prohibitory legislation against artificial butter except in the little state of Schleswig-Holstein. Whether they carry it out or not I do not know.

The CHAIRMAN. Sweden has a law which permits it to be sold under very great restrictions.

Senator PLUMB. Why do you pay 80 cents a pound for dairy butter and use it in the place of this other article, which you say is just as good and which you can buy for 18 cents a pound?

Professor CHANDLER. Because my wife has a fancy for it, and if I can satisfy her fancy for it I am willing to do it. It makes no difference to me. I like oleomargarine, and am perfectly satisfied with it. I have bought it and send it to the hospital on Blackwell's Island, of which I have charge.

Senator BLAIR. Would you regard it as the proper thing to do to put it on your table so that your wife and children would eat it as 18-cent butter?

Professor CHANDLER. I did do that. I took some of it and had it put upon the table for the use of the family, and they ate it for two days without discovering what it was. Then I bought some gilt-edge butter, but my wife and family suspected it was oleomargarine, and nothing would induce them to touch it.

I would simply like to say further that I have carefully studied the literature of this subject and I have not found, either in this country or abroad, any chemist or physiologist who has any standing in the profession who has ever uttered an opinion adverse to artificial butter. Certain persons who have no standing whatever, in the employ of these parties, who are paid by State governments to hound this article of food, have put forth statements, and one of them has published pictures attempting to disgust people by illustrating what he alleged to be what he saw in these compounds under the microscope. His statements are entirely without foundation. He made similar ones against the Croton water in New York when he had a filter to sell. He published just such pictures, showing every conceivable creature as growing in the Croton water, in order to disgust people with the water.

Senator GIBSON. Is dairy butter colored?

Professor CHANDLER. Yes, sir; more than half the time.

Senator GIBSON. Is it a product or a manufactured article?

Professor CHANDLER. Butter is a manufactured article just as oleomargarine is a manufactured article.

Senator GIBSON. As a practical chemist, will you tell us some of the differences in the manufactured product?

Professor CHANDLER. The finished dairy butter and the finished artificial butter are the same. There is nothing in one not found in the other. All the percentages of stearine, palmatin, and olein, and the percentages of water and of salt, are practically the same in the two kinds of butter.

Senator GIBSON. Therefore, when you observed that oleomargarine was butter you spoke scientifically.

Professor CHANDLER. Yes, sir; I spoke scientifically, regardless of the question in controversy. I was speaking simply of the finished article when it is put on the table, and I say they are essentially the same thing.

Senator GIBSON. And the coloring process used in the manufacture of dairy butter is the same as the coloring process used in the manufacture of oleomargarine?

Professor CHANDLER. It is the same thing exactly, and they color it just in the same way. The same coloring matter, annatto, is generally used. It is used by the farmer when his cows produce milk that makes white butter.

Senator GIBSON. Suppose Congress should pass a bill prohibiting the coloring of dairy butter, what effect would that have?

Professor CHANDLER. Dairy butter would not be as acceptable to the consumer, and it would be a bad law.

Senator GIBSON. Suppose Congress required the dairy butter to be colored red, would not that protect people against oleomargarine if that remained of a yellow color?

Professor CHANDLER. Yes; and it would "boom" oleomargarine.

Senator GIBSON. Suppose Congress should pass a law providing that oleomargarine should be colored yellow, and dairy butter should be colored red. Would that be satisfactory or proper, do you think?

Professor CHANDLER. No, sir; I think it would be very wrong.

The CHAIRMAN. Perhaps you had better state that the butter made from the grass in summer time is naturally yellow.

Senator GIBSON. I desire to add that I come from a country where there is as good grass as in New York.

The CHAIRMAN. You are aware, of course, that the greater proportion of butter is not colored at all.

Senator GIBSON. I was brought up around Lexington, Ky., in the blue-grass region, where we think we can produce pretty good butter; but the best butter I ever ate was along the Gulf of Mexico, where the cows feed on cane, and it makes the best butter I have ever seen.

The CHAIRMAN. I think it is too broad a statement to say that all dairy butter is colored. It is not colored, as a rule, in the summer time; but in the winter time it is done to keep it the same color.

Professor CHANDLER. About half of the dairy butter is colored, I understand.

Senator VAN WYCK. I understood you a few minutes ago, in speaking of the examinations and reports made by some chemist or scientist connected with the State of New York, to say that the State was paying him for circulating reports against oleomargarine.

Professor CHANDLER. No, sir; I do not think the gentleman who published the pictures I referred to was connected with the State of New York. I meant to say that the State of New York appropriates \$50,000 a year to support what they call the dairy commission, which was originated for the sole purpose of interfering with the sale of artificial butter. There was no excuse for the passage of the bill to interfere

with the sale of bad milk, for we had all the law we wanted, and I was enforcing it as chairman of the State board.

Senator VAN WYCK. Those gentlemen who made this scientific examination were professional gentlemen?

Professor CHANDLER. They may call themselves such, but they have no standing.

Senator VAN WYCK. You spoke of their being under pay from some source—the class of men who furnish those reports. I want to ask you—it would be but fair—whether the scientific gentlemen who are here arguing in favor of oleomargarine are doing it simply for the public good, or whether they are paid for their services?

Professor CHANDLER. My investigations were made in the interest of the city of New York, as president of the board of health.

Senator VAN WYCK. Then scientific gentlemen are paid on both sides?

Professor CHANDLER. I do not quite understand your meaning.

Senator VAN WYCK. You said those who spoke against oleomargarine were paid by the State. Now, my question is, are not the gentlemen who are advocating oleomargarine paid in some way, or do they do it for the public good?

Professor CHANDLER. I say the reason why the public is prejudiced against oleomargarine and other forms of artificial butter is because the State spends \$50,000 a year in discrediting it.

Senator VAN WYCK. Precisely. But oleomargarine is advocated by equally distinguished chemists, who are endeavoring to allay this public clamor, and they are equally paid, are they not, from some source, or do they do this as a labor of love, in the interest of the public?

Professor CHANDLER. Oh, no. I presume that the experts who have left their homes to come before this committee will receive some compensation for it.

Senator VAN WYCK. Then you are on the same footing so far as compensation is concerned; the advocates on both sides are compensated?

Professor CHANDLER. But it makes a great deal of difference whether a man makes his living solely out of a certain thing, or whether a person who has made investigations in the public interest is asked to come before the committee and his expenses are paid for doing so.

Senator GIBSON. What is the natural color of dairy butter?

Professor CHANDLER. It is a pale yellow.

Senator GIBSON. What is the natural color of oleomargarine?

Professor CHANDLER. It is almost white.

Senator GIBSON. So that naturally these two products do differ in color?

Professor CHANDLER. Yes, sir.

Senator GIBSON. And might be detected one from the other?

Professor CHANDLER. Yes, sir. There would not be so much difference in color in the winter. Winter butter, if not colored, would not have much more color than artificial butter uncolored; it would have a little more, perhaps.

I do not know that I have anything further to say, except that I have the names here of twenty or thirty of the best chemists in this country and abroad, who have committed themselves favorably on this subject. Prof. George F. Barker, of the University of Pennsylvania; Prof. S. W. Johnston, head of the agricultural experiment station in Connecticut; Prof. S. C. Caldwell, who is the professor of agricultural chemistry at Cornell University; Prof. C. A. Goessman, of the State Agricultural College of Massachusetts; Prof. J. W. S. Arnold, who was professor of

physiology in the University of the State of New York; Prof. W. O. Atwater, of the Wesleyan University at Middletown, Conn., the writer of the article on butter in the *Encyclopædia Britannica*; Prof. Adolph Meyer, of Germany, who investigated the digestibility of artificial butter; Prof. W. H. Brewer, of Yale College; Sir Lyon Playfair, who is one of the most distinguished chemists in England, and who was also the deputy speaker of the House of Commons.

Recently Mr. Anton Jurgens read a paper before the Society of Arts, in which he approved of it, and was awarded a silver medal for his paper on the subject, and in the discussion which followed, Professor Redwood, Dr. James Bell, Professor Odling, the chairman, and several others spoke heartily in approval of artificial butter. Recently the Berlin board of health published a report on the subject; in which they have brought together everything that has been written; but I am sorry to say that they have quoted from the report of the Low committee. They do not understand in Germany that when our Government investigates a matter it is not done in the same way it is done in Germany. But their conclusion is, after getting everything on the subject together, American and foreign, that artificial butter is perfectly wholesome. They do say, I am bound to explain, that if unwholesome materials are used, then they may have some fear of it. But so far as they know they are not aware of any unwholesome materials being used. After they read the Low report the suggestion came up in their minds in regard to the use of unwholesome material.

Senator BLAIR. I understand you object to any legislation, and think that any legislation would be wrong which would serve to distinguish these two articles the one from the other?

Professor CHANDLER. I do, but I would have severe penalties imposed for the sale of oleomargarine under any name which would create the belief in the mind of the purchaser that it was dairy butter.

Senator BLAIR. Why, then, do you object to legislation which would seem to enable me to detect the difference between the two and protect me against either?

Professor CHANDLER. Because I think it is unfair and interfering with the rights of the consumer, who does not want red butter. The consumer does not want red butter.

Senator BLAIR. You object to any legislation by which the two articles can be by law distinguished from each other.

Professor CHANDLER. Yes, because a chemical analysis will always distinguish them.

Senator JONES. He does not mean to say that he objects to any law by which people should be put on guard against it.

Senator BLAIR. What legislation would you think proper which would enable the consumer to tell whether he was eating the one or the other?

Professor CHANDLER. Nothing but the labeling of it.

The CHAIRMAN. Do you think it is possible to distinguish the fat of an animal that has died by disease and one that has been killed, both taken the same length of time after death?

Professor CHANDLER. I do not think you could make a marketable butter out of the fat of diseased animals.

Senator BLAIR. That is not my question exactly. What I ask is, whether scientifically you could detect the difference between the fat of a hog dying this moment of cholera and the fat of a hog killed this moment by the butcher, the fat being taken from the two animals at the same length of time after death?

Professor CHANDLER. No, sir; you could not distinguish them.

Mr. WHEELER H. PECKHAM. Would the Senator ask him whether he could distinguish the butter made from diseased milk from that made of healthy milk?

The CHAIRMAN. You can answer that if you have any knowledge about it; it is not of any importance here.

Professor CHANDLER. I do not think you could unless in the case of such milk as the Paris board of health has just excluded or proposed to exclude from Paris. It is found there that in the case of cows suffering from tuberculosis or consumption the milk is charged with the germs of consumption, according to a recent statement I have seen. If that is the case, I have never seen any such; those germs would get into the butter and one could take them into a laboratory and cultivate them and inoculate them and in that way might detect the presence of those germs, provided they are alive when they get to his hands.

The CHAIRMAN. Don't you think the salting process in butter would kill those germs the same as you admit it would the germs found in oleomargarine?

Professor CHANDLER. I was talking about trichinae worms then, but the germs in the case I speak of are not so easily killed.

The CHAIRMAN. Do you desire to make any further statement?

Professor CHANDLER. I think of nothing further at present.

The CHAIRMAN. Then the committee will stand adjourned until tomorrow morning at 10 o'clock.

The committee then adjourned.

WASHINGTON, D. C., *Wednesday, June 16, 1886.*

The committee was called to order at 10.15 o'clock a. m.

The CHAIRMAN. I have received no information from the gentlemen who desired to be heard to-day as to how many of them desire to speak, or how much time they wish to occupy. If some one will give me the names of the parties who desire to be heard this morning, we will call them in their order. I suppose they have selected among themselves those who are to speak and whom they wish to have heard.

STATEMENT OF JAMES F. BABCOCK.

Prof. James F. Babcock, of Boston, Mass., then addressed the committee:

I am a chemist by profession. At present I occupy a position which our statutes require all mayors of cities to fill by appointment, namely, that which is called with us in Boston inspector of milk. By our statutes, inspectors of milk are also charged with the enforcement of the laws in regard to butter and some other food products.

I have been asked to state to the committee what facts have come to my knowledge and observation in the process of carrying out the laws which we have in Massachusetts, and more especially as applied to Boston. The committee doubtless are familiar in general with the character of the law which we have in Massachusetts, which, I will say in brief, is simply one which provides that oleomargarine, butterine, imitation butter, and such goods shall be sold in marked tubs, and sold at retail in marked papers. In pursuance of the execution of that law, our plan in Boston has been this—but I will say before I come to

speak on that subject, that the city of Boston, in the last year and the present year, has appropriated a very generous sum of money for the carrying on of this department, for it is made a department in the city government. They have appropriated \$9,000. They furnish us a well equipped laboratory, we have four assistants, two of whom remain away employed constantly upon the street, a part of their time in regard to matters relating to milk and a part of their time in regard to butter and oleomargarine. These men are called collectors of samples. They make daily reports. They not only take samples of milk, but they visit places where oleomargarine and butter are sold, to see that the parties selling those goods comply with the law. They make a written report in every case, upon a blank which is provided for that purpose, giving the date, the time of the day when the inspection was made, the proprietor's name, place of business, &c., whether he keeps butterine or not, and whether it is properly marked. A record is made of all these inspections.

In the case of retail dealers, grocers, and provision men who sell these goods at retail, we find that some of them do not have the papers marked as the statute requires; that is, they have no papers at all. We find almost universally that the tubs are marked upon the top and side as required by the law. We find that to be the case with the wholesaler almost universally. There have been some exceptions and some prosecutions have resulted, but the great majority of the dealers, both wholesale and retail, have their tubs marked. If we find a retailer who is selling these goods at retail and who has no marked papers, we send him a printed notice, such a one as I have in my hand, and which I will present to the committee, merely calling his attention to that fact. It is what we call a warning.

The paper submitted by the witness is as follows:

CITY OF BOSTON,
OFFICE OF INSPECTOR OF MILK, BUTTER, AND VINEGAR,
1151 *Washington street, Boston*, ———, 188—.

You are hereby notified that a compound made in imitation of butter, and not made exclusively of milk or cream, and known as oleomargarine, butterine, or imitation butter, has been found in your possession with intent to sell, the same not being marked as required by the statutes. You are respectfully notified that the sale of such compound not properly marked, or the possession or custody of the same with intent to sell, renders you liable to the penalties provided by the public statutes.

Further information will be furnished on personal application to this office.

Respectfully,

Inspector.

All these people who sell goods in this way without marked papers are not those who are selling the goods for what they are not, but they are in many cases the owners of small stores or new places of business, where they do not know what the provisions of the statute are, and that is a notice to inform them. These notices are all numbered, as you will observe. It is torn off from a book with a stub, and a record is made on the stub of that notice, and after the notice is sent, in a week or two, the same collector visits the place, and it is found that in almost every case—I should say in 95 per cent. of the cases where notices are sent—that they have complied with the law in consequence of receiving that notice. The number of inspections which we make in this way, and have made, is a matter of record. The number of these warnings which have been sent out is recorded on the stubs, so that we are able to state with comparative certainty the number of cases in the city of Boston

of stores which sell butter and oleomargarine and imitation butter, who are and are not selling in accordance with the provisions of the statute—not necessarily doing it fraudulently in all cases.

I will give some figures to the committee on this subject. In January of this year our collectors reported three hundred and sixty-three inspections. Forty-five of those inspections resulted in parties receiving a notice similar to the one which you have. If I have figured it correctly, that is 12.12 per cent. In February three hundred and sixty-seven inspections were made and thirty-five warnings given. I have other figures here for the months of March, April, and May, which I will hand to the reporter, as I do not desire to occupy too much time. I will say, however, that the whole number of inspections made since I have held the position which I now hold, which covers a period of about a year and four or five months, is 3,371, and the number of warnings of this kind issued up to the 1st day of June was 294. The percentage is easily figured out, and is about 9 or perhaps 10 per cent.

In view of these facts, these figures, and these inspections, which are made systematically, I say, without fear of contradiction, that the laws of the State of Massachusetts, in the city of Boston, are enforced as well as any law can be. We have laws against various crimes, against robbery, yet there are complaints of robbery and assault, and there have also been complaints against parties who have sold these goods in violation of law. Those cases, however, are the exception and not the rule.

It has been within my knowledge, and is within my knowledge at the present time, that there are thousands of persons in the city of Boston who buy butterine, knowing perfectly well what they are buying—who call for butterine, who pay the price of butterine, and who receive it in a paper marked as the statute requires of them in those cases. The marking, so far as those persons are concerned, is unnecessary, because they know what they are buying. But the dealer must mark it whether the person knows it or not. Not only are these goods marked upon the tubs and marked upon the papers provided for the retail sales, but I know of a great many dealers in Boston who in addition to what the law requires mark their goods by hanging a large sign directly over the tub or the ice-chest or refrigerator where the goods are kept. I have in mind at the present time a new store which has only been started within a couple of weeks at the south end in Boston, fitted up, I had almost said with elegance, a store for selling dairy products. They have a refrigerator with some nine or ten compartments in it, with glass doors, and nine of these contain butter and one of them contains butterine. The butterine is marked by a sign hanging over that place with letters I should say three inches long; the price of it is marked—15 or 16 cents, the retail price—and the prices of all this butter, ranging from 18, 19, and 20 cents up to 30 and 35 cents per pound at this season of the year, are also indicated.

You will find in the same way, in the market located in that section of the city, where the patronage is chiefly from poor people, that these goods are exposed for sale and the name is marked upon the goods. A gentleman in South Boston, a very respectable grocer, whose name I could give to the committee if necessary, said to me only last Saturday, speaking of these goods—I will say that he had two tubs of butter and one tub of butterine, and his butterine and papers were marked—he was speaking to me of the sale of these goods to poor people. He said that a regular customer of his had said to him only a few days before that the butterine which he had bought during the winter for 15 cents a

pound had enabled him to give his boy butter to eat; he called it butter, but butterine is what he bought. These goods are spoken of in that general way as butter, although they are substitutes for butter. This man said that the sale of butterine at 15 cents a pound had enabled his boy to have butter during the winter; otherwise he would have had to go without. He said his boy had never eaten any butter in his life, and the man spoke of the goods as being something which he regarded it a privilege to buy. I say it cannot be disputed that in the city of Boston, and in some of our large manufacturing cities in Massachusetts, such as Fall River, Lawrence, and Lowell, there are thousands of pounds of oleomargarine and butterine, imitation butter, sold to people who know perfectly well what they are buying, who call for it, and who could not be cheated in regard to it; they know what it is worth.

Senator JONES. Do they buy it for themselves and their families, or to feed boarders on?

Professor BABCOCK. They buy it for themselves and their families; they do not keep boarders. A poor man with a family of four or five has all the boarders he can take care of. It is undoubtedly sold to and bought by boarding-house keepers, saloon and restaurant keepers, and it is certainly true that they do not put any mark upon it when they put it on their tables. There is a large sale in that direction. But the people who buy it for their own consumption are very numerous and know very well what they are buying.

The CHAIRMAN. Do your inspections of these dairy products go outside of the city of Boston?

Professor BABCOCK. No, sir; not officially. What I know in regard to this matter outside of the city of Boston is only a matter of information from conversation with other inspectors or members of boards of health, &c.

The CHAIRMAN. For what purpose do you appear before the committee?

Professor BABCOCK. I was requested by some of the gentlemen interested in the manufacture and sale of oleomargarine to state to the committee the figures and results of our inspections in the city of Boston. I want to say further that we think, in Massachusetts, that our health laws are enforced as well or better than in any other State. The gentleman who is now the chairman of our State board of health was elected president at the last meeting, in Washington, of the National Health Association—I refer to Dr. Walcott—and our State board of health, in a report which may be found among the Massachusetts documents in 1883, three years ago, discussed this question of oleomargarine in its relation to the public health, and their report and their conclusions are printed in that document. Upon that board was Mr. Thomas Talbot, ex-governor, and Mr. John Fallon, who for many years was superintendent of the Pacific Mills, in Lawrence, which, as some of the committee may know is one of the largest cotton mills in the world. They reported as follows in regard to oleomargarine. They say that "it is inferior to the best butter, but is much superior to the low grades of butter to be commonly found in the markets." So far as its influence on health is concerned they say they can see no objection to its use. They say "its sale as genuine butter is a commercial fraud, and as such very properly condemned by law." They go on to say, as to its prohibition by law, that the same law which prohibited it could also prohibit the sale of lard and tallow, and more especially of low-grade butters, which are far more injurious to health than a good, sweet article of oleomargarine.

Senator BLAIR. You say in speaking of its sale they say in a certain contingency it is a commercial fraud?

Professor BABCOCK. Yes, sir.

Senator BLAIR. Would they consider, or would you consider, the sale of it to a man who eats it as a sale?

Professor BABCOCK. Certainly I should consider that a sale.

Senator BLAIR. If it is sold to him in such a way that he does not know what he is eating, is that a commercial fraud?

Professor BABCOCK. Yes, I should regard that as a commercial fraud. In this report I refer to the board say: "A great deal has been said about a poor grade of fats, of which oleomargarine is made. Any one making such an assertion in regard to fats is simply ignorant of the whole subject. When a fat has become in the least tainted it can no longer be used for this purpose, as it is impossible to remove the odor from the fat after it has once acquired it. The use of a substitute for butter seems to be steadily on the increase in this country. When good butter is from 40 to 50 cents a pound it has passed beyond the means of persons of moderate circumstances, and they have the choice of three things—to do without, to use poor butter, or to use some substitute." That is the published official statement of the state board of health of Massachusetts, and I indorse every line of it. I believe it to be true. I do not know that the committee care to hear anything from me as to my particular views as to the purity or wholesomeness of butter further than what has been expressed in this report of the Massachusetts State board of health.

The CHAIRMAN. You state that under your law the retail dealer has his tubs marked and has the wrapping-paper printed with the word "oleomargarine" or "butterine" on it, which he has to put on the article when sold?

Professor BABCOCK. Yes, sir.

The CHAIRMAN. Is it not possible that the retail dealer, having both butter and oleomargarine in the same shop, could constantly sell oleomargarine to a customer without putting the paper on it, and as butter?

Professor BABCOCK. He certainly could.

The CHAIRMAN. Without being caught by the consumer at all?

Professor BABCOCK. He certainly could; he might.

The CHAIRMAN. And any law that would more effectually guard and prevent that condition of affairs would be desirable, would it not?

Professor BABCOCK. Any law which would more effectually prevent the sale of oleomargarine for what it is not I should be glad to have passed by the national legislature or by our State legislature.

The CHAIRMAN. Your inspectors, of course, do not stay in every retail dealer's shop to see that every pound of oleomargarine is put up in an oleomargarine paper?

Professor BABCOCK. No, sir. But there are certain dealers that we regard with suspicion. We take means to see whether or not the goods are sold in these papers by employing persons to occasionally go into such stores on Saturday nights when there is a rush of business, when, if ever, they are selling these goods fraudulently, and buy a pound or two pounds, or whatever small quantity is desired, and carry it away, and we have found that in the great majority of cases these goods are marked. It must be admitted that there are some persons who violate the law, but they will always do it.

The CHAIRMAN. The temptation would be very great to sell it at a profit of 10 or 12 cents a pound?

Professor BABCOCK. For a dishonest man, yes; for an honest man, no. There are people who will sell you a piece of cloth to-day, and who will say it is all wool, knowing that it is not. They will tell you it is all wool, and they get the price of all-wool goods. The increased price is a temptation, and as long as these goods can be bought at 9 or 10 cents a pound some dishonest man will take the risk and chance of selling the goods for what they are not. A man will sell you a piece of American silk and tell you it is a foreign silk, if he thinks you have a prejudice against American silks.

The CHAIRMAN. Any law that more thoroughly guards that retail sale, then, is desirable, I suppose?

Professor BABCOCK. Yes; I should be strongly in favor of that.

Senator BLAIR. You are an inspector. Have you any means of obtaining data which you could give to the committee which would be a guide to it as to the amount of oleomargarine that is consumed in your vicinity, or within your jurisdiction as an inspector, and as to the relative amount as between that and butter?

Professor BABCOCK. Yes, I can do so approximately. In a report which I have here, and which I will hand to committee, you can obtain some idea of the character of the work which is done in Boston. I have given an estimate of the amount of butter and oleomargarine, based on the most reliable figures which I could obtain, sold in Boston. I will say in regard to these figures, however, that from such information as I have received since the publication or the printing of this report, which was on the 1st of January of the present year, I have reason to believe that the figures I have given in this report as to the amount of oleomargarine received in Boston and from there sent out, not only through the State of Massachusetts but to adjacent States, is somewhat overestimated. The amount is, probably, considerably less than the figures I have given here. But the figures which I did give in this report are as follows:

The total number of pounds, estimated, was 9,945,725 of oleomargarine. In this calculation, let me say, I was assisted by a member of the Produce Exchange of Boston who is not favorably disposed towards oleomargarine, so that this statement doubtless is high rather than low as an estimate. You will find the details of these figures in the report. As I say I believe these figures are too high, but the value of that amount of oleo, at the average wholesale value of 11½ cents a pound, was \$1,143,758.37. The total number of pounds of butter was 24,400,111, which, at the average wholesale price of 20 cents, amounts to \$4,880,022.20.

Senator BLAIR. Those figures cover what territory?

Professor BABCOCK. They represent the quantity received in Boston at the Produce Exchange and from there distributed.

Senator BLAIR. Where did it come from?

Professor BABCOCK. I got those figures from the books of the Produce Exchange so far as they are capable of giving the figures, and a part of them are estimated.

Senator BLAIR. When you say "oleo" you mean "oleomargarine?"

Professor BABCOCK. Yes, sir.

Senator BLAIR. And from what points is that amount collected?

Professor BABCOCK. In Boston we have two factories. There is a factory in Providence which sends goods to Boston, and the Western factories send their goods there.

Senator BLAIR. Can you give us an idea of the proportion in which these several localities furnish you oleomargarine for that market?

Professor BABCOCK. Yes, sir; approximately. There is made in or near Boston about 150,000 packages.

Senator BLAIR. How much is contained in a package?

Professor BABCOCK. At an average of 25 pounds to the package. The rest of it comes from other sections; from the West and from New York.

Senator BLAIR. But butter is mainly, I suppose, collected from New England?

Professor BABCOCK. No, sir; a good deal of Western butter comes to Boston.

Senator BLAIR. From how far west?

Professor BABCOCK. As far west as it is produced—from Wisconsin and Iowa. New England does not produce butter enough to supply her own needs.

Senator BLAIR. Hardly enough to supply her own rural regions—the smaller cities and villages.

Professor BABCOCK. I understand that to be the fact. I will say one single word in regard to the matter of testimony taken before this committee at a former session, which I read from the stenographic report which has been printed. A gentleman from Boston stated that the law was not enforced in Boston, and he relates certain circumstances which, I think, the committee ought to know occurred some five or six years ago, so that what he said does not apply at all to the present condition of things. You may remember that it was stated that he sought to have certain parties complained of, and that the then milk inspector, Mr. Griffin, declined to make a prosecution because there was no money to pay for it. Now the facts in that case were these: There were four complaints, which were instigated by members of the Produce Exchange. They came to the then milk inspector; samples were taken; and at that time I was doing the chemical work for the office, and I made an analysis. I appeared before the grand jury; true bills were found, and when it was discovered that true bills were found against certain people who not only sold butterine quietly, but occasionally bought some butter also of members of the Produce Exchange, these gentlemen came before the district attorney, and at their representation those cases were put on file. That is the reason they were not prosecuted then. There was a party in Boston whom I had occasion to prosecute this spring for selling goods not marked as required by law, which came from the State of Wisconsin. Some gentleman here may know the goods. I think they were marked "Eureka Creamery," and the "Horse-Shoe Creamery" is another one which we know perfectly well. They are both high grades of butterine. They are made and intended to be sold by these people there as a substitute for butter, and the people who have them do not mean to mark them if they can help it.

The CHAIRMAN. You mean they are intended to be sold as butter?

Professor BABCOCK. Yes, I think they are.

Senator BLAIR. Where is that butterine made?

Professor BABCOCK. I do not remember where the Horse-Shoe Creamery is made, but the Eureka Creamery is made, I think, in the town of Eureka in Iowa or Wisconsin; I think Iowa. A party had some of those goods. The members of a firm were complained of and they paid their fine the next day and marked all the goods they wanted to keep, and the rest they shipped back. One of the gentlemen who bought some of these goods from this firm was complained of, and he came to me through a friend, a member of the Produce Exchange who does not believe in oleomargarine at all, with this proposition: He says this party—we will

call him Mr. B.—did not care anything about the fine, but he was a deacon of the church, and he did not want it to appear that he had been convicted of selling these goods. He said: “You know we have been contributing money to pay the expenses of counsel and other expenses towards having this matter investigated at Washington, but if you would consent to have Mr. B.’s case put on file, Mr. B. would be willing to contribute \$100 to that fund.” I said: “I do not know anything about Washington, but we have a State law and Mr. Batchelor—that is his name; I did not intend to give it, but it has slipped out—Mr. Batchelor has violated that law and he ought to pay the penalty,” and he did.

The CHAIRMAN. I do not think your administration of affairs has been questioned before the committee, but that is all right.

Professor BABCOCK. I desire to have the committee know that there is at least one spot on the face of the earth where oleomargarine is sold, in the great majority of cases, for what it is; and what is done in Boston can be done in every city of the country if the machinery of the law is provided.

Senator JONES. Has it been any part of your duty to determine whether these substitutes for butter are injurious to health or not?

Professor BABCOCK. It has not been a part of my duty to determine that.

Senator JONES. Have you investigated that matter?

Professor BABCOCK. I have.

Senator JONES. What are your conclusions on that subject?

Professor BABCOCK. My conclusions are that what is perfectly good on the side of a beefsteak is perfectly good when it is melted out and mixed with salt and milk. My conclusions are, in general, that oleomargarine is a perfectly wholesome food in every sense of the word. There are some points in relation to it in which it is superior to butter, I refer more especially to its keeping qualities. You take an oleomargarine print and put it on this table and leave it here for three months alongside of butter, and the oleomargarine will remain sweet while the butter will rot.

The CHAIRMAN. Is that any evidence that it is better food?

Professor BABCOCK. It is no evidence that it is better food, but it is evidence that the fat from which it is prepared is freer from foreign substances.

The CHAIRMAN. Would it not equally be evidence that it is not as easily digested as butter if it will last that length of time? Salt meat will keep longer than fresh meat.

Professor BABCOCK. Certainly; but it is perfectly healthful, nevertheless. I presume it must be admitted as a physiological fact, at least to be debatable, that oleomargarine is slightly less digestible than butter. But how much less digestible? It is not as if oleomargarine required five hours to digest and butter required only a half an hour or an hour. The figures are expressed in much closer relations than that. I will not undertake to give them, but the committee can find them in the books or in the investigations of those who have considered the matter. It takes three and a half hours in one case and four hours in the other case, or something of that kind. Practically there is not any difference, and as far as food value is concerned, I do not think the physiologists have ever differed in the opinion that oleomargarine has a higher food value than butter. I mean by that that the amount of heat-producing qualities in oleomargarine is greater, theoretically, than in butter, but the relation still is very close; one is about the same as the other.

The CHAIRMAN. You are a chemist, I understand?

Professor BABCOCK. Yes, sir.

The CHAIRMAN. Can you undertake to show by an analysis of any article that is submitted to you what its effect will be, absolutely, on the human system, as to whether it will be a healthful or unhealthful food?

Professor BABCOCK. In some cases, yes, and others, no.

The CHAIRMAN. In what cases yes?

Professor BABCOCK. In cases yes, many of the absurd substances which are found in the patents which have been taken out—alleged improvements in the manufacture of oleomargarine. If there was any sulphuric acid in butterine we should find it. If there were any of the thousand and one things in those patents which could only make a chemist laugh, and the judicious friend of the poor grieve, present in oleomargarine, we could find them chemically. We could not find the germs of disease. You cannot find the germs of typhoid fever in milk, but they get in there.

Senator JONES. Have you examined specimens of these substances frequently?

Professor BABCOCK. Yes; we make analyses of them, and some of them are given in this book merely to determine whether or not they are butter or oleomargarine.

The CHAIRMAN. You can determine by your analysis whether a food product contains any known poison, I suppose?

Professor BABCOCK. Yes, sir.

The CHAIRMAN. But, can you undertake to show by an analysis of all facts what their exact effect would be upon the human system without going through the experiment of having the articles fed to individuals?

Professor BABCOCK. We certainly should not undertake to do that. That is a physiological experiment. The way to find out whether a thing is poison or not, supposing it to be a new poison of which chemists know nothing, is not to analyze it and say what it is and give it a name, but to find out whether it is a poison or not you want to try it, so to speak, on a dog, and if you try it on a dog and it does not kill him or produce a marked effect, we say that it is not a poison. If it does produce an effect, we say it is a poison, and we study it further.

The CHAIRMAN. If you take a food product and analyze it and find no known poison in it, then you can give a scientific and absolute opinion as to the healthfulness or unhealthfulness of it; but is it not necessary that there should be a long experiment in the use of that article, as food, in order to determine what its ultimate effects on the human system will be?

Professor BABCOCK. Certainly.

The CHAIRMAN. Have you made that experiment?

Professor BABCOCK. I have not made the experiment, but the public have been making them for ten years.

The CHAIRMAN. The public have been making them without knowing they were making them, and therefore we have no results. They did not know whether they were eating butter or oleomargarine.

Professor BABCOCK. As I was saying, a dose of poison would kill a man whether he knows it or not. If you have some strychnine in your food put there by accident or design, you may think it is wholesome, but it will kill you.

Senator BLAIR. Have not any of those people died within ten years?

Professor BABCOCK. I never heard of it.

Senator BLAIR. None of those oleomargarine people have died within ten years?

Professor BABCOCK. I never heard of it.

The CHAIRMAN. Have you ever made any experiments in the way of feeding oleomargarine to persons and judging of its effects as distinguished from butter?

Professor BABCOCK. No, sir; and there have never been any physiological experiments made in regard to butter which is put on bread, or on the bread itself merely to determine whether it be wholesome. If you ask me how I know bread is wholesome, I could not point you to any scientific experiments to establish the fact.

The CHAIRMAN. You could probably point to the experiments which have been going on for a thousand years?

Professor BABCOCK. Yes; and that is what I base my opinion on.

The CHAIRMAN. But in regard to oleomargarine, we have not had that sort of experience yet. What I wanted to get at was the ground of your statement of your belief that it was a wholesome food. So far, I find it has been simply a scientific opinion based upon an analysis to determine the elements in it. We were told yesterday, for instance, that lard was substantially the same in its constituent elements as oleo after the stearine had been extracted from the tallow. Do you undertake to say, or do you believe that lard, as an article of food, is as healthful as tallow or butter?

Professor BABCOCK. I see no reason why it is not as healthful as tallow or butter?

The CHAIRMAN. Do you think it is considered to be so by people generally?

Professor BABCOCK. I think well-informed people hold that opinion. I will explain to you the ground of my belief if you will allow me. The objection to pork is well founded, but the fat of the hog tried out and purified, so far as I have ever heard, is no more objectionable than any other similar fat, whether of beef or whether it is produced from a vegetable product such as olive oil or cotton seed oil.

The CHAIRMAN. Is it not generally held as an opinion by the majority of people, cooks, housewives, and others, that the use of much lard in cooking is not healthful?

Professor BABCOCK. That is true, but it is not because it is lard. The use of any fat in excess is undoubtedly objectionable. The man who puts a piece of butter on his bread larger than the bread itself will have dyspepsia after awhile. It is not because it is lard, but because it is fat. The epicure who covers his lettuce with olive oil will suffer in the same way.

The CHAIRMAN. Do you think lard is as healthful as beef fat?

Professor BABCOCK. Pure lard is as healthful as any other animal fat.

The CHAIRMAN. And you base that opinion on the chemical fact that they are very much alike in their elements?

Professor BABCOCK. Yes.

Senator BLAIR. Why is pork unhealthful?

Professor BABCOCK. In the first place, hogs are fed in a great variety of ways. Some are kept well and some are fed on filth. Those which are kept well furnish a perfectly healthful meat, except so far as trichinæ may develop in them, and that does not come in the fat, but is developed in the muscular fiber.

The CHAIRMAN. Leaving out trichinæ, why is the meat of pork fed upon refuse any better than the fat, when there is no disease, but simply healthy fat?

Professor BABCOCK. For the same reason that the milk from a well-fed, carefully-tended cow is better than the milk of a cow fed on swill and slops.

The CHAIRMAN. But I understood you to say that the fat of the hog in the one case was good, and the meat was not healthful in the same animal.

Professor BABCOCK. If I should draw a line between the two, I should say that the fat from the hog would be less affected by changes of condition, as regards feeding and keeping, than any other portion of the animal, unquestionably.

Senator BLAIR. You seem to have had great experience with this subject, and, in discussing the matter of legislation awhile ago, you dropped the expression that you thought any judicious national legislation that could be had would be a good thing. I would be very glad to hear your views in that direction as to what national legislation would be serviceable.

Professor BABCOCK. Any national legislation which would establish a uniform law for all the States, in the direction of having the goods marked, and other provisions of a similar nature, so that they might be sold for what they are, would be of advantage. In Massachusetts we have a certain law in regard to the matter. In the West they have no law. Massachusetts cannot make a law which shall require these goods to be marked before they come into the State, so that they naturally come into the State unmarked. We do the best we can to follow these goods to their market as soon as they come. I say without fear of contradiction that that is the case.

The CHAIRMAN. Let us see how that operates right there. These goods come, as you state, from outside points in the west and come marked as creamery butter with certain brands.

Professor BABCOCK. No, sir; they do not; that is the exception. I will tell you how they come.

The CHAIRMAN. I understood you to state a short time ago that two or three kinds came into your state marked with the brand of a certain creamery, and you gave the name of the creamery.

Professor BABCOCK. But not marked creamery butter. The words were "Eureka Creamery."

The CHAIRMAN. Everybody knows that butter is made from milk and the use of the words "Eureka Creamery," without any qualifying word, would be a deception. If you see a firkin that has something that looks like butter in it, and it is branded "Eureka Creamery" on the top of it, you would naturally say that it was butter which came from that creamery.

Professor BABCOCK. Yes, unless otherwise marked.

The CHAIRMAN. Is it possible; the bulk of it coming branded in that way, that even in Boston you are able to detect it, or to prevent its sale? How are you to do it except by an analysis of each particular lot?

Professor BABCOCK. We get accustomed to seeing the tubs and know their general appearance, the number of hoops on them, and sometimes they have them marked with a brand, a diamond H. N. P., or what not, and there are a great many of those goods that we know are oleomargarine, even if the mark is turned around on the other side. We know the tubs. And while, as I said a moment ago, some goods have been brought into Boston marked in the way I say, and those cases have been prosecuted, the great majority of goods are immediately marked after they are received. Some goods come from Chicago already marked.

There are some agencies in Boston who have their goods marked in Chicago, and they are received in Boston marked. The Providence Dairy, which is the name of a manufacturing concern there, which manufactures oleomargarine, send their goods to Boston, and they are all marked before they come there. The oleomargarine folks in Boston mark their goods, but their goods come from States outside of Massachusetts where they have no law, and of course they cannot be compelled to mark them. But when those goods are received at the store they are marked and we follow them up.

The CHAIRMAN. If there was some general law requiring that all this material, wherever made, should be branded, you think it would be beneficial?

Professor BABCOCK. Yes; it would be a benefit to any State where they have laws, to the State of New Jersey or Connecticut.

The CHAIRMAN. And it would aid you in carrying out your State law?

Professor BABCOCK. Yes, and I should be very willing to see any reasonable provision of that kind enacted.

Senator BLAIR. This inspection you have been familiar with is mainly for the city of Boston?

Professor BABCOCK. Yes, sir.

Senator BLAIR. I would like to know to what extent a like inspection is followed up throughout the commonwealth?

Professor BABCOCK. There is nothing like it in detail, because in the smaller cities they cannot afford to pay the money which is necessary, or to anything like the extent provided in Boston. But there are local inspectors in those places, and the State board of health have men who are collecting samples around the State, and they see to the enforcement of the law in other parts of the State. Violations of such a law as we have are undoubtedly practiced outside of Boston, if at all, much more frequently than in Boston, because the law is not enforced to that extent.

Senator BLAIR. I suppose the efficient administration is all in its details.

Professor BABCOCK. Undoubtedly. The goods that leave Boston are marked, and so far as those goods are concerned, I am sure that the goods received in cities of the commonwealth comply with the provisions of the law.

Senator BLAIR. Does the coloring matter used do any harm to either butter or oleomargarine?

Professor BABCOCK. No; it is a harmless color. I wish the national legislature would pass a law to prevent the coloring of either. It is just as much a fraud in butter as in anything else.

Senator BLAIR. If the coloring matter is used at all, should it not be different, so as to distinguish the articles?

Professor BABCOCK. It does not do any harm, but it is like a man painting up his frost-bitten oranges so as to sell them. They should be sold for just what they are. If the cows do not give milk in winter which will make a good colored butter, they should not be allowed to color it and sell it as June butter, by adding a little color to it.

Senator BLAIR. It all seems to be wrong, but if the coloring matter does not do any harm, why not have a different coloring substance used in these two articles, so that you can tell them apart?

Professor BABCOCK. For this reason: Any color different from that which the public have been in the habit of seeing in butter would create a prejudice. People have been accustomed to strawberry-colored ice

cream, and if a person should ask a confectioner for strawberry cream and he should produce a white cream it would not satisfy him, because he wants a strawberry-colored cream.

Senator BLAIR. You say that oleomargarine is a healthful food, and usually sells upon its merits?

Professor BABCOCK. Yes.

Senator BLAIR. And you also say that it can be furnished at one-half or one-quarter the price of excellent butter?

Professor BABCOCK. Yes.

Senator BLAIR. Then just as soon as the public mind grasps that idea its sale will correspond?

Professor BABCOCK. Certainly.

Senator BLAIR. We eat things that formerly were disgusting to us. The Frenchman eats frogs, and we would soon become accustomed to them. Now, let the people know the truth about this, and attack this popular fallacy that oleomargarine is hurtful, and very soon oleomargarine will take the field against butter?

Professor BABCOCK. I think it would.

Senator BLAIR. On that theory oleomargarine is much better than butter?

Professor BABCOCK. For certain purposes, all things considered in reference to the price.

Senator BLAIR. As good, absolutely, and not costing more than half as much?

Professor BABCOCK. Yes.

Senator BLAIR. Then, why not put oleomargarine upon its merits? Since butter has been allowed to be yellow from time immemorial, give oleomargarine a color we can tell it by, so that the consumer who buys it knows what he is getting. Give him a color to go by. What is the objection to that?

Professor BABCOCK. I will tell you why I think that would be unfair. There is no article of food which people use to-day on their tables, that I know of, that is partly colored except butter. The use of any article to color oleomargarine pink or blue or black would excite a prejudice against it in the minds of everybody.

Senator BLAIR. But not long.

Professor BABCOCK. It would excite a prejudice long enough to have everybody who ever bought it ask the question, "What is this color that you use? How do you make it?"

Senator BLAIR. We all understand there is color put into butter.

Professor BABCOCK. Sometimes there is and sometimes there is not.

Senator BLAIR. The butter that sells the best is understood to be artificially colored, and yet we eat it without hesitation.

Professor BABCOCK. The use of a color which, in its nature, as applied to any kind of food, is repulsive, is unfair. Olive oil, which a great many people eat, is yellow, and cotton-seed oil, which people in the South eat, is yellow; fat also is yellow.

Senator BLAIR. Those are natural colors, not artificial.

Professor BABCOCK. Yes, they are natural colors, and when you make an article to take the place of or be used as a substitute for a natural product, it is certainly but fair to allow the party to color it with a harmless color which makes it resemble the article which it is intended to substitute. That is perfectly fair, I think.

Senator BLAIR. Undoubtedly it is true that for a little while there would be a prejudice created against oleomargarine, but it is based on

a false ground, on false data, and in a little while the public would learn to know the truth.

Professor BABCOCK. I firmly believe that oleomargarine colored any color which was not in itself repulsive would be sought after if its merits were understood, but I do not think you could ever make it salable if you colored it black, for instance—

Senator BLAIR. I introduced in the Senate yesterday, to be sent to committee, an amendment to the bill providing that there should be no foreign substances injected in the process of manufacture, or in any process of the preparation of oleomargarine for food to be sold to the consumer, of a yellow tint or hue. You may take all the other colors of the rainbow, but let butter have its pre-empted color. What harm is there in that, so that the man who eats it can understand what he is eating.

Professor BABCOCK. It is simply unfair. If you can make it one color you can make it another.

Senator BLAIR. Select your color.

Professor BABCOCK. I think that some who might favor such a plan as that would be in reality aiming a blow at the article itself, rather than guarding the people. As I say, if you can color it one color you can another.

Senator BLAIR. Set aside the question of motive. Here is a collision of motives between these two great interests. Each wants to get the better of the other, of course, naturally. It is a mercantile competition. But set that all one side. Is not the man who consumes the butter, or who consumes oleomargarine, entitled to know what he is eating and what he is paying for?

Professor BABCOCK. Yes; certainly.

Senator BLAIR. And is he to be left to the mercy of the hotel keeper and the boarding house keeper and compelled to pay 50 cents a pound for this article by reason of this false color by which it is imposed upon him as butter, when it is really worth and costs, and ought to be sold for less than, 20 cents a pound?

Professor BABCOCK. There is no reason why he should not know what he is eating.

Senator BLAIR. These colors exist in nature; they are in flowers, and in the landscape in every form. The fat has a color when you extract the tallow. Now, why should not the oleomargarine people choose some color, a white or a chocolate color, or a reddish hue, whatever they see fit to select, and then, as the article is very much cheaper, as it is as wholesome or more wholesome, as you claim, than butter, will not the people very soon under your instruction, become consumers of oleomargarine rather than of butter?

Professor BABCOCK. In time, undoubtedly.

Senator BLAIR. And in a short time.

Professor BABCOCK. No, not in a short time.

Senator BLAIR. You eat it now as readily as you do butter?

Professor BABCOCK. I suppose a chemist will do very many things that the general public will not do. The public are always very slow in such matters, and it will take a good many years for people to overcome the prejudices in regard to oleomargarine. I say, in short, that I think the coloring of oleomargarine by a distinctive color would be unfair.

Senator BLAIR. Well, I have drawn out your opinion, and I will not consume more time.

Senator JONES. I think you said, some time ago, that you had exam-

ined this substance to determine its quality as an article of food, whether it was healthful or not.

Professor BABCOCK. Yes.

Senator JONES. And you believe it to be entirely healthful?

Professor BABCOCK. Yes.

Senator JONES. There is a statement made on high authority in a paper that I have marked in pencil, and I would like to have you look at it and tell me whether, from your examination as a chemist, you believe that those substances enter into oleomargarine and butter to any large extent, and if so, to what extent [handing a paper to the professor]?

Professor BABCOCK. I should be pleased to go over this list in detail if you desire it, and state in regard to every specific article what it is.

Senator JONES. I would be glad to have you do so.

Professor BABCOCK. In the first place, I see on this list nitric acid. I do not believe that that has been or is used in the manufacture of oleomargarine. It doubtless occurs as an ingredient in the specification of some person who has taken out a patent for doing something or other, such as the refining of some sort of fat.

Senator JONES. It could be detected if present in this substance?

Professor BABCOCK. Yes.

Senator JONES. Have you ever detected it?

Professor BABCOCK. No, sir. The next article here is sugar of lead. That is poisonous.

Senator JONES. Would that diminish the cost of the manufacture of oleomargarine?

Professor BABCOCK. No, sir.

Senator JONES. Is there any reason why it should be used if it could be?

Professor BABCOCK. I do not know of any reason why it should be used. Sugar of lead is a poisonous substance, and I never heard of its being used in any food product whatever. Sometimes salts of lead have been detected in wine and vinegar, but what possible use it would be, or how the manufacturer could make use of sugar of lead in the making of oleomargarine, I do not know. The next article is sulphate of lime. That is what a man drinks a great deal of when he drinks any water found west of the Alleghany Mountains, especially in the far west. I do not know that it has ever been used in the manufacture of oleomargarine. I cannot conceive of any purpose for which it should be used in such manufacture.

Senator GIBSON. Is it not used some in the manufacture of sugar?

Professor BABCOCK. Sulphuric acid is used to manufacture starch into glucose, and then lime is added for the purpose of neutralizing the acid in that manufacture, and that leaves a little sulphate of lime in glucose.

Senator GIBSON. It is not deleterious to health?

Professor BABCOCK. No, sir; not at all. Butyric acid is named here. Well, that is a normal constituent of butter; that is legitimate. Glycerine is a normal constituent of butter, not as such, but glycerine in a modified form exists in butter. That is, glycerine exists in a modified form in all fats. "Capsic acid" is a mistake. It means capric acid, which is another of the acids natural and peculiar to butter. Commercial sulphuric acid. I do not know of that having been used in any way in the manufacture of these goods. Tallow. That is confessedly an ingredient. Butyric ether. That is a natural product which is developed from butter when it becomes rancid. The butyric forms what is called an

ether. Castor oil. I do not know why a man should use that. Certainly an oleomargarine manufacturer making a product that he sells at 9 cents a pound would not make use of an article that sells for a dollar or two a gallon; I do not know what the exact price is. Castor oil is a high priced article. You go to the druggist and buy a little bottle of it for the baby, and you pay him a quarter for it. No manufacturer would use that in making an article to sell for 9 or 10 cents a pound. Caul. Well, that of course is one of the articles used, the caul fat of the animal. Gastric juice.

In some of the earlier patents for making oleomargarine—I think in the original Mege process, the French process—that a preparation made from gastric juice—what is called pepsin—was an ingredient. That we all to-day regard as a valuable remedy. It will cure dyspepsia quicker than almost anything else. It is the digestive principle of the animal, and is made from the hog's stomach. It is perfectly good and pure, and recognized as a valuable remedy by physicians. This paper refers to gastric juice. It is a reference, I suppose, to some preparation derived from the hog for digesting and dissolving the animal tissues which are found in fat. Curcumine. That is the active property of curcumsa root, or turmeric, which we are glad to have in our curry-powder. Curry-powder is colored with curcumine. If it is good there, it may be in butter. Chlorate of potash. I never heard of that being used for this purpose. If used, however, it is perfectly harmless. Peroxide of magnesia means black oxide of manganese. I do not know how it could be used in the manufacture of oleomargarine. Nitrate of soda is harmless, but I never heard of its being used in that way. It may have been used in some process of salting.

Some of the pork that comes from Southern countries, and indeed some of our pork that is salted here, is salted with nitrate of soda. It is another form of saltpeter. Dry blood albumum. That is perfectly legitimate. Not only dry blood albumum, but fresh blood is used by all the sugar-houses in the country, and if a man should want to create a newspaper prejudice against pure white sugar some day, he could write up an article on dry blood, bone-black, burnt bones, and all those things used in refining sugar—facts that would discount the articles on oleomargarine 100 per cent. I should have no trouble in disgusting the people by an enumeration of the processes used in the manufacture of sugar. Saltpeter. That is harmless. Borax. That also is harmless, and so is orris root. Bicarbonate of soda is used in bread. Capric acid, sulphite of soda, pepsin, lard, caustic potash—I never heard of that being used, and so on. I will not take up the time of the committee in going over the rest of them, but if there is anything else you desire explained, I will do so with pleasure. I characterize that statement as an ignorant and prejudiced statement which no person would intelligently make. Undoubtedly those articles have been found in specifications of patents relating to the manufacture of oleomargarine, but I do not believe that any manufacturer to-day uses any of those things.

Senator GIBSON. Could he use them?

Professor BABCOCK. I do not know for what purpose.

Senator JONES. If they were used, as I understand you, they would be used not as a constituent part of the product, but might be used in processes adopted for the purpose of purification?

Professor BABCOCK. If used at all, they would be used, most of them, in the process, and not as constituent products. But with very few exceptions, I cannot conceive that they would be used at all.

The CHAIRMAN. Could these various acids be used without there being danger of some portion remaining in the product?

Professor BABCOCK. Yes; they might.

The CHAIRMAN. There is no danger of their remaining in the product at all?

Professor BABCOCK. If used, there would be a certain danger of their remaining in the product—I misunderstood your question. If they were used, traces of them might remain in the product or might not. If they did so remain, we should find them.

The CHAIRMAN. Your statement was that you had no knowledge of any of these articles being used. How many oleomargarine factories have you investigated, so as to be familiar with their processes?

Professor BABCOCK. Only two; we have only two in our vicinity. My personal knowledge of the actual practical manufacture of oleomargarine is much less than that of many other gentlemen present.

The CHAIRMAN. You do not believe that nitric acid or any of those other deleterious substances are used at all by any manufacturers, I understood you to say?

Professor BABCOCK. I do not believe they are.

The CHAIRMAN. Do you know anything about the factory of N. I. Nathan & Co., in New York, and of the process used by them?

Professor BABCOCK. No, sir; I do not.

The CHAIRMAN. I hold in my hand here a letter headed "N. I. Nathan & Co., manufacturers of butterine, under patent granted to N. I. Nathan," which reads as follows:

NEW YORK, March 30, 1886.

SIRS: We have taken the liberty of forwarding to you per P. R. R. one 10-pound tub of our creamery brand of butterine, which we claim is the finest in the market, for which we do not charge you anything. We guarantee uniformity in quality at all times, and our present price for the same is 10 cents per pound net, F. O. B., New York, in the following packages, viz: Half firkins, 10, 20, 30, 40, and 56 pounds Welsh tubs; 1 pound rolls, 30, 40, or 50 in a tub; 60-pound tubs, catch-weight rolls; 1 pound round prints, 40 in a case; 1 pound square prints, 52 pounds in a case.

If the quality and price are satisfactory, we would be pleased to receive your valuable orders.

Very respectfully yours,

N. I. NATHAN & CO.

The CHAIRMAN. I also hold in my hand a business card which reads as follows: "N. I. Nathan & Co., manufacturers of butterine, under patent granted to N. I. Nathan."

I have also here a copy of a patent granted by the United States to N. I. Nathan, of New York, for a process of making artificial butter. After going on about preliminary matters, it says:

The lard which has passed through the sieve is then subjected to the action of cold water, to which has been previously added and thoroughly stirred a quantity of borax and nitric acid, about in the proportions hereinafter specified. By treating the lard in this solution, composed of water, borax, and nitric acid, the effect is to further cleanse the lard and make it partake of or assume a clear white color, free of all odor, and almost perfectly tasteless. After being subjected to this treatment, the mass is removed and thoroughly rewashed in cold water, preferably in a separate and distinct vessel from that previously employed, whereby the product becomes a purified or deodorized leaf lard, its characteristic being that it is of a beautiful color, a clear white, perfectly odorless, remarkably solid and free from the disagreeable taste usually present with lard. Arriving at this stage of the process, a certain minute quantity of nitric acid is added to the water, and incorporated with a certain quantity of the purified or deodorized lard to further strengthen the solution, and this mode of treatment and addition of nitric acid are continued as mass after mass of the purified or deodorized lard is prepared, the operation being continued until the product assumes a clear white color, void of odor and taste. The product thus obtained is mixed with oleomargarine, which is then a commercial article and readily obtained in the market, and when all is thoroughly mixed, the mass is subjected to heat, &c.

And he goes on and describes the amount of nitric acid used.

Professor BABCOCK. What was your question, sir?

The CHAIRMAN. You stated that you had no knowledge of anything of this kind being used, and did not believe it was used. Now, I ask you what you have to say in regard to that process?

Professor BABCOCK. I should like to see the whole of that patent first. I do not think because a man has a patent, and because his letter-head says that he works under a certain patent, that it by any means follows that his goods are so made.

The CHAIRMAN. What do you mean by that?

Professor BABCOCK. I mean to say that a man to-day may make a certain kind of goods, and may say that he has taken out a patent for that purpose, and that his goods are made under that patent. But it does not follow that he does so. There are numerous patents taken out not worth a cent, and it is done merely to give a man the right to put that on there, and he does put it on.

The CHAIRMAN. Mr. Nathan says, under his letter-head of March 30, that these goods are manufactured under a patent of the United States, and I have here a copy of the patent.

Professor BABCOCK. I understand that he says so. But I say in the first place, it does not follow that because he has a patent, or because he refers to it in his letter-head, that he makes use of it.

The CHAIRMAN. It follows, then, that he misrepresents the facts as to the making of it?

Professor BABCOCK. I should say that in that case it might be so.

The CHAIRMAN. Then you do not believe Mr. Nathan's statement, that that is made under his patent?

Professor BABCOCK. I did not say that; I did not say what I did not believe. I said this: That in the first place I was not aware of any manufacturer using nitric acid. It appears that Mr. Nathan has a patent, and he says that he uses it. I admit that that may be true. But I say it does not follow that it is true because he has a patent and refers to it in his letter heads. But if he does use it—which I do not know, and which I am thankful to have received information concerning—what of it? It is not a poison in the manner in which it is used, in any way, shape, or form.

The CHAIRMAN. In answer to another question I understood you to say that it was a poison, and that if it was used a portion might remain in the resulting product, and therefore it might be injurious.

Professor BABCOCK. Let me explain that. If you take nitric acid in the strong form in which you buy it in a drug store it is a caustic. It is not a poison *per se*, but a poison because corrosive. But in a diluted form it is not a poison unless taken in large quantities. In the same manner salt is a poison. If used at all it is used in that patent for the purpose of oxydizing certain materials, so as to remove color, probably. As a chemist, I doubt very much whether Mr. Nathan uses any such thing. I do not believe he can use it. I do not understand how a man is going to work nitric acid in that process.

Senator JONES. He says in his patent that he uses it in extremely small quantities, or words to that effect.

The CHAIRMAN. The patent goes on and gives the proportions to be used for a gallon of water, and so forth.

Senator BLAIR. What are they?

The CHAIRMAN. Three ounces to a certain mixture here.

Professor BABCOCK. I wish you would let me see that patent.

The CHAIRMAN. I understood you to say some time ago that the bad odor which comes to the tallow or fat of any kind after it has been lying

exposed to the atmosphere for a short time can in no way be removed. Do you mean to be understood as broadly as that?

Professor BABCOCK. Of course it is a question of degree. In making oleomargarine you need perfectly fresh fat.

The CHAIRMAN. That is to say it makes the product better.

Professor BABCOCK. I do not think you can take any fat material which is tainted and use it successfully.

The CHAIRMAN. I judge from the nature of that patent that nitric acid and other chemicals that were used there were for the purpose of deodorizing the fat. He speaks of deodorizing the mass by the use of nitric acid, borax, and water.

Professor BABCOCK. He says, also: "In practicing my invention I purchase in open market fresh leaf lard." He does not take refuse materials and work them up, but he starts with fresh leaf lard.

The CHAIRMAN. If he starts with fresh leaf lard what is the object of deodorizing it?

Professor BABCOCK. To make it still better and to remove the last traces of the animal. It is to carry it another step. This nitric acid, if used according to this patent, is intended for removing the last traces from the fresh leaf lard, which he admits he uses. He does not use refuse fat any way.

The CHAIRMAN. But might he not use refuse fat and still state on his letter heads that he works under the patent, and that use of nitric acid, would that not apply to lard as well as the other things?

Professor BABCOCK. I do not believe that he can use refuse fat.

The CHAIRMAN. What knowledge have you on that subject?

Professor BABCOCK. I know something of the difficulty of refining fats. I have made that a special study—the matter of oils and fats—and I know that if you have a fat that is tainted, and you want to refine it to a degree so that you can make oleomargarine of it, you have got something which chemists have not yet been able to accomplish, in my judgment. You have got to start with the best fat you can procure and then you have to carry that on by carefully treating it all the way through, and the object of the various patents which have been gotten out has been to accomplish that in some other way than by the original method which was covered in the Mege patent.

The CHAIRMAN. There is no use of nitric acid, or any suggestion of the necessity of it, in the original process of Mege.

Professor BABCOCK. I think not.

The CHAIRMAN. The fact of finding it in the patent would suggest, would it not, to every one, that the object of using it was to deodorize fats which had contracted an odor so that they could not be used without it.

Professor BABCOCK. I think not to any intelligent person who would read that whole specification. When a man says, "In practicing my invention I purchase in open market fresh leaf lard, and after having thoroughly washed it, cause it to be cut up and minced in a suitable machine," it indicates that he buys fresh material and the best he can get.

The CHAIRMAN. Further down it says he uses nitric acid and borax. Is that not a process of deodorizing?

Professor BABCOCK. Certainly it is.

The CHAIRMAN. Why should he deodorize it if it is in the condition in which Mege intended it should be—fresh and without odor?

Professor BABCOCK. He wants to get the odor perfectly out of it and to make an absolutely neutral fat.

The CHAIRMAN. You think that can be done only in fresh fat, and that fat not absolutely fresh cannot be deodorized at all?

Professor BABCOCK. It cannot be practically deodorized. In a chemical laboratory I will not say that it could not be done by the use of chemicals so that a man could get a patent and sell out to some company if he wanted to. But it is not practical, because it would cost 30, 40, or 50 cents a pound.

The CHAIRMAN. I will ask you one other question right on that point, as you have given your opinion very positively. We will suppose that a fat is not perfectly fresh; that it has been removed a short time from the animal and has become slightly tainted by being exposed to the atmosphere. Do you not believe it possible under that patent, or some other patent, by the use of chemicals, to so far deodorize it that it could be used for making an article of oleomargarine, and that whatever odor was left could be concealed by the use of flavoring materials like butyric acid or other matters.

Professor BABCOCK. I do not think that any fat which had become in any sense offensive or unpalatable could be so treated.

The CHAIRMAN. You mean after it has become putrid or partially decayed?

Professor BABCOCK. No, sir; not so far as that. I mean fat not perfectly fresh—fat which is not more than 24 or 36 hours old. You cannot take old fat and work it.

The CHAIRMAN. For how long a period after fat is taken from an animal can it be used?

Professor BABCOCK. I would not undertake to express an opinion in regard to that. I frankly say I do not know. But I say the fat must be relatively fresh. Now a single word on a matter which I think is quite clear, about this purification of the pure leaf lard. If you take water from a well or pond, you say it is pure, nice water, that it has only five or ten grains of solids to the gallon, and you use it for drinking purposes. But for certain manufacturing purposes it is necessary to get absolutely pure water, and so, at a great deal of trouble and expense, so that it costs you 12 to 15 cents a gallon, you take that water and distill it, and it is absolutely pure. That is what this is. It is pure leaf lard that he starts with.

The CHAIRMAN. One other question about the color. Mr. Nathan produces as a result a color which is a pure dead white. That is of course the natural color of butterine or oleomargarine uncolored. Why not leave it right there? Why not provide that no coloring matter shall be added to it, but that it shall be left in its natural form—not compel it to be colored pink or any other color, but leave it in its natural color?

Professor BABCOCK. For this reason: In that way oleomargarine could not be distinguished from lard or tallow, and if the goods were uncolored in that way, in three or four years some people might come before a legislative committee and say, "Here are people who are selling tallow and lard for oleo—lard unpurified instead of oleo." How are you going to provide for that?

The CHAIRMAN. They could be distinguished by the taste and flavor.

Professor BABCOCK. No, the lard might still be purified so as to be a lard without flavor.

Senator BLAIR. Why do they not sell lard for butter now, on that theory?

Professor BABCOCK. For the reason that it is not adapted to the purposes of butter; it is too thin, too fluid.

Senator BLAIR. Would it not be just as useless for butter then as now; it would be lard still.

Professor BABCOCK. It would be lard, but it would be purified. I will say in regard to this matter of color that it is done to please the eye and to make it resemble an article which it is confessedly made for the purpose of resembling as a substitute for it. If a man was going to make a substitute for butter he would not want it black or pink or any other color, any more than he would want to make a substitute for ebony any other color than black.

The CHAIRMAN. You do not think it would injure its commercial value to color it?

Professor BABCOCK. I think that for a number of years any other color than that people are accustomed to see in the goods used for the purpose of butter would create a prejudice which it would require a number of years to overcome. That would be the effect.

Senator JONES. Do you think there is any difficulty practically in enforcing a properly-guarded State law to insure the public against the purchase of oleomargarine except where they choose to buy it?

Professor BABCOCK. I think there is no difficulty in enforcing a properly guarded State law, a local law. If you have a law providing that such and such things shall or shall not be done, and you have nobody to look after it, it is not going to be enforced of course. You must have officers to execute it.

Senator JONES. You think there would be no difficulty in executing a law with proper machinery and a properly framed law?

Professor BABCOCK. I think there would be no practical difficulty in executing it.

The CHAIRMAN. How would you reach every little town and village in Massachusetts and every wayside grocer—by an inspector?

Professor BABCOCK. I should make the attempt in the same way that I should try to enforce the law against rum or anything else of that nature. You have a law about this, that, or the other thing, but it is not enforced in every little town.

STATEMENT OF GEORGE H. WEBSTER.

Mr. GEORGE H. WEBSTER, of Chicago, then came before the committee.

The CHAIRMAN. Please state in what behalf you appear?

Mr. WEBSTER. I am a member of the firm of Armour & Co., of Chicago.

Senator JONES. In what business are you engaged?

Mr. WEBSTER. We are slaughterers of cattle and hogs, and pack and ship the product.

As a preface, I wish to say that it is my desire and intention to cover the ground fully, in order that this investigation may be as exhaustive and comprehensive as possible under the circumstances. If, therefore, any points should be omitted about which you desire to be informed, it will give me pleasure to be interrogated, and, if unable to furnish immediately the information desired, I promise to obtain it. We have nothing to conceal that will tend to enlighten you on this important matter.

As I have stated, I am a member of the firm of Armour & Co., of Chicago. We are slaughterers of cattle and hogs in Chicago to quite a formidable extent, having killed last year 330,000 cattle and 1,200,000

hogs on our own premises. We send the products to all parts of the world, and as an element of this business we are producers of oleo oil and neutral, as well as the much abused products known as oleomargarine and butterine. The testimony to which you listened yesterday and this morning from Professors Morton and Babcock and Chandler was altogether scientific. It is my privilege this morning, as a merchant and manufacturer, to present the matter to you from a commercial standpoint, having noticed yesterday that several questions propounded to those gentlemen regarding the cost and selling value of the articles were not satisfactorily answered.

The methods for producing the several products were so minutely described to you by Professor Morton, that I promise to be very brief in alluding to them again. The product which is most affected by this bill, and which is the more far-reaching in its extent, is that which is commercially known as "oleo oil," the manufacture of which enhanced the value of the cattle slaughtered in Chicago alone, during the past year, to the sum of fully \$4,000,000. This I mention as appertaining to Chicago only; my friends who are present from the cattle districts of the West will have something to say concerning this product and the interest they have in it.

The method of producing oleo oil is as follows: The selected fat is taken from the cattle in the process of slaughtering, and after thorough washing is placed in a bath of clean cold water and surrounded with ice, where it is allowed to remain until all animal heat has been removed. It is then cut into small pieces by machinery, and melted at an average temperature of 150 degrees until the fat in liquid form has separated from the fibrine or tissue, and then settled until it is perfectly clear. Then it is drawn into graining vats and allowed to stand a day, when it is ready for the process. The pressing extracts the stearine, leaving the remaining product, known as oleo oil. It is this article which, when churned with cream or milk or both, and with sometimes a small proportion of creamery butter, the whole being properly salted, gives the new food product oleomargarine. Each animal yields an average of about 40 pounds of oleo oil, and the quantity produced in the United States during 1885 was about 200,000 tierces, equal to 75 millions of pounds; of this about one third is used in this country, the remainder going to various parts of Europe, but mainly to Holland, where the manufacture of oleomargarine for shipment to England is one of the principal industries of the Kingdom. The average market value of oleo oil, over that of common tallow, for the past three years has ranged from 5 to 8 cents per pound, and figuring it at 7 cents per pound, gives approximately \$3 per head which beef cattle are benefited by its manufacture. Of the total quantity mentioned, Chicago and vicinity produce about one-half.

This oleo oil is manufactured to a large extent in Austria, France, and Germany, over 40,000 tierces, equal to 15,000,000 of pounds, finding its way into Holland alone during the year 1885. With this large production abroad the United States has to compete, and if oleo oil used in this country is taxed, which is one of the propositions of the bill, it will throw just that additional quantity on the foreign market and lower the price correspondingly, which, at a low estimate of two cents per pound, would amount to \$1,500,000. Does it seem right or just, from any standpoint, that any portion of your fellow-citizens should be deprived of their own home market for so valuable a product, and forced into an unprofitable export outlet as being the only one open to them, and simply because it is the principal component part of a clean and wholesome food product whose only sin is that it is competitive with

another? Has not an American citizen as much right to make butter from oleo oil as another American citizen has to make it from cream and milk, and has not the consumer as much right to buy and eat it if he so desires? There is no doubt, however, that the consumer should be made aware of what he is buying, and this can be easily accomplished and regulated by proper State police surveillance, but onerous prohibitory taxation is unnecessary and opens the doors for endless troubles in the future.

I have now described oleo oil and oleomargarine and their relations to each other, but there is another product, called butterine, to which allusion was made yesterday, but no satisfactory description of it was given, for the reason that very little of it comparatively speaking is made in the East or in New York, from which city the two gentlemen came.

The difference between oleomargarine and butterine is this: In making butterine we use neutral lard, which is made from selected leaf lard prepared and rendered in a very similar manner to oleo oil, excepting that no sterine is extracted. This neutral lard, which is a beautifully white and odorless product, is cured in salt brine for 48 to 70 hours at an ice-water temperature. It is then taken and with the desired proportions of oleo oil and the finest creamery butter is churned with cream and milk, producing an article which, when properly salted and packed, is ready for market. We use the same coloring that is used by all butter-makers, and which has already been fully described. The butterine is generally made of two qualities, differing only in the proportions of the ingredients used. In cold weather a little salad oil, made from selected cotton-seed, is used in both products for the improvement of their texture. We get an average of about eight pounds of raw leaf lard per hog, which render net about five to six pounds of neutral. This neutral is worth from two to three cents per pound over ordinary steam-rendered lard. Therefore figuring five pounds per hog as a minimum, at two and a half cents per pound, adds twelve and one half cents per head to the value of every hog slaughtered in the large cities.

There were slaughtered in Chicago during the past year 5,000,000 of hogs, which at 12½ cents per head makes an enhanced value from neutral alone of over \$500,000. This article is seldom exported, and therefore if this bill should go into effect the industry of its manufacture would be entirely crushed and destroyed. The proportions of the component parts used in preparing these several articles of oleomargarine, creamery butterine, and dairy butterine are approximately as follows:

Oleomargarine is mainly made of oleo oil exclusively, but sometimes 5 per cent. of the finest butter is added, which is churned with the cream and milk to improve the flavor.

Creamery butterine is usually composed of 25 per cent. creamery butter, 40 per cent. neutral, 20 per cent. oleo oil, and the balance milk, cream, and salt.

Dairy butterine differs from creamery only in the proportions. It is a cheaper product, and its proportion of butter about 10 per cent., neutral 45 per cent., and oleo oil 25 per cent., the balance being made up of cream, milk, and salt.

The average cost of these products respectively is about as follows: Oleomargarine, 8 cents per pound; dairy butterine, 10½ cents per pound; creamery butterine, 13 cents per pound; and the average selling prices, taking our own as an index, are: Oleomargarine, 9 to 9½ cents; dairy butterine, 11½ to 12 cents; creamery butterine, 14½ to 15 cents.

Senator JONES. Do I understand you to mean by oleomargarine, as

you use the term there, the oleo oil, or oleomargarine as prepared in imitation of butter?

Mr. WEBSTER. What I have just stated about the cost and selling price related to oleomargarine—the prepared product.

Senator JONES. Prepared as a substitute for butter?

Mr. WEBSTER. Yes, sir; it is made mainly from oleomargarine oil. On special occasions, and in order to meet competition, we have sold the product at one-fourth to one-half cent per pound over actual cost, all showing that the business in itself is competitive, and done at best on very limited margins of profit. In Chicago there are thirteen manufacturers in all, but the business is principally confined to about half that number. The manufacturers in the whole country, east and west, as far as I can ascertain, number about thirty. The manufacture of these products furnishes employment to probably two thousand men, while the production of oleo oil neutral furnishes employment directly and indirectly to at least three times as many more. At the last American fat stock and dairy show held under the auspices of the Illinois State Board of Agriculture in Chicago, in November last, the butterine manufacturers were allowed, after much dissention, to make an exhibit of their products, and the effect was wonderful in turning popular prejudice into popular favor. The butterine men, in order to show their sympathy and sincerity at that time, offered two thousand dollars in premiums for the best display of fine creamery butter at the next exhibition, to take place November next. I hold a letter in my hand, received by my firm only a few days ago, which I will take occasion to read, if you desire, as it shows how the butterine-makers' premiums are appreciated by the Illinois State Board of Agriculture.

We, as manufacturers of the component parts of oleomargarine and butterine as well as of the products themselves, respectfully urge that you recommend the appointment of a committee to visit the places of the principal manufacture of these articles, and to make a thorough investigation of all the methods and ingredients used. It will be our pleasure to extend every possible facility, that the whole facts may be obtained and every item uncovered that will lead to the whole truth and nothing but the truth concerning them.

In regard to these products being similar to butter, so there are carpets and every other article made in almost exact imitation of those of a higher and more expensive grade, and such imitations are often sold for originals, yet the manufacturers have never had prohibitory taxation thrust upon them, and their offense, if such it is, is far greater than our own, for we sell our products on their merits alone.

A sugar planter in Louisiana would surely consider it a hardship if he should be threatened with taxation because some remote retailer mixed his product with sand and glucose, and then took advantage of the consumer. Undoubtedly the proper way to stop such illegitimate transactions is through the State laws and strict police surveillance in their enforcement. Nothing, I assure you, would please the makers of oleomargarine and butterine more than just exactly such a regulation. Our products are daily increasing in popular favor, and solely upon their own merits; the people generally prefer them and buy them, rather than the unpalatable and unwholesome grades of medium dairy butter. Such butter is fit only for grease, and these new food products are to be thanked for forcing it to find its own true and consistent level. The manufacture of these products does not affect the price of butter adversely, but quite the contrary is the fact. We expended during the past season \$95,000 for creamery butter for use in our butterine and

oleomargarine factory. This represented between 350,000 and 400,000 pounds, at an average cost of 26½ cents per pound, and we have sold our creamery butterine during the past two weeks at 15 cents per pound, when the price of butter in Elgin was exactly the same figure. This shows the hold these products are taking on popular taste and popular favor; it shows, furthermore, that the average consumer is a philosopher, from the fact that he would rather "bear the ills he has than fly to others that he knows not of."

The business of manufacturing these articles will not stand a tax of any kind. We are willing to pay a license if considered admissible and will brand the product; more than this we think should not be demanded.

In regard to the wholesomeness of these products, I want to say a word or two. A short time ago, when Dr. Cyrus Edson, of the New York board of health, was in Chicago, we invited him, in company with Dr. De Wolf, who is health commissioner of New York City, and Dr. John H. Rauch, who is secretary of the Illinois State board of health, to visit our factory. They did so and voluntarily gave us these letters:

CHICAGO, *May 15, 1886.*

Messrs. ARMOUR & Co., *Chicago:*

GENTLEMEN: It gives us pleasure to say to you that we have recently visited your factory at the Union Stock Yards in this city, and thoroughly examined the whole process of the manipulation and manufacture of butterine and oleomargarine. We cheerfully testify that we consider the products cleanly, palatable, and wholesome food products, containing nothing injurious or detrimental to health, but, on the contrary, cheap and desirable substitutes for the medium grades of dairy butter.

Yours, respectfully,

CYRUS EDSON, M. D.
OSCAR C. DE WOLF, M. D.

[Illinois State Board of Health, Office of the Secretary.]

SPRINGFIELD, ILL., *May 17, 1886.*

To ARMOUR & Co.:

GENTLEMEN: While engaged in an official investigation with regard to the slaughtering of beef at the Union Stock Yards, accompanied by Dr. Cyrus Edson, food inspector of the New York board of health, and Dr. O. C. De Wolf, health commissioner of Chicago, recently, I witnessed your process for the manufacture of oleomargarine and butterine. By what I saw I am convinced that it is conducted with the most scrupulous cleanliness; that nothing in the manufacture, or the material used, is detrimental to health, and that the products are wholesome.

Very respectfully,

JOHN H. RAUCH, M. D.

I would be pleased to leave with the committee several of our circulars which we send out for our customers, showing how we place the article before the people from a manufacturer's standpoint.

The CHAIRMAN. Have you any knowledge as to how other manufacturers brand their goods and send them out, or only in regard to your own practice?

Mr. WEBSTER. I know very little as to what others do, but I believe that all manufacturers send out their products as we do, and sell them as we do.

The CHAIRMAN. You heard the statement made by Professor Babcock, who preceded you, in regard to goods coming to Boston from some places in the West, branded "Eureka Creamery," and so forth. Have you any knowledge on that subject at all?

Mr. WEBSTER. I am not familiar with those brands.

The CHAIRMAN. Then I will not ask you to say anything about that.

Senator SAWYER. Do you use any patent right in any of your manufacturing?

Mr. WEBSTER. No, sir; we do not. A number of years ago, in connection with others, we had a patent issued to us simply as a matter of protection against the prosecution of the Commercial Manufacturing Company who held the Mége patent in this country. We had that patent issued, but it was a mere *pro-forma* matter, and was never put into practical effect. It was done for a purpose, and that purpose was our protection from prosecution.

The CHAIRMAN. Can you state about the proportion of butterine, as compared to oleomargarine, now made generally in the country?

Mr. WEBSTER. I think the preponderance is largely in favor of oleomargarine. I have no definite figures of the total manufacture of these products separately.

The CHAIRMAN. I understood you to state that there was more butterine made, or the product containing lard, than there was oleomargarine.

Mr. WEBSTER. I said there was more butterine made in the West than there was in the East.

The CHAIRMAN. I understood you to say that about two-thirds of the latter, or oleomargarine oil, went abroad.

Mr. WEBSTER. Yes, sir.

The CHAIRMAN. About how much fat, on the average, comes from each animal slaughtered? I mean fat that can be used in the oleomargarine factories. About how many pounds of raw fat is the average of each animal slaughtered?

Mr. WEBSTER. They figure about 5 per cent. It averages, I think, about 55 pounds, from which we get on the average, approximately, 35 pounds of oleo oil and 22 or 23 pounds of stearine.

The CHAIRMAN. That is 55 pounds on the average, from each animal slaughtered, of fat that is suitable for oleo?

Mr. WEBSTER. Yes, sir.

The CHAIRMAN. What is the raw fat worth in the market now?

Mr. WEBSTER. I am unable to answer that question definitely, because we never sell it; we manufacture it into oleo oil.

The CHAIRMAN. Has it not any market value in Chicago?

Mr. WEBSTER. Oh, yes, it has.

The CHAIRMAN. Can you not state about what the raw fat is worth?

Mr. WEBSTER. I should think it would be worth, approximately, in Chicago, six cents a pound, judging from the value of the other products.

The CHAIRMAN. What was that fat used for before the manufacture of oleo was discovered, chiefly?

Mr. WEBSTER. It was rendered into ordinary tallow.

The CHAIRMAN. About what was the price of tallow in this country before this process began?

Mr. WEBSTER. I can furnish you with those statistics.

The CHAIRMAN. Can you furnish us with statistics as to the price of tallows and lards running back for a number of years; are there any such figures as those made by the Produce Exchange of Chicago, or other parties?

Mr. WEBSTER. Yes, I think so.

Senator BLAIR. And can you give the present prices to show whether there has been any change in the prices of lard and tallow?

Mr. WEBSTER. I have the prices of oleo oil and tallow for three years past, but I can very readily obtain them for twenty years if you desire them. It is merely a matter of statistical reference. I cannot do so to-day, but I will do so with pleasure hereafter. This oleo oil, if you

will allow me to say it, is a very sensitive article. A year ago it sold as high as 17 cents a pound, and it has sold since as low as 8 cents a pound, a fresh oleo oil suitable for this purpose. Tallow has sold as high as 8 cents a pound and as low as $3\frac{5}{8}$ cents a pound. It is worth in Chicago to-day 4 cents a pound, and fresh oleo oil $12\frac{1}{2}$ cents a pound.

The CHAIRMAN. About how much tallow would be derived from the average cattle killed; taking the whole fat of the animal, how much tallow would be produced?

Mr. WEBSTER. Of the rendered tallow I think about 55 pounds. I think there is about 80 pounds, if I remember rightly, of rough fat, which makes, rendered, in the neighborhood of 55 or 60 pounds of regular tallow. That is the figure, when all the fat goes into the tallow, if I understood your question.

The CHAIRMAN. Yes, it was if the whole of the fat was rendered into tallow how much would be produced from the animal?

Mr. WEBSTER. The average difference in the price, as I believe I mentioned, for a series of years, has been from 5 to 8 cents a pound. I have known it to be 10 cents a pound, but I figure it in my estimate here at 7 cents.

The CHAIRMAN. I wish you would furnish me, at your convenient leisure, the prices of tallow and lard running back for a number of years—the statistics.

Mr. WEBSTER. I will do so with pleasure.

Senator Jones. I think those figures ought to go into and be made a part of his statement.

The CHAIRMAN. They should, if they come in time.

Senator BLAIR. Do you sell oil for consumption in this country or do you turn the whole of your product into oleomargarine and butterine yourselves?

Mr. WEBSTER. We sell large quantities of it to other manufacturers.

Senator BLAIR. To what points of the country do you send it, and give us some idea of the quantities. I do not expect much accuracy about it. Do you send it to the Pacific coast?

Mr. WEBSTER. We make ourselves, at our packing-houses, about 25,000 tierces of oleo oil per annum, and we shipped last year about 12,000 tierces, about one-half. I presume out of the remainder we used two-thirds. My idea of the volume of business would lead me to suppose that we use approximately 7,000 or 8,000 tierces and sell the balance; that is, in this country.

Senator BLAIR. I understood you to say that you shipped about 12,000 tierces abroad?

Mr. WEBSTER. Yes, sir.

Senator BLAIR. And you consume in your own manufacture into oleomargarine and butterine how much?

Mr. WEBSTER. I think six or seven thousand tierces.

Senator BLAIR. And the difference, some five or six thousand tierces, you sell to manufacturers in this country?

Mr. WEBSTER. Yes, sir.

Senator BLAIR. I would like to know something in regard to the parts of the country it is sent to.

Mr. WEBSTER. Certainly. We send it to New York quite largely—that is, the oleo oil, and we sent it to Cleveland, Columbus, Pittsburgh, Pa., and to various points in the West.

Senator BLAIR. Can you state where, substantially, all the oil used in oleomargarine and butterine is produced? Is it pretty much all produced in Chicago and New York—the oil itself I mean?

Mr. WEBSTER. The oleo oil?

Senator BLAIR. Yes.

Mr. WEBSTER. The bulk of it is produced in Chicago and New York. Our Kansas City house is a large producer, but they do not kill as many cattle as we do, and use the greater portion themselves. They ship but very little.

Senator BLAIR. I would like to know how extensive the business of the smallest establishment is. I want to know whether the manufacture of this oil into oleomargarine is becoming common in small places, among small producers and dealers.

Mr. WEBSTER. In the city of Cleveland I think there are three manufactories—three or four. In Columbus, Ohio, there are one or two. In Pittsburgh there are two, and I think three—two that I know of, and I do not recall any more.

Senator BLAIR. Do you know whether, as a matter of fact, farmers and those who are managing what are called creameries are making use of the oil at all?

Mr. WEBSTER. I do.

Senator BLAIR. Will you give us such information as you have as to the extension of its use among those who call themselves butter makers, principally farmers and others?

Mr. WEBSTER. I cannot give you any definite figures in regard to that matter.

Senator BLAIR. I do not expect it; I suppose it is a difficult thing to get figures about it. But I would like to know to what extent butter is being adulterated by the use of that oil.

Mr. WEBSTER. We have sent both oleo oil and neutral out into the farming districts, the dairy districts.

Senator BLAIR. To what class of producers—dealers and farmers?

Mr. WEBSTER. No, sir; I think they are mostly butter manufacturers and cheese manufacturers.

Senator BLAIR. This enters into the manufacture of cheese somewhat, then?

Mr. WEBSTER. Yes, I understand so. I know but little of that industry; simply from what I have heard and read in the papers.

Senator BLAIR. It is added into the dairy butter and cheese of the country?

Mr. WEBSTER. I do not know about the regular cheese. I know there is a cheap imitation of cheese that is made out in that district that this article goes into, or at least I have been told so; I cannot speak from absolute knowledge, for I never saw either product of cheese manufactured.

Senator BLAIR. But as a business man, you understand that process is going on. Of course it is a healthy article; at least it is, certainly, from your standpoint. Do you see any objection to its becoming gradually diffused through the entire manufacture of butter and cheese so far as it can be used and utilized?

Mr. WEBSTER. So far as its wholesomeness is concerned I should think not, unless they use some other compound or product in connection with it.

Senator BLAIR. But if it be a cheaper product than ordinary butter, why is not the natural commercial tendency to its general diffusion through the entire butter manufacture of the country? People can make money that way.

Mr. WEBSTER. That is a matter of conjecture that I am unable to give you satisfaction about.

Senator BLAIR. But that is going on to some extent I understand. I have not heard much said about the extent to which the tallow of sheep was used.

Mr. WEBSTER. It is never used, that I know of, for this purpose. In the course of our business we kill from 50,000 to 60,000 sheep per annum, and all the tallow from them we sell to soap makers. Kirk & Company, of Chicago, are our principal buyers.

Senator BLAIR. You do not understand that mutton tallow enters into the manufacture of oleomargarine?

Mr. WEBSTER. I never heard that it did.

Senator BLAIR. No animal is killed simply for the purpose of increasing the manufacture of oleomargarine, I suppose?

Mr. WEBSTER. Not solely for that purpose.

Senator BLAIR. Then it is the animal which is killed for consumption as meat, as food, and which would be killed any way?

Mr. WEBSTER. Yes, sir.

Senator BLAIR. You utilize a portion of the dead product in the way which you speak of, so that the only limitation to manufacture is the demand of the animal as a food, as meat, is it not?

Mr. WEBSTER. Yes, sir; as food—not altogether as fresh meat.

Senator BLAIR. Not altogether; the hides and tallow and all that. But I want to get at an idea of the extent to which this business can naturally be competitive with the ordinary dairy manufacture of the country. There must be some limitation, and it is incident only to the general meat business, and incident to the general production of meat as food.

Mr. WEBSTER. Yes; that is so.

Senator BLAIR. And as it is carried on all the animals killed in the country, substantially, are now utilized, are they not?

Mr. WEBSTER. No, sir. In small towns in New England, for instance, where a country butcher kills a few cattle from week to week, they do not pretend to make oleo oil; it cannot be done. It requires a process, machinery, and an expensive plant.

Senator BLAIR. But in the great slaughtering business of the country, on the extensive scale it is carried on in your business, the fat of the cattle and of the hogs are already utilized to the fullest extent to which they can be in the manufacture of oleomargarine and butterine; is not that so?

Mr. WEBSTER. The fat from the hog is a very small percentage. This leaf lard is the choicest fat from the hog, and only weighs about eight pounds in the rough. We get about five pounds of neutral from a hog, when we ordinarily get about forty pounds of lard.

Senator BLAIR. To what greater extent could the fat of the hog be used or utilized for the manufacture of oleomargarine than now; how much more could it be used than it is now? Could you double the production?

Mr. WEBSTER. I do not think so.

Senator BLAIR. Could it be increased materially?

Mr. WEBSTER. I think not, except from the general growth of the country and business.

Senator BLAIR. As more animals were killed. But in all the hogs killed, substantially, all that portion of the hog product which is fit to work into oleomargarine is already utilized in that way, is it?

Mr. WEBSTER. Yes; from the hogs killed in the larger cities. The small packing houses throughout the country do not make neutral at

all. It is only in cities like Chicago, though some is made in Boston, some in Kansas City, and I think some in Saint Louis.

Senator BLAIR. What proportion of the animals killed in the country are killed in these large centers, do you think?

Mr. WEBSTER. The greater portion by far.

Senator BLAIR. Four-fifths?

Mr. WEBSTER. Yes, sir.

Senator BLAIR. Of the animals killed in these great centers, then, just four-fifths of the whole, or more, of the hog and the beef creature are utilized, as far as they can be profitably, already in the manufacture of oleomargarine and butterine. I understand that to be your statement. Is that correct?

Mr. WEBSTER. In the manufacture of oleo oil and neutral. A neutral or oleo oil is manufactured which does not go into the manufacture of oleomargarine in this country.

Senator BLAIR. But it goes into the manufacture somewhere else.

Mr. WEBSTER. Yes, sir.

The CHAIRMAN. Does your house ship its products to this District; I mean oleomargarine or butterine?

Mr. WEBSTER. We do.

The CHAIRMAN. How are the tubs that come here branded?

Mr. WEBSTER. I do not know, but I think they are branded as we usually brand them. Sometimes we put on merely a specific name, but our products usually are branded like that. [Exhibiting a printed paper to the committee.]

The CHAIRMAN (reading the paper). "Armour & Co.; pure dairy butterine." "Armour & Co.; finest creamery butterine."

Senator VAN WYCK. Why are the words "dairy" and "creamery" put on that bill?

Mr. WEBSTER. Merely to distinguish the grades. Creamery butterine is the highest grade.

Senator VAN WYCK. Why do you not say "first quality" or "second quality"?

Senator SAWYER. Mr. Webster stated, before you came in, that they used 25 per cent. of butter besides the milk, which ran it up to 35 per cent., and in some other grades less.

The CHAIRMAN. Do not all the manufacturers in branding it leave out the words "oleomargarine" and "butterine," and simply brand it "dairy" or "creamery"?

Mr. WEBSTER. Possibly so. Sometimes they put on a single name without specifying whether it is dairy or creamery.

The CHAIRMAN. What do you mean by that?

Mr. WEBSTER. Sometimes they will put on the name with the word "oleomargarine" under it.

The CHAIRMAN. Does your house ever brand it without using the words "butterine" or "oleomargarine"?

Mr. WEBSTER. Yes; but not to any great extent. We do that on an order, because customers ask it.

The CHAIRMAN. You brand it just as your customers ask to have it branded, if they have any desire about it?

Mr. WEBSTER. Well, we use a consistent judgment about that. If our customers should ask us to brand it "creamery butter," we should decline to do it.

The CHAIRMAN. But if they ask you to put any special brand or name upon it, you do that?

Mr. WEBSTER. Yes, sir.

Senator BLAIR. What are some of those names which occur to you which you put on at the request of customers—those brands?

Mr. WEBSTER. I am not very familiar with that. My business is at the office, 5 miles from the packing-house, but "Oakfield" is one.

Senator BLAIR. That represents oleomargarine?

Mr. WEBSTER. Yes, sir. That is the brand, I believe, that some of our customers ask us to put on.

Senator VAN WYCK. Is there anything on that label indicating that it is oleomargarine or butterine?

Mr. WEBSTER. No, sir; nothing specially.

Senator BLAIR. You sell in quantity to those who sell to the consumers?

Mr. WEBSTER. Yes, sir.

Senator BLAIR. Why should not they desire the thing they have to sell to be branded according to the fact?

Mr. WEBSTER. I cannot answer that; that is their own matter.

Senator BLAIR. Do you not understand that is a matter of deception on their part?

Mr. WEBSTER. Not altogether. A man may have a sort of private brand. Many people have private brands that they sell their products under; not this product specially, but many things which I should think it would be legitimate to mark with a brand.

Senator BLAIR. But there is nothing on this package to indicate what it is. You say "Oakfield." We will suppose it is the name of a place or the name of a person; but there is nothing to indicate whether it is butter, butterine, oleomargarine, lard, or what not.

Mr. WEBSTER. They may have a brand that they put on after that.

Senator BLAIR. They *may* have.

Mr. WEBSTER. Well, I do not pretend to follow it to its remotest limit.

The CHAIRMAN. Would you, at the request of a customer, brand it "Oakfield Creamery," or "Oakfield Dairy," without using the word "butter." Would you put that on if they asked you to?

Mr. WEBSTER. I think we would.

The CHAIRMAN. Simply "Oakfield Creamery," without the word "butter" attached to it; simply "Oakfield Creamery," or "Oakfield Dairy," if a customer desired that brand put upon it?

Mr. WEBSTER. I think we would. It is merely a distinguishing term as to quality.

Senator BLAIR. Is there such a creamery in this country as the "Oakfield Creamery"?

Mr. WEBSTER. Not that I know of.

The CHAIRMAN. What do you think of the possibility of the business being carried on in a very small city of making oleo oil by parties going around to the various butcher-shops and buying up the fat as fast as it is produced and taking it to their places of business and making it into oleo oil?

Mr. WEBSTER. That is done in New York City to quite a large extent.

The CHAIRMAN. They go around to the various butchering establishments and get the fat?

Mr. WEBSTER. No, sir; not to the small butchers, but to the large slaughtering establishments.

The CHAIRMAN. They could get it from small places as well as large ones?

Mr. WEBSTER. It is not likely to be fresh in that case, and unless it is fresh it is utterly valueless.

The CHAIRMAN. They could collect it every day?

Mr. WEBSTER. It would have to be collected and handled in a very prompt manner, because where there is the slightest decomposition it is rendered entirely valueless for this product.

The CHAIRMAN. You say that is done in New York?

Mr. WEBSTER. Among the large slaughtering-houses I understand it is to some extent. I do not know it of my own knowledge, but I understand it is so.

The CHAIRMAN. You have no knowledge of your own as to that?

Mr. WEBSTER. No, sir.

The CHAIRMAN. You think it might be done?

Mr. WEBSTER. Yes, I think it might be done safely.

Senator VAN WYCK. Who do you send to here in the District from your establishment?

Mr. WEBSTER. We have a branch house of our own in the Center Market. I have made my statement from a commercial standpoint. I do not pretend to be an expert in all these matters.

The CHAIRMAN. That is the information we want.

Mr. WEBSTER. I thought so.

Senator JONES. How long have you been engaged in the manufacture of oleomargarine and butterine?

Mr. WEBSTER. About four or five years; not exceeding five years.

Senator JONES. Do you know anything about its effect on the health of the consumers?

Mr. WEBSTER. I never heard anything adversely concerning it.

Senator JONES. Do you believe it is a wholesome article of food?

Mr. WEBSTER. I do most positively. I have used it in my family for years.

Senator JONES. Do you use, in the manufacture of this article, the fat of animals which have died of disease, or any filthy or disgusting fats?

Mr. WEBSTER. Never.

Senator JONES. Do you believe you could do it if you wished to?

Mr. WEBSTER. I do not think we could.

Senator JONES. You think it would injure the product in such a way that you could not use it? Do you use any poisons in the manufacture of these articles?

Mr. WEBSTER. Nothing whatever approximating anything of that kind.

Senator JONES. You stated awhile ago that you did not use mutton tallow. Why do you not use it?

Mr. WEBSTER. We have an outlet for that, and I have never known that it was suitable for this purpose.

Senator JONES. Do you think it likely that there would be any odor connected with it that would render it unfit for this purpose?

Mr. WEBSTER. I should think there would be. I am not an expert on the subject, but I should judge so. I do not think it could be utilized advantageously.

Senator JONES. You spoke awhile ago about the rough fat of beeves and hogs as a distinct sort of fat. Do you use that in the manufacture of these articles?

Mr. WEBSTER. We do not. We use only the selected parts from each animal—the caul fat from the steer and the leaf lard from the hog.

Senator JONES. And you think it is a necessity to use that kind alone, to make a success of the business of this manufacture?

Mr. WEBSTER. Undoubtedly it is.

Senator JONES. Do you think that the manufacture of this article, and the utilization of every product of the hog and beef as it is butchered, tends generally to render the whole animal more valuable and enables you to sell the other products at a cheaper rate? For instance, are you not able to sell the beef and other things at a lower rate than when you were compelled to dispose of them in a more limited market, or in the old way.

Mr. WEBSTER. I think it would naturally have that tendency.

Senator JONES. Could you use rancid or refuse butter in making this product?

Mr. WEBSTER. We could not.

Senator JONES. And you do not?

Mr. WEBSTER. We do not. We tried the experiment a year or two ago of buying some butter in the month of June and putting it in tierces and laying it away in our cooling rooms, thinking we might be able to use it in the fall; but we sold that butter recently for five cents a pound, which is the price of common grease.

Senator JONES. Could small butchers in small towns profitably use the fat of their animals for this purpose?

Mr. WEBSTER. They could not. It requires a certain plant, machinery, and expert knowledge.

Senator JONES. I should like to have an idea, if you can give it to me, about what you think would be the value of the smallest plant that could be profitably used in this sort of manufacture.

Mr. WEBSTER. In manufacturing oleo oil and neutral, you mean, I suppose.

Senator JONES. Yes.

Mr. WEBSTER. I should not think a plant could be constructed that would be of any profitable service under five or six thousand dollars; ours probably cost \$100,000.

Senator JONES. And it would cost more than that to be able to manufacture oleomargarine and butterine as it is prepared for the market, or would that plant be sufficient?

Mr. WEBSTER. The smaller the quantity produced of either of these products, the greater would be its approximate cost.

Senator JONES. I understand that; but do you mean that a plant costing five or six thousand dollars would justify a man's entering into this?

Mr. WEBSTER. I thought your question related to the plant in a small town.

Senator JONES. It does; but I should suppose that even a plant put up in a small town would necessitate the butchering of a certain number of animals before the man could profitably enter this field of manufacture.

Mr. WEBSTER. It is merely a matter of conjecture; I am not able to answer that question satisfactorily.

Senator JONES. If I tell you my object, perhaps you will get the idea I have in my mind. If there was a law requiring the licensing, for instance, of these manufactories, would it be possible that there could be a manufactory of this kind, an underground establishment, so to speak, that could be profitably conducted where it would not be likely to be found out by the officers of the law; or would it necessarily have to be conducted in such a large way that there would be no difficulty in find-

ing out who was in the business of manufacturing butterine and oleomargarine as a food project.

Mr. WEBSTER. I think that would depend a great deal upon the amount of tax, if taxation should be decided upon. I recollect an experience in the old whisky times, when high wines were worth 30 cents a gallon and the tax was \$2, that our house in New York used to receive consignments and make advances of 25 to 30 cents a gallon for shipments made to us in bond from various distillers in the West. I have sold that whisky repeatedly at 30 to 35 cents a gallon with a \$2 tax, and have seen it on the market next day at \$1.50.

Senator JONES. I understand, of course, the difficulties that we are met with in a matter of that sort, and there would be necessarily, in any licensing system that could be adopted, evasions. But what I wanted to get at was whether they could be easily detected?

Mr. WEBSTER. And more especially in a tax system, if you will allow me to correct you—you said a license system—would a specific tax encourage that kind of illegitimate business.

Senator JONES. Still you do not get my point. If a law was adopted the object of which was simply to have this product branded and put on the market honestly, so that the people would know exactly what it meant, and if there was a license system for all manufacturers simply for the purpose of enabling the officers of the law to find out where this article was produced, and to follow back to its origin any packages that they might find in the market, how would that operate? That is what I want to get at.

Mr. WEBSTER. I do not think there could be very much, if any, produced under those circumstances.

Senator JONES. There would be no difficulty in regard to the matter with any concern which manufactured an amount of it that would be profitable?

Mr. WEBSTER. No, sir.

Senator VAN WYCK. You do not think there would be as much danger of the illicit manufacture of oleomargarine as there is of whisky, for instance?

Mr. WEBSTER. No, sir; unless they had a prohibitory tax.

The CHAIRMAN. I understood you to say that if the matter were under regulation of law, and placed altogether under the control of the Government, it would not be easy to establish small factories to evade the law, because they would be readily discovered?

Mr. WEBSTER. Yes; and that is with merely a licensing law, compelling a branding of the product.

The CHAIRMAN. The business has to be carried on in such an open way in the rendering of lard, &c., that any one could find the place; it could not be easily covered up.

Mr. WEBSTER. I think that is so.

Senator BLAIR. What tax do you think could be borne without leading to attempts at evasion?

Mr. WEBSTER. I do not think any tax at all could be borne.

Senator BLAIR. It would not depend so much upon the amount of the tax—I understood you to say that.

The CHAIRMAN. A small tax would not be apt to be evaded so much as a large tax, of course.

Are there any other gentlemen here, from the West particularly, who desire to be heard?

Senator JONES. There is a gentleman from New England, I think from Rhode Island, who will be here to-morrow, who desires to be heard.

The CHAIRMAN. I told some gentlemen who wanted to be heard on the other side that we would hear them to-morrow; but if there is anything more to-day I should like to hear it.

Mr. WEBSTER. A few days ago we sent from Chicago a number of samples of all these different products. They have arrived, and we have sent for them this morning, and it will give us great pleasure to exhibit them to you if you will allow us the opportunity. We have samples of oleomargarine, butterine, oleo oil, and neutral.

The CHAIRMAN. We will look at them in the morning. If no one desires to be heard at present, we will adjourn until to-morrow at 10 o'clock.

The committee then adjourned until Thursday, June 17, 1886, at 10 a. m.

WASHINGTON, D. C., *Thursday, June 17, 1886.*

The committee met, pursuant to adjournment, at 10 o'clock a. m.

The CHAIRMAN. Mr. Webster desires to submit a few additional remarks to those he made yesterday.

Mr. GEORGE H. WEBSTER. Two questions were propounded to me yesterday which I did not answer satisfactorily to myself, although of course unintentionally. One of them was addressed to me by the chairman, and the other by Senator Jones. The chairman's question was whether we ever made oleo oil from anything but the caul fat. I having the Armour & Co. brand in my mind, told him that we did not. We do make a second brand from the kidney fat, but its preparation is very small and it goes exclusively to Holland. I do not think we sell a hundred packages of it in this country; it goes to Holland entirely. I had our Armour & Co. brand in my mind when you asked me the question, and I thought it was only right to put myself properly on record, as it was an unintentional oversight.

Senator GEORGE. Are you connected with the Armour factories?

Mr. WEBSTER. I am a member of the firm.

Senator GEORGE. I was not here yesterday, and that was the reason I asked the question.

Mr. WEBSTER. Senator Jones asked me a question yesterday which I have given consideration to since, but which I did not quite appreciate at the time, and I would like to make a further explanation or answer to that question.

The CHAIRMAN. You may do so.

Mr. WEBSTER. Senator Jones asked me about the cost of a plant, and whether the manufacture of oleo oil could be profitably or consistently carried on in small places. In thinking the matter over further, I think the cost of a plant to manufacture oleo oil would be larger, as it would necessitate all the paraphernalia and fixtures of a large slaughter-house, which, of course, would be very expensive, and probably cost twice the sum I named as a *minimum*. And as to the number of cattle which a man with a moderate plant would be required to handle in order to make it at all profitable, I should think that a plant costing ten, fifteen, or twenty thousand dollars would require the handling of ten thousand cattle, and not only that, but oleo oil being such a small percentage of the product of the animal, he would require to find a market for all that beef, which is no small matter, as the average country butcher only slaughters from twenty to thirty cattle a week, say from 1,000 to 1,500 a year. So that the point is, that it would be impossible to carry on this business to any extent in any surreptitious manner and in a manner that could not be directly traceable.

Senator GEORGE. In addition to that, it is an industry which could only be carried on by men of large capital. Small capitalists are not, by the conditions of the business, allowed to invest in it.

Mr. WEBSTER. It does not necessarily require a very large capital, but a liberal capital.

Senator GEORGE. Well, \$20,000 or \$30,000; that is a large capital in my part of the country.

Mr. WEBSTER. Yes; very likely it would.

The CHAIRMAN. Did you state yesterday whether you could give us an estimate of the entire amount of oleomargarine and butterine made in this country?

Mr. WEBSTER. There are no statistics on that point, and it would be entirely a matter of conjecture. I have had that in my mind, and would be very glad indeed if I could be of some tangible service in giving them, but I cannot.

The CHAIRMAN. I think you stated that there were about thirty manufacturing factories that you knew of.

Mr. WEBSTER. Yes; in the United States. I can make out an estimate if you would like to have it.

The CHAIRMAN. I would like to have your data.

Mr. WEBSTER. I will give you the data from which I obtain it, and submit it for what is worth; but there are no statistics that I know of, or I should be glad to submit them.

The CHAIRMAN. I did not know but what the people engaged in the business, knowing each other, might know pretty nearly what it was. But we would be glad to have your estimate if you will send it to us.

Mr. WEBSTER. I will do so.

Senator BLAIR. Were there any census statistics on the subject.

Mr. WEBSTER. I think not. I never have seen any.

Mr. WILLIAM J. CAMPBELL. At the adjournment yesterday Mr. Webster stated that he had some samples showing the various stages of manufacture of these products, and if any of the Senators desire to see them they are here and they can do so.

The CHAIRMAN. I think we had better wait until we get through the regular hearing and then all will have an opportunity to examine them. It was intended to give the time to-day to people appearing in favor of the bill; but I understand there are two or three people here from Chicago who did not have an opportunity to be heard yesterday, and who desire to address the committee to-day. We can hear them now if they will make their statements very brief, or perhaps they can put them in writing, to go into print with the rest of the statements, because these proceedings are all to be printed, and of course each member of the Senate and of the committee will have a copy of the entire proceedings. If any of these parties have their statements prepared in writing, they might make some explanatory remarks, submit them, and let them be printed.

Mr. WILLIAM J. CAMPBELL. Mr. Hammond desires to make a statement.

STATEMENT OF FREDERICK HAMMOND.

Mr. FREDERICK HAMMOND, of Boston, Mass., then addressed the committee:

I am employed as manager by George H. Hammond & Co. for the sale of their oleomargarine or butterine in New England, with headquarters at No. 54 Chatham street, Boston, Mass. I was employed for the position about three and a half years ago, at which time this firm

commenced the manufacture of oleomargarine or butterine. Since that time a large amount of these goods has passed through my management, most entirely to the jobbers of butter and oleomargarine in Boston and its vicinity. I have here affidavits stating that we sell and bill the goods honestly and strictly according to the law. While we do not usually sell in small quantities, many people come to our place of business and ask us to sell a single tub for use in their families. We have done this in some instances, but being manufacturers, we prefer to do a wholesale trade. I have used our goods in my own family for the past three years. I never have heard of any injurious effects from the use of these articles, and I believe them to be a perfectly healthful article of food and a much needed product for the poorer classes. I most positively have reason to believe, and do believe, that most all of this class of goods sold in Massachusetts is sold to the consumer honestly for just what they are, and at such low prices that the consumer is much benefited thereby. A very large proportion of these goods sold in Massachusetts is sold to consumers in small tubs and unbroken packages.

I have here the affidavits of my book-keeper and salesman which I will read if the committee desires to hear it.

Senator GEORGE. If you have them reduced to writing they will be printed. You can just give a general statement of the points you want to make and submit the paper and let it be printed.

Mr. HAMMOND. I will do so.

Senator GEORGE. In whose behalf do you appear?

Mr. HAMMOND. I represent the firm of George H. Hammond & Company.

Senator GEORGE. Where is their factory?

Mr. HAMMOND. At Hammond, Indiana.

The CHAIRMAN. How are the goods branded when they come to you in Boston?

Mr. HAMMOND. They are not branded at all.

The CHAIRMAN. What brands, if any, do you put on the packages?

Mr. HAMMOND. We put on, I think, a simple brand; we brand them according to the laws of the State of Massachusetts upon their arrival in Boston. Here is a copy of the brand [exhibiting]. That is the regular stamp. "Calumet" is our trade-mark.

The CHAIRMAN. Do any of these goods come in branded with merely some fancy name of a creamery or dairy?

Mr. HAMMOND. They have no mark on them at all. Our goods are shipped to us in car-load lots. They are shipped by our own firm to their own house in Boston, a branch house.

The CHAIRMAN. The inspector in Boston stated to us yesterday that these goods came from various manufactories into Boston and into Massachusetts, branded sometimes as the "Oakfield Creamery," without any other brand on them, or branded "Eureka Creamery" or "Eureka Dairy." Did you ever see any goods branded in that way?

Mr. HAMMOND. I never have.

The CHAIRMAN. Your goods are all branded in this way after they arrive; they come without a brand?

Mr. HAMMOND. Yes, sir.

The CHAIRMAN. You sell to the retail dealer?

Mr. HAMMOND. No, sir; we sell to jobbers most exclusively.

The CHAIRMAN. You are the agent, then, of the manufacturer, and sell to the wholesale dealer or jobber and not to the retail dealer?

Mr. HAMMOND. No, sir.

The CHAIRMAN. In selling to a jobber, you sell it to them for what it is?

Mr. HAMMOND. We do. ¹

The CHAIRMAN. In all cases?

Mr. HAMMOND. In all cases.

Senator BLAIR. How much did you sell last year?

Mr. HAMMOND. I have not the exact figures; I could, perhaps, approximate the amount nearly.

Senator BLAIR. That is all we expect.

Mr. HAMMOND. I should state, probably, a million and a quarter pounds.

Senator BLAIR. What proportion of the amount sold in Massachusetts did you sell; in other words, how much was sold in Massachusetts besides what you sold?

Mr. HAMMOND. I have no way of knowing.

Senator BLAIR. Do you think you sold half of the total amount?

Mr. HAMMOND. I should think we did.

Senator BLAIR. Do you sell for this Chicago firm of Armour & Company; do you sell their goods in Massachusetts?

Mr. HAMMOND. No, sir; George H. Hammond & Company represent their own house in Boston.

Senator BLAIR. Then there is that great firm besides yours which carries goods without some mark, and you say you sold over a million pounds last year?

Mr. HAMMOND. I think we did.

Senator BLAIR. Are there any other dealers who find a market in Massachusetts besides yourself and Armour & Company?

Mr. HAMMOND. There are a few goods shipped there from the Providence, R. I., manufactory.

Senator BLAIR. Are any shipped from Kansas City?

Mr. HAMMOND. I never have seen any from Kansas City.

The CHAIRMAN. These goods go into all the interior towns of New England as well as to Boston?

Mr. HAMMOND. The principal trade is in the manufacturing cities of Lawrence, Lowell, Fall River, and Worcester.

Senator GEORGE. Do you understand that the sales are made in those cities of these goods to be used by the operatives; you understand that to be the fact?

Mr. HAMMOND. Yes, sir; I am positive of that fact.

Senator GEORGE. To be sold to operatives employed in the factories?

Mr. HAMMOND. Yes, sir.

The CHAIRMAN. How do you know that?

Mr. HAMMOND. I have visited the places and visited the families personally, and am posted in regard to the matter.

Senator JONES. Do they know what they are using?

Mr. HAMMOND. Yes, sir.

The CHAIRMAN. Give me the name of any family or operative that you ever visited who is using it.

Senator BLAIR. These operatives, as a rule, are boarded, are they not?

Mr. HAMMOND. I do not know how to answer that question. There are operatives who board at the public houses, but I should say not as a rule.

Senator BLAIR. I think, as a rule, they do not board at hotels. The manufacturers board their help practically. The cost of the operative enters into the cost of the manufacture, and they make it as cheap as they can, and so feed them on oleomargarine, and they do not know the difference.

Mr. HAMMOND. In answer to the chairman's question, I would refer him to the names signed to the petitions which I have presented, three hundred of them.

Senator JONES. I observe that one of the petitions which is signed here reads: "We, the undersigned citizens of Worcester and vicinity, do hereby state that we have at different times bought for family use a butter substitute known as oleomargarine or butterine, and that we bought the same knowingly, and because it gave us much better satisfaction than any natural butter we could purchase at the same price." That is signed by a considerable number of persons apparently. Do you know anything about that; you file that with your paper?

Mr. HAMMOND. I file that with my statement.

Senator JONES. Do you know anything about these persons?

Mr. HAMMOND. I did not get those signatures personally; no, sir.

The CHAIRMAN. How are those names procured?

Mr. HAMMOND. Those names are procured by going around to the people whom the retailers knew used it and whom they sold it to, and getting them to sign their names to that effect. There is one paper there that I passed around myself amongst a few friends that I know, and in those instances I know the statement to be correct.

Senator BLAIR. There is no doubt, I take it from your testimony and that of others, that where this article is well made, many people use it knowingly, and from choice, on account of its cheapness?

Mr. HAMMOND. Yes, they do; that has been my experience.

Senator GEORGE. What is the difference between the retail price of good oleomargarine and good butter?

Mr. HAMMOND. That depends on the season of the year somewhat.

Senator GEORGE. Well, indicate both seasons so as to give us an idea about it.

Mr. HAMMOND. Do you mean ordinary straight oleomargarine? There are as many different grades almost as of butter. It sells from 10 to 30 cents a pound.

Senator GEORGE. Compare it on the basis of Jersey butter first.

Mr. HAMMOND. We have not had any experience in Jersey butter up our way.

Senator GEORGE. Well, take the best butter on the market, then, and the best oleomargarine; put it that way.

Mr. HAMMOND. I should think there was a saving to the consumer of 8 to 10 cents a pound.

Senator GEORGE. The difference would be 8 to 10 cents a pound?

Mr. HAMMOND. I should say so.

The CHAIRMAN. Do you know what the wholesale price of butter is in Boston now?

Mr. HAMMOND. No, not the wholesale price.

The CHAIRMAN. I suppose you are in the habit of looking at the price current published every day in the newspapers?

Mr. HAMMOND. Yes, sir.

The CHAIRMAN. Then state what the wholesale price of butter is.

Mr. HAMMOND. There has been a little rise in butter lately. It was down to about 17 cents, but now I think the best butter coming to Boston and being put away in storehouses for next winter's use is about 21 cents, or was when I left Boston.

Senator GEORGE. You mean the wholesale price?

Mr. HAMMOND. Yes, sir.

Senator GEORGE. What is the wholesale price of the best oleomargarine?

Mr. HAMMOND. The wholesale price of best oleomargarine is 11 cents in Boston.

Senator GEORGE. 11 cents and 21 cents, then, are the figures.

Mr. HAMMOND. Yes; that is the present price. I do not give the price of butter as 21 cents positively; but that is about the price of it.

Senator BLAIR. Does the price of oleomargarine fluctuate with that of butter? Does it fluctuate according to the butter market or does it establish a price of its own and hold it?

Mr. HAMMOND. The price of oleomargarine is governed by the price of oleomargarine more than it is by the price of butter. Still, of course, when butter is high it causes a larger number of people to use it instead of paying high prices for butter, and that makes the demand for oleomargarine larger at certain seasons of the year; it increases the demand for oleomargarine.

Senator GEORGE. It is increased owing to the high price of butter?

Mr. HAMMOND. Yes, sir. When people cannot afford to pay 40 or 50 cents a pound for butter they buy a cheaper article.

Senator BLAIR. Do any of these families you know of use both articles—sometimes one and sometimes the other?

Mr. HAMMOND. Yes.

Senator BLAIR. Knowing what each article is, of course?

Mr. HAMMOND. Yes.

Senator BLAIR. Can you think of some instance—can you tell the prices that such persons, with knowledge, were paying at the same time for oleomargarine and for butter?

Mr. HAMMOND. A family in my neighborhood buys oleomargarine of me. They buy a ten-pound tub about once in two weeks, and they use it principally for cooking purpose. I also buy for them as a mere accommodation (they are near neighbors) a very nice grade of creamery butter for table use.

The CHAIRMAN. Why do they not use the oleomargarine for table use as well as for cooking?

Mr. HAMMOND. They like butter better on the table.

The CHAIRMAN. Could they not buy good lard for cooking cheaper than oleomargarine?

Mr. HAMMOND. They probably could, but they do not like it as well. They get more service and better satisfaction out of the oleomargarine.

Senator BLAIR. What criticism do these families make to you of the two articles as articles of table use? They make a criticism, I suppose, which would be indicated by what they do, which is that the butter is better for table use, more palatable, and more agreeable to use on bread, and that the other is as good, because cheaper, for cooking purposes, or something of that kind—or what do they say?

Mr. HAMMOND. A fine grade of fresh butter is better for the table than a standard grade of oleomargarine.

Senator BLAIR. Well, then, take a fine grade of oleomargarine.

Mr. HAMMOND. We make a standard grade of oleomargarine, but I am not familiar with the high grades of so-called butterine.

The CHAIRMAN. Do you know what the average wholesale price of good butter has been in Boston for the last three or four years?

Mr. HAMMOND. No, sir; I could not give you the figures.

The CHAIRMAN. Or in New York or elsewhere?

Mr. HAMMOND. No, sir.

The CHAIRMAN. You spoke about butter being 40 to 50 cents a pound. If you know anything at all about the sale of butter, you must know

that there has not been any such average price of butter in cities for years.

Mr. HAMMOND. I said in my statement that when butter was at that price.

The CHAIRMAN. But butter has not been at that average price for years.

Senator JONES. You say you use this oleomargarine in your own family?

Mr. HAMMOND. I do.

Senator JONES. Do you use butter also?

Mr. HAMMOND. Yes, sir.

Senator JONES. In what proportion do you use oleomargarine and butter?

Mr. HAMMOND. About one-half of each.

Senator JONES. Equal quantities, you mean?

Mr. HAMMOND. Yes, sir.

Senator JONES. Do you use oleomargarine on your table or for cooking purposes only?

Mr. HAMMOND. I have when butter was worth 40 or 50 cents a pound at retail, and that took place in February or March of this year. We could not buy a good piece of natural butter at our retail grocery at less than 45 cents a pound. At that time I preferred oleomargarine on my table.

Senator JONES. What was the retail price of oleomargarine at that time?

Mr. HAMMOND. About 15 cents.

Senator JONES. Your chief use of oleomargarine, then, is for cooking purposes?

Mr. HAMMOND. Amongst a certain class of trade, the operatives; among a certain class of people.

Senator JONES. I am speaking of your own case.

Mr. HAMMOND. Yes, sir.

Senator JONES. What were you going to say about operatives?

Mr. HAMMOND. They use it largely on their tables, and the moderate class of people use it largely on their tables. So do the medium class of people use it largely on their tables.

Senator GEORGE. You mean people whose income does not exceed \$1,500 or \$2,000 a year.

Mr. HAMMOND. Yes, sir.

The CHAIRMAN. You use the oleomargarine for cooking and also upon your table?

Mr. HAMMOND. Yes, generally, when butter is high, but not when it is cheap and good.

Senator BLAIR. The experts testify that no mortal man can tell the difference between the two. If that is so, why is it that you pay the difference in the price?

Mr. HAMMOND. Did not that refer to scientific experiments?

Senator BLAIR. Do you have reference to the statements of the experts, Dr. Morton and others?

Mr. HAMMOND. Was he not speaking in the sense of a scientific expert?

Senator BLAIR. I did not understand him so.

Senator JONES. I do not think anybody has made that statement here.

Senator BLAIR. I do—that except by scientific tests the consumer could not tell the difference.

Senator JONES. My remembrance of it is that he said it was very much alike, but that the flavor of oleomargarine was never as good as the flavor of butter, because of the small proportion of butyryne. They all said that, according to my recollection.

Mr. HAMMOND. I understood that testimony to be expert testimony given in a scientific way.

STATEMENT OF GARDINER B. CHAPIN.

Mr. GARDINER B. CHAPIN, of Boston, then addressed the committee.

Mr. CHAIRMAN AND GENTLEMEN: I did not come here to make any extended remarks, for I have given my testimony once before to this committee. But I merely want to call your attention to some testimony that was given here yesterday and also to-day. There seems to be a good deal of difference in the opinion of the gentlemen in regard to the value of these goods, and the value that they have upon the market.

Senator GEORGE. Do you mean the price?

Mr. CHAPIN. Yes; the price. I am chairman of the committee on market reports of the Boston Chamber of Commerce, and have been on that committee every year, with the exception, I think, of two or three years, since the old Produce Exchange, which was finally merged into the Chamber of Commerce, was first organized, and I claim to have some knowledge of the market value of the goods. It is my duty every day while I am at home to make up a list of prices to telegraph to the principal markets of the world—that is, in the United States and to Liverpool.

Senator GEORGE. You refer to the wholesale prices?

Mr. CHAPIN. Yes; to the wholesale prices. I am somewhat conversant with the retail prices, but not so much so as the wholesale, for I have a brother who is in the retail business, and I supply him with the most of his goods except oleomargarine and butterine. That he buys of our neighbors generally. Professor Chandler, I think it was, stated that the wholesale cost of oleomargarine was, I think, six or seven cents, or perhaps eight cents.

Senator GEORGE. The cost of manufacture?

Mr. CHAPIN. Yes, sir; and that it was put on to the market at the price of nine and a half to ten cents. I will admit that from the testimony I heard yesterday, and that which I have heard since I came to Washington, I am perfectly demoralized, and I am not really in a fit state to make a statement here to-day. And that is caused by hearing such a different statement of facts from what we have been educated to and what we have learned from our daily experience, so that I am not able to meet those statements as they ought to be met. We did not come here prepared to meet any such testimony. We came here to give you the practical view, not the scientific view. We have no one here that I know of to give you the scientific principles in regard to the manufacture of these goods.

The CHAIRMAN. That is not what we are inquiring after now; it is the commercial view of it that we want.

Mr. CHAPIN. I notice the price of butter has been given at 80 cents a pound; I did not hear any other price named during the giving of this testimony. Now, as regards the 80-cent butter, I will say that right opposite where I live is the old Peter C. Brooks estate, an estate which

has been in possession of one family for many, many years, and I understand that they have made dairy butter for some of their Boston friends and charged them \$1.10 a pound. But in our business we know nothing of such prices at all. It is like comparing the gold stud which I wear in my bosom with a diamond worth a thousand dollars.

I want to say a word with regard to the execution of the law. Professor Babcock says that the law is executed in Massachusetts as well as it can be.

Senator GEORGE. Do you mean the law prohibiting the sale of oleomargarine for butter?

Mr. CHAPIN. No, not prohibiting the sale of it, but the law regulating the sale of it. The law requires every dealer in oleomargarine to brand his butter with a half-inch letter on the cover and also on the side of the package. They testify that that butter comes to Boston without any mark on it whatever. Even if it is branded every butter dealer in Boston is supposed to have what we call a scratcher and a stencil or brand which he can get for twenty-five cents, and I know that the brands on that butter are scratched off and the brand reprinted after it reaches Boston—I mean oleomargarine. I testified before this committee on the 28th of April that a party told me—that is, he was selling a certain butter, and I gave you the brand of it at that time. He was selling from 500 to 700 packages a week under that brand and was selling it for butter. I bought ten packages of him, and requested him to brand it butterine before he sent it to my place of business, and he said there was no necessity for it; he said: "We are selling 500 to 700 packages a week just as it is." He told me they were agents for a Chicago firm. As it is not customary here to mention names, I will not mention the name unless some member wants it.

Senator GEORGE. Oh, let us have the name.

Mr. CHAPIN. I refer to Fairbanks & Co., of Chicago. A brand of butter was mentioned here yesterday; that is one brand; I will not say that Fairbanks & Co. make the brand that was mentioned by Professor Babcock yesterday, the Eureka brand, but that was one of the brands I was talking about. There is also another one which people attribute to Fairbanks & Co.

The CHAIRMAN. That is branded simply as "Eureka Dairy" or "Eureka Creamery," without the words butterine or oleomargarine. It does not contain the words oleomargarine or butterine, but simply "Eureka Dairy."

Mr. CHAPIN. That was all there was on it.

Senator JONES. Was that scratching of these packages you spoke of just now a violation of the law?

Mr. CHAPIN. Yes, sir.

Senator JONES. Did you report the people who were guilty of that violation of the law which you say you knew about?

Mr. CHAPIN. No, sir; I did not.

Senator JONES. You knew, then, of a violation of the law which you did not report?

Mr. CHAPIN. Yes, sir.

Senator BLAIR. Are such violations generally reported by those who know of them?

Mr. CHAPIN. No, sir; they are not, because a man does not want to get into trouble with his neighbor.

Senator BLAIR. Do you mean that the law is practically a dead letter?

Mr. CHAPIN. Yes, it is practically a dead letter. Once in a while there is a prosecution, just enough to keep in mind the fact that there is a law in the State of Massachusetts to that effect. Perhaps Mr. Babcock does his duty as well as he can; I have not a word to say in regard to that. But I do say that when Mr. Babcock makes the statement that he can detect oleomargarine or butterine by the looks of the package, or by the hoops on the package, it is preposterous. There is not a butter dealer in Boston who would dare to stand up here and make that assertion. There is not a butter dealer in Boston who could detect it every time or one time in five by tasting of the goods; and I claim to be an expert. I have been in business thirty-four years, and make no use of tobacco or intoxicating drinks in any manner, and I claim to have what is called a pure taste for goods. I have obtained my living by tasting right along for thirty-four years.

Senator GEORGE. Do you mean that the taste of butter and the taste of oleomargarine are so nearly alike that it could not be detected?

Mr. CHAPIN. No, sir; that is not the idea I wish to convey. But there is some poor butter and some good oleomargarine that it would be hard to distinguish apart. But we claim we can detect good butter from good oleomargarine. We cannot taste a difference between an ordinary grade of butter and an ordinary or pretty good grade of oleomargarine. That is where we have trouble.

Senator BLAIR. Then if you experts by actually tasting cannot tell the difference, of course it is understood that the mass of the people are unable to detect one from the other?

Mr. CHAPIN. Yes, that is the case. I live in a town 5 miles from Boston, called West Medford. In our town we have about 2,200 inhabitants, I believe. Since I returned home from giving testimony before to this committee, I have made it a point to investigate the matter. I did not think of getting up a petition, as the gentleman who preceded me did, or anything of that kind. But I have asked the dealers in regard to it, and I think there are four in our place who sell butter, and they all say the same thing and give the same answer, and that is that there are but very few, that the percentage is very small, of people who ask for oleomargarine. Among the inquiries that I made was one of a man who receives a salary of \$1,800 a year, and he said it was the most iniquitous legislation he had ever read or heard of in his life. He said, "It means that I have to pay 10 cents a pound more for my butter." I said to him, "That does not necessarily follow. I think you are making a great hue and cry about the advance in the price of butter, provided this bill passes Congress, taxing oleomargarine 5 cents a pound. My dear sir, if the price of butter is advanced 2 cents a pound, it will stop the exportation of every single pound of butter for the time being, and throw the surplus onto the market, and in that way the price will regulate itself. Therefore you need have no fear about any fabulous prices of butter being reached on account of the passage of this bill taxing oleomargarine 5 cents a pound."

The CHAIRMAN. What is the wholesale price of butter in Boston now?

Mr. CHAPIN. When I left Boston, the Boston Chamber of Commerce was quoting it at 18 to 18½ cents. In my own reports, which we telegraph to other markets, it was 18 to 19 cents for the best creameries in Boston, that is, the best butter that comes to Boston to my knowledge.

Senator GEORGE. Is that the butter which those high-toned people who live on Beacon street consume?

Mr. CHAPIN. Yes, those living on Beacon street and by the proprietors of the Parker House, Young's Hotel, and that class of customers. They eat it; it is the highest priced butter.

Senator JONES. Do you know whether the Parker House had a contract for butter, a year ago, to be delivered at 75 cents a pound the year round?

Mr. CHAPIN. I never heard of it; it may be so.

Senator JONES. What class of people live in the town of Medford—merchants engaged in business and in good circumstances, or the poorer class of people—operatives?

Mr. CHAPIN. The majority of them, I think, are clerks and school teachers, ex-school teachers, &c. We have quite a number of school teachers who teach in Boston and live there, as well as quite a number of Boston merchants and some poor people. Since I returned from giving testimony before this committee, people have made it a sort of headquarters at my place of business to discuss this bill, and Mr. Hibbard, who came on here with me—

The CHAIRMAN. We have not time for that discussion here. We want to know in relation to the prices and to obtain your own knowledge as to how oleomargarine is sold. There are many gentlemen here from all over the country, and we cannot undertake to listen to an argument in regard to what takes place in small towns.

Senator BLAIR. I would like to hear the discussion he was going to repeat.

The CHAIRMAN. Very well, if he will confine himself to a statement of the facts.

Mr. CHAPIN. There were half a dozen merchants in my place of business talking this matter over, and some of them were in favor of it, those who deal in the Blackstone market; and one of them said I ought to be hung for the part I had taken in this discussion; and there was a laboring man, an Irishman, who stood near by, whom I have been acquainted with several years, and I turned to him and said, "Henry, have you ever known one of your people to go into a grocery store and call for a pound of oleomargarine?" He said, "Mr. Chapin, never in my life." He said, "Those are the men who eat oleomargarine."

Senator SAWYER. I do not think it is necessary to spend any more time on that portion of the subject.

The CHAIRMAN. Just give the committee your opinion as to whether the Massachusetts law compelling oleomargarine to be sold for what it is is generally carried out and enforced, and to what extent.

Mr. CHAPIN. Mr. Babcock referred to certain prosecutions under the law.

The CHAIRMAN. You need not repeat anything Mr. Babcock said. I ask simply for your opinion, as chairman of the committee of the Chamber of Commerce of the city of Boston in regard to the enforcement of the law.

Mr. CHAPIN. I cannot make my statement in any other way except by illustration.

The CHAIRMAN. I ask you whether you believe the law compelling oleomargarine to be sold in the State of Massachusetts for what it is is generally enforced?

Mr. CHAPIN. Mr. Senator, I want to ask you the privilege of proving my assertion. In the first place, I say it is not enforced. Now, I want to prove it by Mr. Babcock.

The CHAIRMAN. You say it is not enforced. Why do you say it is not enforced?

Mr. CHAPIN. Mr. Babcock said there were four persons (under the administration of Mr. Griffin, I think he said) who were complained of for selling oleomargarine contrary to the law of Massachusetts, and at a certain stage of the prosecution some of the dealers found out that those men were their customers, and they then asked for the warrants to be put on file. Now the party who asked that privilege of the deputy sheriff I think is in this room. I think he is connected with the manufacture of oleomargarine. To illustrate: Knowing the fact that one of my neighbors is selling oleomargarine—that is, I mistrust that he is—I go to the milk inspector and inform him that I think my neighbor is selling oleomargarine contrary to the laws of the State. He sends his deputy and makes an inspection to that effect, and if he finds they are selling it in that way, why, of course, he enforces the law. Now I will state another fact. A gentleman came into my place one morning and said, “One of your customers has been prosecuted for selling oleomargarine contrary to the law of the State. Now,” he says, “if you will see Mr. So-and-so (I may as well mention his name; it is Noyes & Son), if you will tell Noyes to put \$50 in a sealed envelope somebody will be in here and pick it up and that will be an end of his suit.” I said that that was a rascally piece of business and I would have nothing to do with it. But I understood afterwards from good authority that the money was put down somewhere and picked up, and that was the end of his prosecution. That was before Mr. Babcock’s administration. I think it was done under the board of health.

Senator JONES. How long ago did that happen?

Mr. CHAPIN. About three years ago.

Senator JONES. And in regard to these other cases you spoke of?

Mr. CHAPIN. They were dropped, and the indictment quashed right there.

Senator JONES. I would like to ask one question in this connection. When you take so much interest in this matter at your place of business, which you say is a kind of headquarters for people who are interested in this matter, and you yourself take such a lively and deep interest in the suppression of this traffic, why, then, do you not report some of those people who violate the law to the officers of the law, whose business it is to prosecute them?

Mr. CHAPIN. I did not say that I had informed against any of them in particular.

Senator JONES. I understand; you said you had not. But you said you knew of parties who violated the law. Now I want to know why a good citizen of the State of Massachusetts, as you are, does not prosecute the violators of the law when they they are doing things against the public interest and the public health?

Mr. CHAPIN. I do not wish to be understood as saying that I never did inform against any of them. But I do not wish to get into trouble with my neighbors, and that is the reason other people have, I suppose. One of my neighbors has said I ought to be hung, and I do not want them all to think so.

The CHAIRMAN. You have a State inspector whose business it is to look after the matter, have you not?

Mr. CHAPIN. Yes, sir; we have a State inspector.

Senator GEORGE. If a State law cannot be enforced in Massachusetts, how can a Federal law be enforced?

Mr. CHAPIN. Because the goods will then be under charge of United States officers.

Senator JONES. But it might be that people who did not want to get

on bad terms with their neighbors would not inform the United States officers, either?

Mr. CHAPIN. If it passes out under the hand of the United States with a tax of 5 cents a pound upon it, we will risk it.

The CHAIRMAN. If it is put under the United States law and branded and stamped in the factory where it is made, there is no danger of its being sold for what it is not?

Mr. CHAPIN. We will try and compete with the goods with a five cents' tax.

Senator GEORGE. Then your idea is that the remedy for this evil is to have a United States rather than a State law?

Mr. CHAPIN. Yes.

The CHAIRMAN. Do you know anything, of your own knowledge, in regard to the collection of fat in your city for the manufacture of oleo oil?

Mr. CHAPIN. Yes, sir.

The CHAIRMAN. State in regard to that as briefly as you can.

Mr. CHAPIN. Mr. Armour's partner testified yesterday that they used but very little kidney fat, nothing but the caul, or something to that effect.

The CHAIRMAN. But Mr. Webster has made his statement plain this morning.

Mr. CHAPIN. The reason of that is because they ship their goods to Boston by refrigerator cars. It takes some time for these goods to arrive at their destination, and after being received in Boston the goods are hung up in refrigerators and kept there until the meat is called ripe, and then it is thrown down on the block and separated into three different parts. A man comes in and wants a pound or two of steak, and it is cut down from the sirloin to the kidney, and that part is left and remains until there are but 3 or 4 pounds left, and then that is sliced off and thrown into a barrel near by. That is allowed to remain there twenty-four hours, the kidney fat, which is probably ten days after the creature was killed and sometimes longer than that. Then the team calls around once a day, in hot weather and cold, and gathers that fat from what we call the meat-men in the principal markets. The wagon stands at the door of the market and the man goes in and gets his basket of tallow and throws it into the wagon, and at this season of the year there are thousands and hundreds of thousands of flies covering those goods during the process of loading that team. It is then carried from there to the manufactory, and we do know it to be a fact that these fats are gathered in that manner. One manufacturer admitted that sometimes they only called once a week at his place and collected the fats. That would make an average of about two weeks after the creature was butchered before the fat was collected.

Senator JONES. You say that is the fact, and that the fat is used in the manufacture of this oil?

Mr. CHAPIN. Yes.

Senator SAWYER. How do you know that; are you in the business?

Mr. CHAPIN. No, sir; I am not in the business, but it comes under my supervision. We see the teams back up to the establishments, &c.

Senator SAWYER. Do you regard that information sufficient to enable you to say that it is worked into this article, or are you guessing at this thing? I do not want any guessing about it.

Mr. CHAPIN. We never have followed it up from the time after the team has picked it up from the establishment.

Senator JONES. Can you give me the name of a person who uses the at in that way?

Mr. CHAPIN. The parties I refer to are John Reardon & Sons, and the Commercial Butter Company.

Senator JONES. They get this stale fat and work it into oleomargarine, you say?

Mr. CHAPIN. I have not used the word "stale."

Senator JONES. Well, then, this fat that has been kept at least ten days after the animal was killed, and make it into oleomargarine?

Mr. CHAPIN. Yes, sir.

Senator GEORGE. If it is not stale, what is the matter with it; is anything the matter with it?

Mr. CHAPIN. I have not said anything about that. I have not said it was stale.

Senator GEORGE. Was it bad in any way?

Mr. CHAPIN. I have not examined it thoroughly to see whether it was or not.

Senator GEORGE. You do not know whether it was perfectly good fat or not?

Mr. CHAPIN. I do not doubt the fat is sweet.

Senator GEORGE. Sweet and good?

Mr. CHAPIN. I presume so—that is, I could not say whether it was or not.

Senator GEORGE. It had not been very long from the steak from which it was taken?

Mr. CHAPIN. I could not answer that.

Senator GEORGE. Did it not come off the steak?

Mr. CHAPIN. Yes, but it remained exposed in that way two hours afterwards.

Senator GEORGE. But with that exception, it had been there no longer than the steak?

Mr. CHAPIN. That is all.

Senator GEORGE. And people ate the steak and it was good?

Mr. CHAPIN. Yes, I presume so.

Senator GEORGE. You cannot say whether this fat was good or bad?

Mr. CHAPIN. I could not.

Senator JONES. Does this Mr. Reardon make tallow in his establishment at all?

Mr. CHAPIN. I think he does.

Senator JONES. Can you state whether the fat of this character which is collected goes into the manufacture of oleomargarine or tallow?

Mr. CHAPIN. I could not say; I never followed the team any farther.

Senator JONES. Then you do not know anything about it?

Mr. CHAPIN. No, sir.

The CHAIRMAN. You simply know that the teams of these men collected that fat and took it to his place?

Mr. CHAPIN. Yes, sir.

Senator SAWYER. I do not see why this committee should ask anything further about it; he does not know what is done with it.

The CHAIRMAN. That is what the committee wants to know about. The statement has been made here repeatedly by experts and manufacturers that no fat can be used in the manufacture of oleomargarine which has been out of the dead animal more than twenty-four hours, and that it is under no circumstances used. The testimony of Mr. Chapin is simply to this effect: That he does know that the wagons of certain oleomargarine manufacturers in Boston collect fat which has been killed ten or twelve days, and carry it to their factories; what they do with it he does not know.

Senator GEORGE. And that these same oleomargarine manufacturers are tallow manufacturers also.

The CHAIRMAN. There are in all large places tallow manufactories.

Senator GEORGE. And that the same men whose wagons get that are tallow manufacturers. Is that not so?

Mr. CHAPIN. As to the Commercial Manufacturing Company, I could not say whether they manufacture tallow or not; I do not know. But the other firm makes soap. I want to say that Reardon & Sons are honest men.

Senator GEORGE. The long and short of it is that you do not know what becomes of that fat.

Mr. CHAPIN. No, sir; not after the teams back up to the establishment.

Senator JONES. You testify to the honesty of Reardon & Sons. Do you believe they would put a disgusting and filthy article of fat into anything used for food?

Mr. CHAPIN. From my knowledge of Reardon & Sons I should say they would not.

Senator BLAIR. You say there is some bad oleomargarine. How is that made?

Mr. CHAPIN. I could not tell you.

Senator BLAIR. The testimony of the experts was to the effect that it was necessarily made of most excellent materials all the way through. I would like to know how, under those circumstances, there could be bad oleomargarine?

Senator JONES. And I would like to have you state whether it is made bad or became bad after it was made?

Mr. CHAPIN. I know of one instance where we had some from the Commercial Butter Company, and it tasted so strong of saleratus that we had to send it back.

Senator JONES. You do not know where that saleratus got in?

Mr. CHAPIN. No, sir; but it was supposed it was put in to clarify the tallow.

The CHAIRMAN. We have had all the facts about that. That will do.

Colonel Littler is here from Chicago, representing a large dairy interest in the West, and the committee will hear him.

Mr. CHAPIN. I want to add that I know nothing against the Commercial Manufacturing Company which would lead me to think that they would not also make honest goods.

STATEMENT OF R. M. LITTLER.

Col. R. M. LITTLER, secretary of the Chicago Produce Exchange, then addressed the committee.

The CHAIRMAN. Please state to the committee your name and position.

Mr. LITTLER. My name is R. M. Littler, and I am from Virginia originally; a farmer's son, a boy who drove the cows in the pine hills of Virginia nearly sixty years ago. When my country called for soldiers to go to Mexico, I shouldered my musket, though but seventeen years of age; and when the Government gave me my land warrant, I located it in the West and enjoyed the pleasures of the ague and living in a sod house, and have remained in that glorious country ever since. But although I live in the West, I love old Virginia yet. Well, the war is over. I know no South, no North, no West, no East; nothing

but a common country. I am at this time, after having lived upon a farm in Iowa for nearly thirty years, the secretary of the Produce Exchange of Chicago, having been honored by the city of Chicago in being chosen to that position. I am now upon my third year of service, and while other gentlemen may come here as professionals, who have had all the advantages that education and wealth could give, I beg that you will indulge me by allowing me to give you a few plain facts in a plain way; and as I am now pretty well on to the jumping-off place in life, I shall endeavor to tell the truth.

I almost dread, gentlemen, coming before this committee, because there was a gentleman here yesterday, a scientific man, who came and said that he had read all the literature and all the science; he knew it all. You have heard from two or three men who are paid to come here and traduce and villify agriculture. They have come here under the Dome of this Capitol and have dared to make assertions of such a kind that it would not have astonished me if Columbia, the goddess upon the Dome, had come down and shed tears of blood to think that people could be hired to make such statements. I have enjoyed the privilege of hearing the bark of the prairie-dog and have lived in a sod house, and I want to say to you, gentlemen, that I think in this examination many questions have been put that have no bearing upon the case. I am addressing you also as a representative of the National Dairy Association of this country, which represents a product larger than any single product which is grown.

I am an Iowa farmer and a brevet Chicago man, and I come here to say to you that it does not require elaborate arguments or very keen moral perceptions to see that the manufacture and sale of a counterfeit article as genuine is highly demoralizing to all in any way engaged in the business. The dealer who sells it for what it is not, and places something that is unhealthful in the place of something known to be healthful and desirable, may try to quiet his conscience with the thought that somebody else would sell it if he did not, and he might as well have the profit as another one. But that is very poor logic, the farmer thinks. Certainly his customers would not be imposed upon if he did not impose upon them. But the temptation is too strong, the price of the fraudulent article so cheap, that he yields as a matter of necessity, and he soon becomes as hardened and conscienceless in the matter as the worst of his brother dealers. He has thrown down the bars, and the devils of dishonesty will pass over in troops until he becomes so conscienceless that he cannot be honest if he would. Soon he ceases to care about honesty, and the old superstition of selling one's soul to the devil becomes practically verified in his case.

Said it is, Mr. Chairman and gentlemen of the committee, that the service of mammon in this world pays better in worldly riches than the honest pursuits of duty in the interests of humanity and the higher moral virtues.

And right here let me say that in the city of Chicago we have sixteen firms which manufacture this stuff, where it comes in direct competition with the men I represent. Therefore I claim the right, after having come 800 miles, not to go home until this matter is presented to your consideration fairly and honestly. I have the highest appreciation of the dignity of the Senate of the United States; no one more so. You gentlemen occupy that proud position, and we look to you and feel that in your hands we are safe, and we only ask you to solve one conundrum, and that is this: Where in the name of Heaven does any man get the right to force upon the community a counterfeit article while they think

they are getting a genuine one? Is there anything in any State law, national law, or in Holy Writ that would allow a man to make a counterfeit product to compete with an honest one?

Men can be found, as you have seen here, gentlemen, during the sessions of this committee, who will do anything for money—and I am only sorry that I did not get Professor Chandler to write my speech for me instead of writing it myself. But he got out of town before I could get to him. He said he had all the literature and all the science, and that he knew it all. Professor Babcock, of Boston, and all those other distinguished gentlemen have addressed you, but I am nothing but a clod-hopper, a crank, and a granger. But, thank God, I come from an honest father, and the principles he taught me in the old pine hills of Virginia stick to me yet.

I claim, gentlemen, the right to speak of this. I have grown gray-headed on the prairies of the West; going there from Virginia, with nothing but my knapsack, my discharge from the army, and my land warrant, and tilling the soil like all other men, like our great President—and I honor him for it—I found a woman who suited me and I married her, and with true Virginia grit I tried to do my duty, and I did it, as eight boys and a girl can testify. [Laughter.] Now, gentlemen, a man who has done that for his country has a right to be heard. Every dollar I own, gentlemen, I have dug out of the soil of Iowa, as a farmer. I have just gotten my farm in a position where my cows and my chickens begin to pay me. For a long while in old Iowa I had a nip and tuck race with the sheriff and constable. Sometimes the sheriff was ahead and sometimes I was ahead, but as a rule my crops were generally harvested before they were out of the ground. But with old sukey, with her crumpled horns and milk, and my delicate wife of 220 pounds, I made up my mind that we could furnish people with good butter at 20 cents a pound, and then the light began to dawn. We had no sooner made a calculation for a seal-skin sacque for the wife and a piano for the daughter than Armour & Company commenced making butter that there was not any butter in, and they got to squeezing the life out of lard and cooking up the tallow and putting them into a churn with a little milk-man's-milk, and set it revolving, and could turn out a product that they could put in the New Orleans market at 9½ cents a pound, when I used to get 14 cents a pound. They put their goods onto the market under a false name; they are making a spurious article, and they are to-day foisting it on the consuming public as genuine. They do not sell it to the consumer for what it is, and they know it.

I live in Chicago, where we handle over 90,000,000 pounds of butter annually, and 40,000,000 pounds of that is butterine. They do not sell it to the consumer as butterine. There may be an occasional man who prefers it, as there are men who will drink 40-cent whisky, who are not ashamed to own it. But still they will do it. They can get certificates enough in regard to its quality, if they will pay enough for them. But they do not sell it under its own name. It is not enough that they sell it to the boarding-house keeper for what it is. The making of counterfeit money is not more of a fraud than this, for the counterfeiter sells it as counterfeit, and knows that the people he sells it to will shove it off on the people as genuine. The bogus-butter maker does precisely the same thing in selling his goods to rascally landlords and shameless boarding-house keepers. He knows they will pass them off as genuine butter. Then, how is the maker of this "queer" butter any better morally than the maker and vendor of "queer" money? Morally, there is no difference between them; and we farmers hope you will see to it

that there shall be a difference, legally, between an honest butter-maker and a man who makes a counterfeit article or sells counterfeit butter. Both the counterfeiters deal in a bogus article, and both shove it on an unsuspecting public, for the purpose of defrauding them and putting money in their own pockets. It matters not that there is some value to the bogus butter. It is not what it is taken for, and it is not what the buyer pays for, except, of course, the dishonest public caterer, who buys it of the maker or dealer with intent to defraud his patrons by clandestinely giving them to eat cheap, nasty grease in the place of butter. The dealer who sells to such a customer is on the same level as the possessor of counterfeit money who sells to another person a spurious article, knowing it is to be passed as genuine.

Touch it as you may, gentlemen, counterfeiters, whether they make butter or any other article, are not a whit better than the bogus-butter men or counterfeit-butter men, or any name you choose to call them. The offense of cheating their fellows in the quality and character of their food is the more despicable, reprehensible, and dangerous. It is an assault on the public health; and even here a professor of science undertook to tell me and tell you, to tell this honorable committee, that there was no work that would certify to the fact that tape worms exist in the fat of animals.

Now I have a little taste for literature myself, and whenever I have a chance to read I improve it, as I have seen what great men have done by reading. I think when the long winters in Iowa come I shall have a chance to read, and I may improve myself and get to Congress yet, and so I want to get in shape. Now I happened to import a book from England. It is a German book. I cannot speak a word of German, but my wife, who is a Pennsylvania Dutch woman, can, and we put in our odd times and she translates this great work to me. It is very interesting. Many great men have been educated by their wives, you know. She tells me that Dr. Adolph Schmidt Mulheim, of Hamburg, says that these germs and parasites do exist in the fat, notwithstanding the fact that these distinguished men from New York, these men who claim to have been for so many years professors, one of them the president of the board of health, deny it. I am sorry that he is not here now. Professor Chandler, of Columbia College, with a twenty-five years' experience, tells you that parasites are only found in the lean and muscular fiber, when this man who is considered authority by everybody, and is recognized as such, declares that they do exist in the fat, and that they also exist in the kidney fat. I have here another authority, called Fleming's Manual of Science, and he says there are three kinds of tape worms which exist.

But there is a gentleman here who has kindly agreed to take up this subject, a scientific man, who knows more about it than I do, and consequently I will not detain you with going into the tape-worm question. I only make this observation, that these gentlemen who preceded me day before yesterday misrepresent the truth; whether they do it knowingly or ignorantly I cannot say. But books in the library in this building, and books in the library in the Agricultural Department will contradict every assertion they made.

Now, gentlemen, they say if the people are willing to accept it, why haven't they a right to sell it? All I have to say is, if they think it is as good as they say it is, where is the need of any deception? Why do they want to put it in a butter tub and in pound prints, and why do they want to bill it as butter, as I have bill-heads to show they do in the city of Chicago—the men who come here and boldly say to you that

they bill it for what it is. They do not. I have bill-heads on file showing that it was billed as butter.

Gentlemen, I am talking for my wife and children. This is a fight between 7,500,000 agriculturists and a score and a half of capitalists and manufacturers who would see the world sink if they could get a golden canoe to float to heaven in. I feel this. It is my bread and butter; it is my life. It is for my boys, who, thank God, so far have lived without a stain upon their characters, and expect to hold the plow and wield the scythe in our home in the Northwest. For these reasons I appeal to this honorable committee to aid in the passage of this bill.

But these gentlemen say it is a State question; do not bring it to the United States authorities. We have tried it as a State question. State laws are very much like giving a man an invitation to go and hunt. You give him a gun and a cartridge-box, and you may give him a luncheon, but unless you give him powder and shot he don't bring home much game. We want a national law to take hold of this thing. Glorious temperance Iowa has passed a law and assessed herself \$20,000, and appointed a commissioner to see to it that the dairy or creamery men in our State shall have protection from this imitation butter. The State of Illinois has passed a law also; they have given the gun and cartridge box, but have given no ammunition, and the law is a dead letter. The merchants of Water street raised several thousand dollars for the purpose, and some of the gentlemen here in this room subscribed to that fund. They had a detective that ran up and down the streets; they found these men; they arrested them, and they were bound over, but then you know if there is anything uncertain in this world it is the decision of a jury. Why, they tired us out. They could legislate and beat us every time. I will tell you that when men are killing about 90 per cent. of all the cattle killed in the country, if there is any kind of a margin, they can afford to be liberal to their friends.

If a substitute for butter is good, it will go under its own name. The fact that imitation butter is not so put before the public is proof conclusive that they have no faith in it as an honest substitute. Hence they resort to deception and fraud. These bogus butter men are not only dealing in a fraudulent article but the arguments they use are frauds. They claim to be making a cheap, pure article for the poor. They say they are the poor man's friend—in disguise. They want the poor man to pay a butter price for their lard and neutral. Why, for heaven sake, gentlemen, we won't deny the right of any man under the Constitution to eat tar if he can persuade his stomach it is made of molasses; he has that right. But, in heaven's name, give a man the right if he wants to eat butter and lard, to mix it to suit himself. I do not want you to mix it for me; let me mix it to suit myself.

If a farmer sells a horse as being sound, kind, and true, and he proves to be a kicker, the farmer is mulcted in damages to the injured party. If a druggist's clerk, with large experience, puts up a prescription without a license he is fined. If the honest miller puts shorts with his buckwheat flour and sells it for a pure article he is denounced as a fraud. If a milkman puts Potomac water into his milk and he is detected by the authorities he is imprisoned, fined, and punished. But a few wealthy manufacturers of bogus butter can put from 50 to 80 per cent. of lard in my creamery butter, label it with the same brand that is on my own tub, and I must not say a word. If I do, I am personal. I know that in the city of Chicago they copy the brands of good substantial creameries in Illinois, Iowa, Minnesota, and Wisconsin, and only the day before I left home the Jefferson Creamery, of Iowa, sent to Chi-

cago some butter in tubs which was bought and shipped after it was mixed, without scratching the brand off the tubs, to Minneapolis and sold there. It was received, and the man who received it was arrested, and he came back on the creamery man, and it was proved that he sold it as good butter.

The CHAIRMAN. You mean to say that the tub in which the creamery butter came to Chicago was filled with oleomargarine and sent out again?

Mr. LITTLER. Yes, and I have the letter to show it, so that any gentleman on the opposite side can inform himself about it. The case comes up for trial in Minneapolis under the State law. The arrest was made by the assistant superintendent of the dairy commission in Minnesota.

The CHAIRMAN. Have you any other information of a similar nature?

Mr. LITTLER. No, sir; I have only the knowledge that I obtain as I pass up and down Water street and see small tubs of 9 pounds marked "Rosebud Creamery, Best Dairy," &c. They claim that the word "creamery" and the word "dairy" belong as much to them as to the butter man; that is what they claim. I think I know what I am talking about when I say that these men steal the livery of Heaven to serve the devil in, and put on the market daily and weekly more of this fraudulent compound as dairy and creamery butter than is made of genuine butter in all the dairy States of the Northwest.

Now what is the result upon myself? My property has shrunk in value because of the manufacture of this article. There are fifteen concerns in the city of Chicago which can turn out daily 5,000 tubs of imitation butter and can sell it from 3 to 6 cents a pound less than the farmer can possibly produce it to-day.

Senator BLAIR. How much in a tub?

Mr. LITTLER. From 50 to 60 pounds.

The CHAIRMAN. What knowledge have you as to the retailing of this material?

Mr. LITTLER. It is sold in three thousand groceries within 5 miles of my office.

Senator BLAIR. Are you speaking of the city of Chicago?

Mr. LITTLER. Yes, sir.

The CHAIRMAN. What do they sell it for?

Mr. LITTLER. The groceryman knows well enough what it is when he buys it, but it is the innocent child who runs in and says it wants a pound of butter who is deceived, and instead of getting 16 ounces of something giving strength and vigor, they give a material that contains 2 ounces of butter, 6 ounces of lard, and 8 ounces of neutral, with salt and water, of course, mixed in; and these men will tell you, if they tell you the truth, that they can make this cheaper than the farmer, because they manage to get water enough into their product to pay for manipulating and working it.

The CHAIRMAN. Have you any knowledge as to what proportion of it is sold in the West as oleomargarine?

Mr. LITTLER. I believe that the honest dealers of the city of Chicago will tell you that 95 per cent. of all sold to the consumers is sold as genuine butter. Why do they sell it? Simply because they can buy it at from 10 to 14 cents a pound and can cut it at 25 cents. We have a grocery on the corner in our town and they pay their entire running expenses on the profit of butterine that is sold. I guess my friend Mr. Stern will tell you that that is the truth. They will deliver one or two tubs, and if a man does not like it they will exchange it the next day. It is given to them fresh and it does look nice. Tallow is

a pretty article and will keep, if iced, sixty to ninety days. That is refined tallow, and of course it will keep.

I would just like to say here, gentlemen, in respect to this score and a half of butterine makers who are fighting us and fighting all the agricultural interests of the United States, a few words. But first let me say to my Southern friends, the Senators, that I hope they will understand that the Northwest is not sectional. I believe that Tennessee is going to be the finest dairy region in the country. I have been invited down there to talk to dairymen, and from what I have seen and heard of Central and Eastern Tennessee and parts of Arkansas, and even down in Texas, it is all capable of producing dairy products. I hope these Senators will see that the dairy interest of the South is something that should not be overlooked.

I claim that these gentlemen have caused 13,000,000 cows to depreciate in value about \$10 per head. The gentlemen make great boasts of adding \$3 to the value of each steer when he is slaughtered and sold. But there are 13,000,000 cows, and putting the shrinkage in value at \$10 each we have a loss of \$130,000,000. The yearly product of butter and cheese has depreciated in value, according to my books, about \$75,000,000.

Senator GEORGE. Is it a decrease in the quantity, or in the price of the article?

Mr. LITTLER. In both. A great many farmers do not raise their calves now. A calf is sold when it is only worth \$2 instead of keeping it for a year when it would be worth \$10. Then there is this young stock which is about as much more, which makes altogether \$250,000,000 of shrinkage in value. And here are these families of men, women, and children who are willing to deprive themselves of the culture of society, who go out on the prairies and live in sod houses, who get up at daylight and go to bed at dark with the chickens, and all that kind of thing, and yet these gentlemen come here and say to you, "Gentlemen, do not give us protection." I am talking not only for the farmers of the Northwest, but for the farmers of the whole country. Five hundred thousand agricultural laborers are idle, too, in consequence of this thing. On the Sioux City Railroad between the town of Manchester and Sioux City there are nineteen creameries dismantled because they cannot compete with the 9½ and 10 cent butter of these gentlemen who take neutral land and churn it.

Senator GEORGE. Right there; do you propose to suppress it?

Mr. LITTLER. No, sir; but we would have you gentlemen regulate it so that a man can know what he is buying.

Senator GEORGE. Do you think that would decrease the consumption of oleomargarine?

Mr. LITTLER. It would decrease it, certainly. I do not think one person in ten would eat it if they could get anything else. That is my honest opinion.

Senator GEORGE. You think it would partially suppress the manufacture to expose the character of the article, because people would not buy the product; is that your idea?

Mr. LITTLER. Yes, that would suppress it some, but we would like to have you tax it with a small tax and compel the manufacturers to get a license, or do something to regulate it. It is making us a nation of dyspeptics, and as some men say, a nation of tapeworm bearers; that is what the physicians tell us. I speak, gentlemen, I say, in behalf of agriculture and agriculturists, that great source of national prosperity. While these persons are growing rich through fraud and

deception, we are told that the farmers and dairymen have no case; that we must not attempt to obtain an effective national legislation that will at least regulate or check, if it does not relieve us of, this great evil. I see the danger that threatens my section of country, and I say, as I stand before heaven to-day and under the great Dome of this beautiful Capitol of ours, that I do not think any question ever was presented to the American Congress on which the weal and woe of this nation so greatly depends. I do not except from this remark any question of tariff, public policy, or anything else.

Gentlemen, when the plow rusts in the furrow and the farmer's mortgage is foreclosed, God help America, God help the United States. Murray Hill may shine for awhile; New York, with her summer resorts and her broadcloth, may get along for awhile, but we, gentlemen, who own but one suit of clothes, we men who live and toil upon the prairies, we men who suffer and endure everything and have endured everything that we might have a country and have a commerce, if we are to be crushed by this hideous fraud, then I say, God help America.

I thank you, gentlemen, for the attention you have given me. If any man wants to know what the average price of butter has been for the year, here is the report [exhibiting]. I did intend to say something about the unfairness of these men who come and feed their cattle on the public domain out in the Northwest and never pay a cent for it. But they have not got enough. They raise their cattle out on the public domain and never pay a cent for it, and then come in and compete with Eastern farmers and still are not satisfied. They still want you to protect them in making neutral and tallow so that they can compete with the farmers of the older States.

I sent to some of you the other day a circular which explains this thing exactly, and I will submit a copy of it as a part of my statement.

(Mr. Littler then read portions of the circular referred to to the committee, and it will be found in full at the conclusion of his oral statement.)

Senator GEORGE. Are you not aware that there has been a general and continuous fall in prices for the last five years?

Mr. LITTLER. Yes, sir; I understand that.

Senator GEORGE. Do you think the shrinking in value of those products to which you have alluded has been greater than in other things?

Mr. LITTLER. Yes, sir; and I think Bismarck is partly to blame for it. I think if he had not legislated against American meats we might have had a better show and better prices. But here is another thing I think the farmers ought to understand. These scientific men told you about what happened five years ago when they produced their figures. But the farmers and their wives and daughters want to know what is going on now, and what the Senate of the United States is going to do for them now. In 1879 I was honored with a commission to go to Europe to attend the International Dairy Convention, and when I got there I found exactly how our dairy interests were running. We were told to exhibit samples of our butter and cheese, and we did so, and Mr. Thurber and other gentlemen in New York built up a large export trade, and we should have it to-day if it had not been for the adulteration used in the manufacture of these goods. Our exports have greatly fallen off for that reason.

Senator BLAIR. Have you anything to show as to the effect of this manufacture upon the amount of production of butter?

Mr. LITTLER. Of course if these men can make a product that can be sold to the consumer at from 9 to 14 cents a pound—

Senator BLAIR. I understand the theory; but have you any figures

to show whether the amount of production has been increasing or diminishing?

Mr. LITTLER. Yes; I have. There has been a great decrease. I will not take time now to hunt up the figures, but I will submit them hereafter to the committee.

Senator BLAIR. I wish you would do so.

Senator JONES. In your statement of the export value of the products, state separately what each product is.

Mr. LITTLER. I will do so. I will tell the truth, the whole truth, and nothing but the truth about it. I have no ax to grind in this matter, and here I want to say, in justice to myself, that no one pays me a nickel to come here, nor has anybody contributed anything towards my expenses. I have taken the necessary money to pay my expenses out of my own hard earnings, and I come here by permission of the body of commercial men whom I represent in Chicago. I am fighting for my home and my interests, and all I ask in regard to these men who make this counterfeit article which comes into the market against my goods is, that this great Government of ours shall take the farmers under its protecting wing, as the States cannot do it, and compel them to put their product upon the market in its true guise.

Senator BLAIR. Let me ask you a question right there. You say you do not want a counterfeit article made. What is done in this article in its manufacture which makes it a counterfeit?

Mr. LITTLER. I am not a chemist, but in the first place you have to get at the chemistry of butter. As a gentleman told you here yesterday, and as any other man who has given the matter any consideration will tell you, in butter-fat we have oils that are not found in anything else but mother's milk. The milk and the butter-fat oils are the first and last food of man. The little mewling, puling infant in its mother's lap is restored to life and vigor by the use of the butter-fat in that milk. It is the same with animals. These gentlemen will not deny that there are fine, essential oils in the butter-fat that are not in this imitation product, and they cannot get them there.

The CHAIRMAN. I do not think you understood the Senator's question, which was undoubtedly directed towards the matter of coloring. This product is colored to imitate butter, is it not?

Mr. LITTLER. Yes, it is colored, but I believe coloring is not at all objectionable with any class of men.

Senator GEORGE. Is butter colored too?

Mr. LITTLER. Yes; butter is colored with annatto and some other things.

Senator GEORGE. Is it colored by the dairymen?

Mr. LITTLER. Yes, sir. High-class butter is colored with a pure color which hurts no one.

Senator BLAIR. You say all you want is to be able to distinguish the two articles. If the consumer knows what he is consuming, you are willing to take your chances in other respects?

Mr. LITTLER. We are not afraid of fair competition.

Senator BLAIR. Suppose that oleomargarine was of a different color, so that every man by the eye could tell whether it was oleomargarine or butter; would that satisfy you?

Mr. LITTLER. That would satisfy me, individually, if they will only get somebody to enforce that law. That is what I want; to have the law enforced, and not be a dead letter.

Senator BLAIR. Suppose there was such a supervision of the manufacture that every package which left the manufacturer should be of

some different hue from the yellow which seems to belong to butter from time immemorial, so that the eye would know at once that it was not butter. Would that satisfy you, if in addition to that you had a tax sufficient to pay the expenses of the supervision?

Mr. LITTLER. Yes; I would not ask for anything more. We do not want to load our friends down and drive them out of the business.

Senator BLAIR. If there was a distinctive color for butter, yellow, and oleomargarine had all the other hues of heaven and earth to select from, of course that would not interfere with you, because your color is yellow. Anything of a yellow tint cannot be oleomargarine if the law is carried out. Now, if in addition to a regulation requiring the manufacturer to introduce some coloring matter—if he puts in anything not of a yellow tint—and you have a law which raises revenue enough to pay for its administration, a faithful and efficient administration by national authority, would that protect the dairy interest?

Mr. LITTLER. It would be satisfactory to many and would be protection to the dairy. But do I understand that the coloring matter used must be so distinctive that there could not be any possible mixing up of the two articles?

Senator BLAIR. I do not know that you comprehend me. Here are all the hues of nature, except yellow, at the disposal of the oleomargarine men. They may make their products strawberry color, violet, or whatever they choose. It may resemble ice-cream in color, or they may make it in any way that would be attractive to the eye or taste, but they must not use yellow, because that is your color. It is substantially white when well made in the first instance, I understand. If it is left without any coloring matter then it can be distinguished from butter?

Mr. LITTLER. Yes, it can be if there is no white butter; but there is a great deal of white butter made.

Senator BLAIR. You can color your butter?

Mr. LITTLER. Yes; but large quantities of butter are put on the market not colored at all.

Senator BLAIR. But if it was colored anything but yellow you could distinguish the two articles?

Mr. LITTLER. I think it would be easier for the manufacturer to color his butterine than for the farmer; farms are so isolated.

Senator BLAIR. Suppose he does color it, but not yellow?

Mr. LITTLER. Yes; pea green, pink, black, or anything but yellow. They put yellow coloring in because it makes it look like butter, and that is an additional means of deception.

Senator JONES. I will ask a question. If your sole object in coloring butter is to make it of a color so that oleomargarine would not be mistaken for it, how would it suit you to have a law passed that pure butter should be colored green and the oleomargarine people could color their product anything except green?

Mr. LITTLER. That would be unfair, I think, in this way, because yellow is the clover and grass butter color, and belongs to it naturally; the pigment or coloring matter is naturally a straw color at certain seasons of the year.

Senator JONES. And at other seasons of the year annatto is used to color it so as to make it appear that clover and other grass has been used in the butter when it has not.

Mr. LITTLER. The object is to make it a little more pleasing to the eye. We are using yellow corn and carlots, farmers who are able to have barns and stalls, and are endeavoring to color it in that way.

Senator JONES. Is this a butter color in this tin? [Indicating a specimen submitted by Armour & Co.]

Mr. LITTLER. It is the color of some butter. Some is like that and some several shades darker. I thought you were going to ask me if it was butter.

Senator JONES. I understood you could not tell.

Mr. LITTLER. I could if I had a glass here.

Senator JONES. But not by an inspection of it?

Mr. LITTLER. No, sir.

Senator JONES. If this is the natural color for oleomargarine, would there be any impropriety in having that go on the market without any coloring, if it was properly labeled?

Mr. LITTLER. Yes, sir; I think so; the difference should be seen.

Senator JONES. If it is properly labeled, I say.

Mr. LITTLER. The man who buys it could scratch the mark off. What we want is to protect the consumer who buys 2 or 3 pounds at a time. That is what we are after. These gentlemen may bill it as butterine.

Senator JONES. Is this specimen here butter or oleomargarine?

Mr. LITTLER. I could not tell you just now by looking at it. The only way we can tell when it is honestly made is to heat it to a temperature of 135 degrees, and let it settle. [After an inspection of the sample.] No, that is not butter. Nobody would ever accuse that of being butter.

Senator JONES. I ask you whether there is any deleterious substance in oleomargarine, so far as you know?

Mr. LITTLER. Yes, I think there is, if what I have heard is true, and, if the chairman will just allow me I will read the evidence of a man who says that he worked for one of these factories a year, if the chairman will allow it to go in. He says, "I have worked in the factory"—the one he represents—"for a year. The factory uses acids and alkalis in making its butterine."

Senator JONES. What factory is that?

Mr. LITTLER. It is Armour & Co.'s factory.

Senator JONES. You know nothing of the unwholesomeness of these products except what you have heard?

Mr. LITTLER. Only what I have heard. I saw a knife once that was used in a butterine shop that was eaten up with the acids, but I do not know anything about it.

Senator JONES. Would you consider a low-grade butter unhealthy?

Mr. LITTLER. I would not consider it unhealthy if sound, but it is not palatable.

Senator JONES. I mean rancid butter.

Mr. LITTLER. I do not want to eat rancid butter, but I do not think it would kill any one if he should eat it.

Senator JONES. The question is as to its unhealthiness.

Mr. LITTLER. I should think to a delicate, sensitive system it would be unwholesome.

The CHAIRMAN. What is rancid butter—spoiled butter?

Mr. LITTLER. Yes, sir.

The CHAIRMAN. Then it is not fit for market any more than spoiled fresh meat would be?

Mr. LITTLER. No, sir. Another thing I desire to state. A gentleman here yesterday said that he gave 80 cents a pound for butter when he could buy oleomargarine for 18 cents. I have been marketing butter

regularly for twelve years. I have my prices at home, and I think I make pretty good butter, but my butter only averages me 22 cents a pound on the average, on the farm or at the depot. At the White House Mr. Cleveland gets butter from the Darlington Creamery, supplied by Oyster & Co., on the avenue, and pays \$1 a pound, I have no doubt. But that does not settle the market price of butter. We are talking about the 98 or 99 per cent. average prices. While there are some dairies that might be able to get 75 cents a pound for their product, the average price of the best dairy butter has been in Chicago 40 cents a pound.

Senator JONES. Do you say that the best butter is always colored?

Mr. LITTLER. I suppose 90 per cent. of it has more or less coloring in it.

Senator JONES. Why is it colored?

Mr. LITTLER. Because it is supposed to look better and to bring a higher price.

The CHAIRMAN. Is not yellow the natural color of butter made from grass?

Mr. LITTLER. Yes, sir; and the object of the coloring is to try to maintain the natural color of grass butter during the whole year.

The following is the circular referred to in Mr. Littler's statement:

To the honorable Senate of the United States:

I notice that the Chicago Live-Stock Exchange has adopted a resolution against the passage by your honorable body of the bill to regulate the manufacture and sale of butter substitutes, known as the Scott bill, which has just passed the lower house of Congress, and sent a committee to Washington to work against its passage by the upper house. The resolution assumes to speak "in the interest of the vast cattle raising industry of the land, of equal rights to all, and of the millions of consumers to whom this object of taxation [counterfeit butter] proves a cheap, wholesome, and almost indispensable article of food."

Let us see what right these few Chicago capitalists have to speak for so vast a multitude. The "industry" which they have the effrontery to defend before the honest representatives of an honest people, numbering nearly 60,000,000 souls, is based on counterfeiting the products of one of the oldest and most important industries of this country and fraudulently getting their counterfeit products into consumption. It is safe to say that not 1 per cent. of their counterfeit goods has been knowingly bought and eaten by the consuming public. Like the counterfeiters of currency, these counterfeiters of butter may have sold their manufactures to their jobbing and retail agents for what they were, but the retailers, boarding-house keepers, *et id genus omne*, have imposed them upon consumers for and in the name of genuine butter. Nobody wants to consume their goods. Have they the right to smuggle them down the throats of consumers by giving them a false guise and a false name?

So much for their assumption to speak for the "millions of consumers," who, so far from considering the counterfeit products of the stock-yard gang "an almost indispensable article of food," shrink from, shun, and abominate them. The wholesomeness or unwholesomeness of the counterfeits does not enter into the question, which is, have a few capitalists the right to counterfeit a leading farm product and fraudulently pass it off upon the public to the injury of the farmers and the disgust of the consumers?

Now for the "vast cattle-raising industry of the land" which they assume to speak for. Do not dairy stock and the other stock of the farmers belong to the "cattle-raising industry of the land?" Do the stock-yard gang speak for these? By no means. The owners of the stock in all but a few Northwestern States and Territories are the men against whom the stock-yard gang are arrayed. Let us see how the interests of all not represented by the gang—assuming, for the sake of the argument, that they have authority to speak for the cattlemen *per se*—compare with those concentrated in the Chicago stock-yards. We will make no estimates, which may be misleading, but take the census of 1880 as a basis for comparison. According to that the cows in the United States numbered 12,443,120; all other stock 23,481,391. The total was 35,924,511 head, one-third of which would be 11,974,837. So over one-third of the cattle of the country are cows. Let us see what the stock-yard gang have the

least shadow of claim to represent. We will give them the following Territories and States:

| | Cows. | Oxen. | Other cattle. |
|-----------------|----------|----------|---------------|
| Colorado..... | 28, 770 | 2, 080 | 315, 989 |
| Dakota..... | 40, 572 | 11, 418 | 88, 825 |
| Idaho..... | 12, 838 | 737 | 71, 292 |
| Montana..... | 11, 308 | 936 | 160, 143 |
| Nebraska..... | 161, 186 | 7, 234 | 590, 129 |
| Nevada..... | 13, 319 | 765 | 158, 137 |
| New Mexico..... | 12, 955 | 16, 432 | 137, 314 |
| Texas..... | 606, 176 | 90, 502 | 3, 387, 927 |
| Utah..... | 32, 768 | 3, 968 | 58, 680 |
| Wyoming..... | 3, 730 | 718 | 273, 625 |
| Oregon..... | 59, 549 | 4, 132 | 352, 561 |
| Total..... | 983, 171 | 138, 922 | 5, 594, 622 |

Here, then, according to this showing, we have scarcely one-quarter of the "other cattle" of the census represented by the stock-yard gang. Three-fourths of the "other cattle" are owned by those more or less interested in dairying as an industry, to say nothing of the millions of consumers who want pure dairy goods and have the right to know what they eat.

To further illustrate where the dairy interest lies, and to show that those engaged in it have also an interest in "other cattle," we give the following from the census of 1880:

| States. | Cows. | Oxen. | Other cattle. |
|---------------------|-------------|----------|---------------|
| Virginia..... | 243, 061 | 54, 709 | 377, 414 |
| North Carolina..... | 232, 133 | 50, 188 | 375, 105 |
| South Carolina..... | 139, 881 | 24, 507 | 199, 321 |
| Kentucky..... | 301, 882 | 36, 166 | 505, 746 |
| Georgia..... | 315, 073 | 50, 026 | 544, 812 |
| Louisiana..... | 126, 464 | 41, 729 | 282, 418 |
| Arkansas..... | 259, 407 | 25, 444 | 433, 392 |
| Alabama..... | 271, 443 | 75, 534 | 404, 213 |
| Florida..... | 42, 174 | 16, 141 | 409, 055 |
| West Virginia..... | 156, 956 | 12, 643 | 288, 245 |
| Tennessee..... | 303, 900 | 27, 312 | 452, 462 |
| Total..... | 2, 392, 374 | 414, 399 | 4, 272, 183 |

It will be seen from this that eleven Southern States have only 2,392,374 cows (a little over one-sixth), and only 4,686,582 of the "other cattle," including oxen, which is less than one-fourth. The total number of "other cattle," exclusive of oxen, owned by the Territories and Western States engaged in beef-raising as a main industry, and by the eleven Southern States, was only 10,015,185—considerably less than one-half—the balance of "other cattle" and 8,693,341 head of the dairy stock belonging to the dairy States proper. So these Northern States have not only a much larger interest in dairying than the others, but also a larger interest in beef cattle.

| States. | Milch cows. | Working oxen. | Other cattle. |
|--------------------|-------------|---------------|--|
| Wisconsin | 478, 374 | 28, 762 | 622, 005 |
| Illinois | 895, 923 | 3, 246 | 1, 515, 812 |
| Iowa | 854, 187 | 2, 506 | 1, 755, 343 |
| Indiana | 494, 944 | 3, 970 | 864, 846 |
| Kansas | 418, 633 | 16, 789 | 1, 015, 935 |
| Michigan | 384, 578 | 40, 393 | 466, 669 |
| Minnesota | 275, 545 | 39, 344 | 347, 161 |
| Missouri | 661, 405 | 9, 020 | 1, 410, 507 |
| New York | 1, 437, 855 | 39, 633 | 862, 233 |
| Ohio | 769, 043 | 8, 220 | 1, 084, 977 |
| Pennsylvania | 854, 156 | 15, 062 | 861, 019 |
| Total | 7, 524, 643 | 207, 945 | 10, 806, 498 *206, 945 7, 494, 643 |
| Grand total | | | 18, 587, 086 |

* Oxen

Eleven dairy States had in 1880 more than one-half of all the cattle in the United States.

It is claimed that the counterfeit business has added to the value of beef stock. We say the market quotations do not justify the claim, while it is an indisputable fact that the value of all dairy stock has been very much reduced—it is believed fully 25 per cent.—while the number of cows in the country has been correspondingly lessened from what it would have been had dairymen had only honest and open competition to contend with.

To illustrate the preposterousness of the claim of the stockyard gang that their use of lard and tallow in the manufacture of counterfeit butter has added to the value of beef cattle and hogs, we give the following prices per 100 pounds live weight, taken from the stockyard books:

| Years. | Native cattle. | Range cattle. | Hogs. |
|------------|------------------|------------------|------------------|
| 1882 | \$4 25 to \$9 30 | \$3 25 to \$6 80 | \$5 40 to \$9 35 |
| 1883 | 4 10 to 8 25 | 3 00 to 6 25 | 3 90 to 8 15 |
| 1884 | 4 10 to 8 00 | 2 65 to 6 25 | 3 80 to 7 75 |
| 1885 | 3 50 to 6 80 | 2 35 to 5 25 | 3 10 to 5 35 |

We give the range of average prices for the years named. The figures thus far this year are certainly no better than they were last. It will be seen that as the counterfeit-butter business has increased the prices of both beef cattle and hogs have declined. But, as a matter of fact, for the information of the cattlemen and all interested, not over 10 to 12 per cent. of oleo oil—just enough to give body—is used in the manufacture of counterfeit butter, the balance being prepared from lard. The neutral is so prepared by running the melted raw material into a sulphuric acid bath, to remove the smell of the pig-stye and the cattle-yard. Instead of being heated to 150 degrees, as claimed—a degree far too low to cook it or kill the eggs of parasites—we are credibly informed that it is barely melted, rarely running above 115 degrees.

But, aside from these commercial considerations, is the great question of morality and justice which is involved, and which no Senator can conscientiously ignore. The consuming public have the right to protection against fraud. Men engaged in an honest industry and furnishing to the public honest goods are entitled to protection against the counterfeit of their goods. Men who engage in counterfeiting should not only have their business suppressed, but be punished for the offense. Men who fraudulently put goods on the market, or connive in any way at their sale to consumers for something which they are not, commit an outrage upon the public, which they should not only be restrained from repeating, but for which they should also be punished. Legislation to this end, to cover all cases of the future counterfeiting and fraudulent sale of butter substitutes, is anxiously and hopefully looked for at the hands of your honorable body by a very large majority of the people of the United States.

All the dairy interest, nearly three-quarters of the "other cattle" interest, good morals and justice, are against the Chicago stock-yard representation.

As to the claim of using a large percentage of fine butter: While we are writing this circular the leading manufacturer of counterfeit butter in Chicago is making a

product in which not a particle of genuine butter is used. The only claim it has to be a dairy product is its brief contact with the milkman's milk in which it is churned. This delectable product is sold to the grocers at 9 cents a pound, and retailed to consumers at 20 cents and upwards.

With this statement of facts, which cannot be gainsaid, before him, can any friend of agriculture, any believer in honesty and good morals, any lover of justice, for a moment deny that national legislation is imperatively called for to suppress the counterfeiting of butter and the fraudulent sale of the counterfeit to the consumer?

Respectfully,

ROBERT M. LITTLER,
*Secretary of the National Butter, Cheese, and Egg Association,
and Secretary of the Iowa Butter and Cheese Association.*

CHICAGO, June 9, 1886.

STATEMENT OF A. M. FULLER.

Mr. A. M. FULLER, of Meadville, Pa., then addressed the committee.

I have the honor to represent the Pennsylvania State Dairymen's Association, an organization of which I have been president some six years. That organization I will say is supported by the State. I have a very few remarks to offer, and they will bear solely upon one point. We have, during the past six or eight years, discussed very fully this question of oleomargarine. We have endeavored to enact in the State of Pennsylvania the best law which we could possibly get to govern and control the manufacture and sale of bogus butter. I will say that two years ago we held a convention at Harrisburg in connection with the State Agricultural Society over which the governor presided, and we framed a law at that time following very closely after the New York State law. We found, however, that according to the new constitution of the State of Pennsylvania, it was not competent for us to institute a bureau to carry out the provisions of this law, as they are able to do in New York State and some of the other States; consequently I came before you merely to say this, that so far as Pennsylvania is concerned, we feel that we are entirely unable to enforce the law which we have. We feel that the only safety for us and the only certainty in making the law operative is to have it proceed from the General Government.

I do not understand that the farmers and dairymen of Pennsylvania ask for protection. We do not ask that. We are willing to compete with this product. All that we ask is that the law be enforced. We are unable to enforce our law, and in that respect we think we are very much in the position of many of the other States. We believe that the General Government can alone enforce this law. Consequently I, on behalf of the dairymen of Pennsylvania, ask that you will consider the measure which is now before you favorably. That is all I have to say.

The CHAIRMAN. You think, then, that the Government ought, by some system, to supervise to a certain extent its manufacture and see to it that every package is properly branded and stamped and sold to the consumer under its own name?

Mr. FULLER. That is it; yes, sir.

The CHAIRMAN. Have you read the bill now before the committee?

Mr. FULLER. I have read a portion of it.

The CHAIRMAN. Do you think that bill, if enacted into a law, would secure that result?

Mr. FULLER. I think it would.

Senator BLAIR. What is your idea in having a tax imposed?

Mr. FULLER. I presume a tax would be necessary to carry out the provisions of the law under the Government.

Senator BLAIR. Do you mean to pay the expenses of carrying it out?

Mr. FULLER. Yes, sir.

Senator BLAIR. Do you think there should be a tax beyond the amount necessary for that purpose?

Mr. FULLER. No, sir; I do not.

Senator JONES. If this law should be passed do you think it would destroy the manufacture of oleomargarine altogether?

Mr. FULLER. No, I do not.

Senator JONES. Do you think it would affect the production in any material degree?

Mr. FULLER. I think it would lessen the production somewhat.

Senator JONES. Have you any idea how much?

Mr. FULLER. No, sir; I have not.

Senator JONES. In that law which you say you gentlemen framed a year or two ago, did you look toward the suppression of the production of oleomargarine and its sale, or were you looking simply toward protecting the public against being imposed upon by bogus products under the name of butter?

Mr. FULLER. We were not looking at all toward its suppression, but merely to a law covering the sale of it to protect the consumer.

Senator JONES. The provisions of your law then were addressed solely to the protection of the consumer?

Mr. FULLER. Yes, sir.

Senator JONES. And did not in any sense interfere with the production of this article where it was publicly put upon the market for sale?

Mr. FULLER. No, sir; I think we felt, as Colonel Littler has said he felt in regard to it, that we acknowledged it as a competitor, and all we asked was to have it sold for what it was.

The CHAIRMAN. Does your law undertake to prevent its manufacture to be sold as imitation butter?

Mr. FULLER. Yes, sir.

The CHAIRMAN. The same as the New York law?

Mr. FULLER. Yes.

The CHAIRMAN. That law went so far, of course, as to attempt to prevent its manufacture as imitation, when manufactured with attempt to deceive, and to be sold as butter rather than under its genuine title.

Senator JONES. Have you a copy of the Pennsylvania statute with you?

Mr. FULLER. No, sir; I haven't it with me.

Senator JONES. Can you furnish a copy to the committee?

Mr. FULLER. I will do so.

The CHAIRMAN. Have you any knowledge as to the sale of this material in your State, any positive knowledge at all?

Mr. FULLER. I have not.

The CHAIRMAN. You have not given that matter any attention?

Mr. FULLER. No, sir.

The CHAIRMAN. You come, then, simply to represent the dairy interest, without any knowledge of the commercial interests involved?

Mr. FULLER. Yes, sir. If you will allow me to add, I will say, as an evidence of the interest that is taken in this matter by Pennsylvania dairymen, that more petitions have been sent in from Pennsylvania to your honorable body than from any other State of the Union, feeling, as we do, that it falls entirely to this body to give us the relief we hope for.

The CHAIRMAN. Mr. Seymour, of New York, would like to be heard.

STATEMENT OF JAMES H. SEYMOUR.

Mr. JAMES H. SEYMOUR, of New York, then addressed the committee.

Mr. Chairman and Gentlemen of the Committee: I come from the birthplace of oleomargarine in this country—the city of New York. I am acquainted with the gentleman who introduced it there, who procured the Mége patent, and have been familiar with the progress of this product from that day until now. It was never introduced as a product on its own merits.

Senator JONES. What time did they begin to manufacture it in New York?

Mr. SEYMOUR. I think it was about 1877 or 1878, or in that neighborhood; I do not remember the exact date. But there was then some complaint about its being sold as butter, and its not being butter, and a question arose as to its wholesomeness. He then procured a certificate from two scientific gentlemen, who have appeared before this committee.

Senator BLAIR. Do you mean witnesses who have been before this committee?

Mr. SEYMOUR. Yes; I refer to Professors Chandler and Morton. He produced the article which he wanted analyzed. They analyzed it with the result they have no doubt stated to you, and I know of no other test by those parties from that day to the present time.

Senator JONES. What date was that?

Mr. SEYMOUR. It was in 1880. That is on record and has gone forth. At that time they analyzed the product of the Commercial Manufacturing Company, which was the largest company in the United States. It employed \$500,000 capital, and they proceeded to manufacture what they called oleomargarine, they said, from fat. They went along until about 1883, I think, and then came in the new product known as the Chicago butterine, made from the lard product. The oleomargarine oil being more expensive than the hog product, they were driven out of business, and that concern is now out of existence, with a large number of judgments standing against it for legal fees, &c. But since 1883, or from that date, the growth of butterine or bogus butter made from various materials, as stated, from neutral lard, and cotton-seed oil, to a small extent, and a small amount of oleomargarine oil and sesame oil, has been increasing. Those are statements made to me by manufacturers.

The two chemists, Professors Chandler and Morton, state that oleomargarine is wholesome. The authorities have been procured, or the history of this thing, by official examination in the State of New York on the product which has been put upon the market from 1884 to the present time, taken from the retailers, not knowing who the manufacturer was or knowing anything about who put up the goods originally, but taken and given to chemists, and I will give you the names of the chemists and what they say in reference to the wholesomeness of these goods. Dr. Bartley, of Brooklyn, who is the doctor for the board of health of Brooklyn; Stillwell and Gladding, chemists of the Produce Exchange, and who have been such for about fourteen years; Professor Waller, of the School of Mines; Dr. Love, and E. H. Griswold—these gentlemen state from their examination that the wholesomeness of the products which they have analyzed cannot be determined from chemistry. They have gone into this physiologically, in order to determine

that fact; and that authority which I have cited here Professors Chandler and Morton will not contradict, especially Professor Waller.

The CHAIRMAN. Can you furnish the committee with their statements in writing or print?

Mr. SEYMOUR. They are contained in the report of the dairy commission of the State of New York, for which they did the work. It was all done for the dairy commission.

The CHAIRMAN. I think we have a copy of that report given out in advance.

Mr. SEYMOUR. I think you have it. I am greatly surprised at the butterine people in their attempt to draw in the cattlemen. Why, gentlemen, there is no greater deception on their part than that very thing. And then they try to influence the cotton-seed men in their favor. Now, that is a mistake for either one of them, and especially for the cattlemen. They say it will depreciate the value of a steer from \$3 to \$4. I will furnish you with figures that they cannot dispute, which will show that that is false, and also will show that not all the fat so used for oleomargarine oil goes into consumption in this country; more than 75 to 80 per cent. of it goes abroad, which this bill does not touch. They are pulling the wool over the cattlemen's eyes, and you mark it! The farmers of the United States who buy their cattle and farms and pay the taxes, will not feel very favorable to the cattlemen coming here to defeat this law when they are raising their cattle upon Government land. I do not believe the cattlemen will take that position; I have not any idea that they will. Neither do I believe that the cotton-seed oil interest of the South will take sides with the interest whose fraudulent practices we are trying to-day to stop.

Gentlemen, you must bear in mind that the men who are engaged in the manufacture of this product are not men who are doing it simply for a livelihood. They are some of the richest men in the country, and we have had one of their representatives who is here to-day stating publicly that they take these goods and color them yellow to make them look like June butter. They acknowledge that they do it with the object of deceiving, and what can you expect of a manufacturer who does that and carries it through to the consumer?

I will not occupy your time but a moment, but I want to speak of the commercial aspect of this question; I want to say what I know. I know that every person who is interested in the manufacture of adulterated food products, or in the sale of them, is with these gentlemen and against this bill. Now, gentlemen, the responsibility rests with this committee, and with the Senate of the United States, to say whether that deception in these things—these fraudulent practices—are proper or not. If that is to be the course of this particular business, every dairyman must adulterate his butter in order to cheapen it and to compete with this product, or sell his farm, and every merchant must sell these goods, as they are following the business, on a fraudulent basis.

I am fighting this business, gentlemen, because of the fraud and deception in it. I could have made ten times, yes, fifty times, as much money out of the business of selling the things that these gentlemen have put upon the market in the last five years as I have out of the butter business. But I have never yet stooped so low as to do that kind of business. I handled their product for about two years when we had a law in the State of New York compelling the branding of oleomargarine and the selling of it as oleomargarine. But soon came the Chicago butterine, and they branded it "butterine," which we had no law to cover, and from that day they have not complied with the law in

regard to this subject. So that I quit selling it in 1883 or 1884. I know the history of this thing from beginning to end.

We leave the responsibility with you, to say whether these gentlemen are to regulate the code of morals for business practices in the United States, or whether business is to be done on a fair and honorable basis.

The CHAIRMAN. You have stated that figures were given to show that if this business was stopped absolutely it would reduce the value of fat cattle and steers \$3 a head. With that statement you take issue. Can you give the value of the fat, animal tallow, in the New York market, so that we can see what the fact is?

Mr. SEYMOUR. I have made an investigation within the last two weeks concerning the largest tallow dealers in the city of New York, who buy tallow all over the United States. When the manufacture of oleomargarine commenced, they were selling their best tallow for 9½ cents.

The CHAIRMAN. That was when the tallow was made out of the entire fat.

Mr. SEYMOUR. Yes; out of the whole product. When the oleomargarine manufacturers went into the markets of the United States, all the large markets, and bought the best material for making their oil, at that time American tallow held the markets of the world for its superior quality. When they went in and took out the best of the product and left the culls and inferior grades to be exported, they killed our market, until to-day we are not exporting any tallow for that reason, and Australia and Russia hold the tallow markets of the world. That is the benefit from the production of oleomargarine upon the article of tallow.

The CHAIRMAN. What is the market price of ordinary tallow now; that out of which oleomargarine is made?

Mr. SEYMOUR. It is from 3 to 3½ cents, and the best bullocks will furnish, I am told by men who slaughter them and know about the matter, 125 pounds of fat.

The CHAIRMAN. Do you mean fat of all kinds?

Mr. SEYMOUR. Yes, all kinds of fat; and the poorest bullock will furnish about 40 pounds, none of which can be used for oleomargarine oil. Out of the 125 pounds, not over 50 to 55 pounds can be used for oleomargarine oil, and it sells at 4½ cents a pound.

The CHAIRMAN. That is, they pay in New York 4½ cents a pound for the best part of the fat used for oleo?

Mr. SEYMOUR. Yes, sir.

The CHAIRMAN. What does the remainder of it bring?

Mr. SEYMOUR. From 3 to 3½ cents. It makes very little difference. At that rate, 50 pounds to the steer at 1½ cents, will make 75 cents. That will make 75 cents on every steer if all the oleomargarine oil was consumed of necessity. You ship 75 per cent. and consume one-quarter of it here. How much does that injure stock-raising?

The CHAIRMAN. But suppose the oleomargarine portion, the 50 pounds out of the steer, was put in with the 3 and 3½ cent quality, what would be the value of the product then?

Mr. SEYMOUR. It would not raise it very much for the purpose it is used for, I am informed.

The CHAIRMAN. But going abroad it would run much higher?

Mr. SEYMOUR. Yes, sir; now we have no foreign market for our tallow, I am informed by these gentlemen, because the other markets have taken it.

The CHAIRMAN. Because the quality of our tallow has been depreciated?

Mr. SEYMOUR. Yes, sir.

Senator JONES. That was on account of taking only the best qualities of fat for making oleomargarine.

Mr. SEYMOUR. Yes; that is the reason we lost our hold.

Senator JONES. You understand, then, that the oleomargarine manufacturers use only the best fat for their products?

Mr. SEYMOUR. That is what they claim, but I do not know what they use.

Senator JONES. You do not know whether they do or not?

Mr. SEYMOUR. No, sir.

The CHAIRMAN. You take their figures on that?

Mr. SEYMOUR. Yes; I take their statement for what it is worth.

Senator JONES. You do not agree to the statements that have been made that they use refuse and unclean fats for the manufacture of oleomargarine?

Mr. SEYMOUR. I have been told by these gentlemen that they make different grades of this oil. It has been stated to-day by gentlemen from Chicago that they make different grades.

Senator JONES. Has the petroleum product had any effect on the price of tallow?

Mr. SEYMOUR. Yes; some effect.

Senator JONES. Can you state what proportionate effect it has had on the tallow market?

Mr. SEYMOUR. No, sir; I could not.

Senator JONES. You say you have been familiar with the business of selling oleomargarine from the beginning?

Mr. SEYMOUR. Yes, sir.

Senator JONES. And have known more or less of the condition and quality of the products put upon the market?

Mr. SEYMOUR. Yes, sir.

Senator JONES. What time do you say the butterine manufacture or mixture of hog's lard was introduced?

Mr. SEYMOUR. It commenced about 1883 or 1884. Before that they tried a mixture of lard and butter, but it did not work well; the lard flavor exhibited itself until they found that deodorizing process of taking away the lardy flavor and making the neutral which these gentlemen have told you about. That takes the lardy flavor away, and with a small percentage of butter you get only the flavor of the small percentage of butter, the other being neutral.

Senator JONES. As a healthful product, what is the difference between this butterine product and the oleomargarine first produced?

Mr. SEYMOUR. If I had my choice, I would rather eat pure oleomargarine than take my chances on butterine.

Senator JONES. Why?

Mr. SEYMOUR. Because I do not think chemicals are good to put into one's stomach three times a day, and I do not want to eat them. The best evidence in regard to it, I think, is that they will not eat it themselves when they know what the product is.

Senator JONES. But I understood you to say awhile ago that you considered these things wholesome.

Mr. SEYMOUR. No, sir; I do not think I said so. I read from a chemist's report about them.

Senator JONES. I understood that the chemist stated that chemistry could not disprove they were wholesome, and I understood you to express the opinion that they were not unwholesome.

Mr. SEYMOUR. No, sir.

Senator JONES. I will ask you whether you consider it a wholesome article of food ?

Mr. SEYMOUR. I would not dare to eat it or give it to my family to eat or advise other people to eat it until it is declared to be wholesome physiologically.

The CHAIRMAN. You have not any practical knowledge on the subject, really, whether it is wholesome or not ; you have never experimented in that direction ?

Mr. SEYMOUR. No, sir.

Senator JONES. Then you have no fixed belief whether it is wholesome or not ?

Mr. SEYMOUR. I believe this, speaking of it commercially, or so far as I can know about it ; I believe they can make it wholesome and they can make it very unwholesome, and I think the competition is where the danger comes in in making it unwholesome.

Senator JONES. Has this been your opinion always in regard to the quality of it as a food product ?

Mr. SEYMOUR. I sold oleomargarine when it was first made, as testified to by Professor Chandler and others.

Senator JONES. You considered it a wholesome article of food at the time you engaged in the trade, I suppose ?

Mr. SEYMOUR. I had the same opinion then that I have now ; I sold it for what it was, and I was contributing money all the time to punish men who sold it for anything else. All my customers who bought it were aware of the fact.

Senator JONES. You kept your customers fully advised of what you sold it for ?

Mr. SEYMOUR. Yes, sir ; every time.

Senator JONES. You say you did sell these products when your customers knew what they were getting ?

Mr. SEYMOUR. Yes, sir ; every time. I never asked them to buy them. They said they wanted to try the new product, and I would send an order for them, and the manufacturers delivered the goods to me in violation of the law then. I had a plate cut in accordance with the law in the State of New York regulating the branding in one-inch Roman letters. I branded them when they delivered them to me without having a brand on the top and sides as the law required, and invariably sold them for what they were.

Senator JONES. Why did you receive goods that were delivered to you in violation of law ?

Mr. SEYMOUR. I requested these parties to put the stamp on them, and sometimes they did and sometimes not.

Senator JONES. It was just an occasional instance, then, where they failed to comply with the law ?

Mr. SEYMOUR. Yes ; there were occasional instances where they did it.

Senator JONES. It was not a persistent attempt to do anything of that sort ?

Mr. SEYMOUR. Well, if I insisted upon it, or requested them to, they would put on most any brand. They are the most obliging people you ever saw.

The CHAIRMAN. You are a wholesale dealer, are you not ?

Mr. SEYMOUR. Yes ; and have been since 1867.

The CHAIRMAN. You wrote me the other day, June 14, and gave me the same figures that you have already stated to the committee in regard to the value of tallow exported, the proportion found in the bullock

and I think in other respects the figures are the same. With your consent, I will put this letter into the record, as it may be shown a little plainer there than in the statement you have just made.

The letter referred to is as follows:

[Office of James H. Seymour & Co., commission merchants. Specialties: Butter, cheese, eggs, &c
159 Chambers street.]

NEW YORK, June 14, 1886.

Hon. WARNER MILLER,

Chairman Committee on Agriculture, United States Senate:

MY DEAR SIR: Your favor of June 9 came duly to hand. I have carefully investigated the points you mention, and conclude from the best authority obtainable that artificial butter does not contain more than 10 to 15 per cent. oleomargarine oil, and I think it is safe to say that at least 85 per cent. of the oleomargarine oil produced in the United States is exported to foreign countries.

I am informed by the most reliable and, I think, the largest tallow dealers in this city that up to the beginning of the oleomargarine business in this country our American tallow held the markets of the world for its superior quality. The price at that time for best tallow was 9½ cents. The oleomargarine men went into the tallow markets of the United States and selected the best grades, which left the culls or inferior grades for export. The effect of exporting the poor quality has been to demoralize and ruin the foreign demand for our tallows. Australia and Russia now supply the markets which American tallow held heretofore. The want of foreign markets for our tallow has reduced the price from 9½ cents in 1875 to 3½ cents in 1885 and 1886.

I have also sought the most reliable and disinterested party in New York as to the quantity of tallow taken from a steer or bullock, and find the following result: The finest bullock will produce 125 pounds, and the poorest about 40 pounds. About 50 pounds of the best fat from the best bullock can be used for oleomargarine oil at 4½ cents per pound, the balance would sell for 3 cents per pound, and the poorer quality or the finer quality would sell for 3 cents, it makes very little difference the price being so low, whether the best quality is taken out or not; thereby, figuring from the basis of the finest quality at 1½ cents per pound, it makes 75 cents difference per head on the finest cattle, while on the poorer grades it has no influence whatever; therefore their claim that the passage of the bill would reduce the value of cattle \$3 to \$4 per head, the very most that can be figured on their side of the argument is 75 cents per head on the finest cattle. This is about as near the fact as they ever reach it in their arguments. These facts, which I have obtained from thoroughly reliable sources, are surprising to me, as they doubtless will be to you. If there are any other points that you would like me to look up for you I am at your service any time.

I hope to appear before your committee some day this week, and should like about fifteen minutes to present a few points. Wishing you every success with your bill, I remain,

Yours, very truly,

JAMES H. SEYMOUR.

Senator JONES. I will ask you why you quit dealing in this article.

Mr. SEYMOUR. Because they quit obeying the law.

Senator JONES. I understood you to say just now that you frequently received packages in violation of the law while you were engaged in the business.

Mr. SEYMOUR. Yes, sir; and I branded them, too. We had a law of the State of New York, and I invariably called their attention to it, and they knew it.

Senator JONES. That violation of the law did not drive you out of business. What violation of the law was it that drove you out of the business?

Mr. SEYMOUR. The reason I went out of the business was because it got to be so disreputable in selling these goods for what they were not, and the business was getting down upon that basis, and then we started for our State laws, and soon after that we had the only State prohibitory law, and the dairy commission, in 1884.

Senator JONES. I understood you to say a while ago that you could

have made a large amount since 1884 out of these products if you had sold them.

Mr. SEYMOUR. Yes, a great deal more than I could out of butter, and do as the other gentlemen in the business do.

Senator JONES. Do you mean to engage in frauds?

Mr. SEYMOUR. Yes, if I engaged in selling the goods for butter.

Senator JONES. Have you a law in New York against selling these goods under false pretenses now?

Mr. SEYMOUR. We have the State dairy law, yes, and the commission.

Senator JONES. Is that law violated or enforced?

Mr. SEYMOUR. It is enforced pretty well. In 1884 we had a prohibitory law, and goods were shipped in from neighboring States direct to retailers, so that it was very difficult for the inspectors to find these goods. They would come from Pennsylvania, Illinois, and other States, and go direct into the dealer's hands, and he, knowing this law existed, would keep them out of sight of every inspector who would come round; and to-day they will only sell to those people who come in whom they know and the children of people whom they know. A stranger who goes in cannot get an ounce of it.

Senator JONES. Do they sell it for what it is or as butter?

Mr. SEYMOUR. Ninety-nine per cent. of it is sold for butter.

Senator JONES. Do you know of an instance in your State within a few months past where a dealer has sold bogus butter for butter?

Mr. SEYMOUR. Not of my own personal knowledge. The dairy commission would know.

Senator JONES. But you do not know personally of a single instance?

Mr. SEYMOUR. No, sir.

Senator JONES. Then you do not know that it is done?

Mr. SEYMOUR. I know what I read of the evidence taken in the courts.

Senator JONES. Where persons have been indicted?

Mr. SEYMOUR. Yes.

Senator JONES. You do not know of any instance except that?

Mr. SEYMOUR. No, sir.

Senator JONES. Have you any reason to believe that the law is evaded and violated any further than by the reading of these public prosecutions, which have been brought to your attention?

Mr. SEYMOUR. No, sir; I have no means of knowing, except what I get through that channel.

The CHAIRMAN. Your belief is that 99 per cent. of it is sold for butter and not for oleomargarine?

Mr. SEYMOUR. Yes, sir.

Senator JONES. Is there any sale for it as oleomargarine?

Mr. SEYMOUR. Not to my knowledge; I do not know, except as I am told by the retailers, and those who are familiar with it.

Senator JONES. Yet, when you dealt in it you stated you sold a good deal to persons who knew what they were buying?

Mr. SEYMOUR. I sold to the retail trade, the grocers, but not to the consumers.

Senator JONES. Did you understand that they sold it under false pretenses to their customers?

Mr. SEYMOUR. I never knew that they did.

Senator JONES. Do you think they sold it honestly to their customers?

Mr. SEYMOUR. I think so.

Senator JONES. Do you not think the same individuals who consumed butterine knowingly and of their own choice at that time probably consume it yet?

Mr. SEYMOUR. Yes, sir.

Senator JONES. But you think all the other butterine sold except this small percentage of one pound in a hundred is sold dishonestly and under false pretenses?

Mr. SEYMOUR. Yes, sir.

Senator JONES. Can you give any idea of the amount of butterine or oleomargarine that you sold while engaged in that business in New York?

Mr. SEYMOUR. I suppose I sold less than fifty tubs a month; I cannot state positively without looking at the figures.

Senator JONES. What proportion of the amount of butter which you sold was oleomargarine?

Mr. SEYMOUR. Not 1 per cent.

Senator JONES. But you think that what you did sell was honestly sold to the trade, all of that?

Mr. SEYMOUR. I sold it to them and it is my belief that they sold it for what it was.

Senator JONES. But you do not think other dealers do the same thing?

Mr. SEYMOUR. Other wholesale dealers?

Senator JONES. Yes.

Mr. SEYMOUR. I have not made that statement.

Senator JONES. I understood you to say that 99 per cent. of the butterine and oleomargarine was sold under false pretenses.

Mr. SEYMOUR. By the retailer to the consumer, I said.

Senator JONES. You think it is fairly sold to the retail dealers by the wholesale dealers?

Mr. SEYMOUR. I think so, generally.

Senator JONES. And that it is the retail dealers who are perpetrating the fraud?

Mr. SEYMOUR. Yes; that is, to a large extent.

Senator JONES. You seem to have a firm conviction in regard to that. Upon what do you base your opinion?

Mr. SEYMOUR. From the best knowledge I can obtain of the business.

Senator JONES. What knowledge?

Mr. SEYMOUR. From retail grocers and their organizations and other sources.

Senator JONES. Did the retail grocers tell you that they perpetrated these frauds?

Mr. SEYMOUR. I did not go around and ask every grocer about it.

Senator JONES. But those you did see told you that they were perpetrating these frauds?

Mr. SEYMOUR. Several have told me that they would have to sell it for butter if they sold it at all.

Senator JONES. Did they tell you that they sold any for butter?

Mr. SEYMOUR. Yes, certainly they did.

STATEMENT OF S. P. HIBBARD.

Mr. S. P. HIBBARD, of Boston, then addressed the committee.

The CHAIRMAN. Please state to the committee, as briefly as you can, about the collections of fats, and your conclusions and views as to the law being enforced in Boston in regard to the sale of oleomargarine and whether it is sold for what it is.

Mr. HIBBARD. I have in my hand a Boston Herald containing an article published last Monday morning, which seemed to be a very candid and clear statement of the question, and a few of us went to the office to ascertain who the writer of it was, and found it was Professor Tilden, formerly of the Agricultural Department here in Washington, and also connected at one time with the Treasury Department in New York. He was also the gentleman who discovered arsenic in the bouquet that was attempted to be given to Guiteau on the morning that he was executed. I would like to read just a few lines in this article in regard to the matter. Speaking about the manner in which this article was originally intended to be made, and speaking of Mége, the Frenchman who got out the patent, he says :

He contemplated using only pure animal fats, freed, so far as possible, from other tissues, and in fresh condition. The practice in many places has been very different, and the writer has observed instances of sickening carelessness, or worse, in the quality of materials used.

And he goes on to give the details. I will not read them because the article is here. In another place he quotes Hassell as follows :

Beef fat is sometimes prepared on a large scale and made up in imitation of butter, being known and sold as "butterine." This article is mainly the olein of the fat, with only a small percentage of stearin. When freshly prepared it is sweet and palatable. In some cases it may be a useful, and therefore excusable, substitute for butter, but it is to be feared that such a preparation would be used in some cases for the adulteration of butter.

We know this is so to a very great extent from the admissions of parties on the other side, who say they sell it to creameries, and so on.

I will now state what I know about the gathering of fats. An oleomargarine manufacturer in Boston has told me that he used only caul and kidney fats pure; that he gathered them from the provision dealers every day. The provision dealers use very largely Chicago dressed beef, which has been killed eight or ten days, and sometimes two weeks before it is used. I do not say but what it is perfectly pure and sweet. But when the other side of the house come here and pretend to tell us that they cannot use anything but suet and beef fat taken from the animal within twenty-four hours after it is killed, I do not think their testimony is worth much.

Several years ago our firm was approached with an offer to enter into a company in Boston with the intention of manufacturing this product, and an agreement was entered into as to the amount of capital each one should contribute, what we should call our business, and where we should locate it, and I asked the man who had charge of it, and who was then manufacturing oleomargarine or butterine, where he got his suets. He stated there were already two manufactories in Boston which had probably all that the provision dealers could furnish, and he said that he gathered it from the smaller cities in Maine, Connecticut, and Western Massachusetts once a week in cold weather and twice a week in hot weather, and was making large quantities of it. I asked him what he deodorized it with, and he said with slippery elm bark and

some harmless acids. Those were the facts that the manufacturer stated himself.

Senator JONES. Who made that statement?

Mr. HIBBARD. It was the Standard Butter Company.

Senator JONES. Who was the individual?

Mr. HIBBARD. Mr. Cochrane.

Senator JONES. Was he a manufacturer, do you say?

Mr. HIBBARD. Yes, sir.

Senator JONES. Is he still manufacturing?

Mr. HIBBARD. No, sir; the organization fell through, and he had no capital and ran only a year or two, and we made up our minds, several business men who contemplated going into it, not to go into it.

Senator JONES. He made a poor class of goods, did he not?

Mr. HIBBARD. No, sir; he made as good a quality of goods as is put on our market in that business. But he has been in business several times and has failed. He is not a business man.

Senator JONES. Did he have any trouble with his manufactures?

Mr. HIBBARD. He did as others did at that time. They had patents.

Senator JONES. Did he have any trouble about any deleterious mixtures, or handling unhealthy products, do you know, or anything of that sort?

Mr. HIBBARD. Not that I know of.

The CHAIRMAN. You repeat a simple statement made to you, I understand.

Mr. HIBBARD. Yes, sir; he was in business there for several years.

Senator JONES. Did he produce a class of goods popular on the market?

Mr. HIBBARD. Yes, sir; he produced an article containing a preparation of tallow and cotton-seed oil. It was intended to take the place of lard used by bakers, who commended it very highly; but it was soon found that the food made from it became very dry and crumbly, and did not retain its freshness as long as that made with pure lard. Whether it was attributed to the cotton seed or not, I do not know. Many bakers used it and spoke highly of it for awhile, and then gave it up.

Senator JONES. Did he sell his product for butterine or oleomargarine?

Mr. HIBBARD. He did not sell it for butter at all, because it had the soft substance and texture of lard; but he made a great deal of oleomargarine that he sold as such.

Senator JONES. Did he sell it as butter? Did he make a counterfeit butter out of his oleomargarine and sell it as butter?

Mr. HIBBARD. He made an imitation butter and sold it as such, as imitation butter. Professor Babcock stated here yesterday that he thought the law in Boston was properly enforced; that he thought but very little was sold in Boston that was not sold for what it was; that thousands of people went to their grocers and asked for this stuff, and bought it and paid for it as oleo. Since I was here in April I have been over a certain portion of South Boston and the South End, and have made inquiries of a great many families, and I think I have found about one in a hundred families who will admit they are buying it. Fifty per cent. of the others think they are buying it as butter. He told you yesterday that many of these stores had a sign up and a tub marked "butterine, at 15 cents a pound." I have no doubt of that. But at the other end of their ice-chest they will have four or five tubs of what they call butter, and half of that is butterine, and marked as butterine, but it is

set down in the ice-chest where it cannot be seen. The other is set up where it can be seen, and parties come in and ask for oleo, at 15 cents a pound, and, as I tell you, I believe that of the persons whom I conversed with not one person in ten wants it or buys it, and yet they do buy it out of the other end of the ice-chest, thinking they are getting good butter.

Professor Babcock made a statement that he had two detectives engaged in the business. I think if those two detectives and himself gave their attention even to the inspection of milk it would take about all their time. He made another statement that he watched this when it came and could usually tell the tubs from their appearance—the most absurd and ridiculous statement made before this committee. The Boston market desires to have its butter put up in spruce tubs. We have a creamery butter made in the Northwest exclusively for ourselves, and we send these Vermont spruce tubs there and have our butter packed in them, and these Chicago men can manufacture oleo and do the same, and send to Vermont and get spruce tubs and put them up of the same sized packages we put up our butter in. I deny that any man can tell that stuff when it comes to Boston except by analyzing it, and I do not know that you can tell then. I have been in the business twenty years of my life, and I confess that I cannot tell a great deal of this best but-terine from pure butter.

Professor Babcock goes on and states that in January he made 363 inspections and found 45 parties who were not complying with the law, and sent them a notice. I do not know why he did not prosecute them. I do not know why the gentleman was here. He is employed by the city of Boston as our milk inspector to prevent the people being imposed upon, and I do not know why he is here associated with these fraudulent butter-makers. But he is here, and his testimony has been given on that subject, and is all on that side of the case. He did not know Mr. Chapin and myself yesterday, but he knows all these gentlemen in Boston who are dealing in fraudulent butter. He says that in February he made 367 inspections and gave 35 warnings, and that during the time he has occupied that position there have been a total number of inspections to the number of 3,371, and 294 warnings have been given to people who, as he says, have not complied with the law. But I believe he says he did not prosecute them, but only sent them notices. Now, the fact is that the second time the inspector goes there they know him, and they are put on their guard. He says one of his methods is to send people into these stores to buy the goods, so that they can be tested. But after a man has been fined once he is very careful. He has a certain class of customers or line of families that he can sell to all the time and to whom he does sell this fraudulent stuff. One of the largest manufacturers assailed me after I got home because of some testimony I gave here in April. I put this question to him: "Why do the retailers sell this stuff for butter?" He hesitated a moment and said: "Well, my testimony is going to condemn me and my fraternity, but I admit it as a fact. You have made such a hue and cry about this stuff being unhealthy that they are compelled to sell it as pure butter in order to sell it at all; they cannot sell it in any other way." That is the statement of one of the largest manufacturers in Boston, made to me.

Senator JONES. Who is the manufacturer; what is his name?

Mr. HIBBARD. It is Mr. Rearden; I think one of the most honorable men we have in Boston. I do not think his house would put out a fraudulent article themselves without its being branded what it is. He is a

very high-minded and honorable man, but he says it is necessary for them to sell it as butter, because there has been such a hue and cry made against it.

Senator JONES. Yet he is permitting and defending a fraud?

Mr. HIBBARD. I claim all these things are frauds when they color them to look like butter and put the stuff in tubs made just like butter tubs, in perfect imitation of butter.

Senator JONES. Do you think a dairyman is committing a fraud when he colors butter at one time of the year to make it look like butter made at another time of the year?

Mr. HIBBARD. That is the natural color.

Senator JONES. What do you put annotto in it for, if it is the natural color?

Mr. HIBBARD. Annotto is only put in in the winter time.

Senator JONES. Do you think it is a fraud for dairymen to put annotto into butter to create the impression that the butter is richer?

Mr. HIBBARD. I would be glad to take the ground that butter should not be colored at all.

Senator JONES. I ask you if you think that is fair and honest?

Mr. HIBBARD. Well, 90 per cent. of the consumers understand that winter butter is colored. There was one other point I wished to touch upon, and that is as to the freshness of these fats. Professor Babcock stated here yesterday that the receipts of imitation butter during the year—but I think he must have meant in 1884—were 9,945,725 pounds, and he also stated that there were manufactured by the two manufactories in Boston about 150,000 tubs, at an average of 25 pounds each, which would give us something like 3,000,000 pounds of this imitation butter. Mr. Webster, from Chicago, and others stated here yesterday that they got about 35 pounds of this pure oleo and oleo oil out of an animal, which would necessitate a sale in Boston of about 110,000 beeves, and I do not believe that one-quarter of that amount is slaughtered in Boston. Most of the beef consumed there is Chicago beef. I think the same thing can be said of New York. I do not think one-quarter as much beef is slaughtered in the city of New York as would be required for the oil manufactured. Mr. Rearden, in addition to the amount of oleomargarine that he manufactures, exports a very large portion of his oil and ships a greater portion to other points.

Senator JONES. Where do you think he gets his fat?

Mr. HIBBARD. From our provision dealers. I think they are from ten to twenty days old when he gets them. I am perfectly willing to admit that I think they are pure and fresh—not fresh, but wholesome. But I do not like to have a man come here and say it has to be used within twenty-four hours. If that is their testimony, I do not think their testimony on other points can be worth much. Colonel Littler went into this thing very fully, and I indorse every word that man said in regard to the farming and dairy interest of this country being ruined. They do not ask for protection from any honest competition. As I have stated before, these manufacturers of oleomargarine take out that portion of the oil that is nearest to butter out of tallow, take that portion out of the lard which comes the nearest to it, flavor it, put it into packages, and it was admitted by Mr. Webster after a good deal of quibbling yesterday, that they send it out under the brand of a creamery, or send it out without any mark on it; and I would like to ask any intelligent man what that is for, except to deceive and defraud the public?

Senator JONES. You state that after you were here in April and went home, you made some investigation to ascertain the number of people using oleomargarine, and I understand you to say that one-half of those using it think they are using genuine butter.

Mr. HIBBARD. About 75 per cent. think they are using it.

Senator GEORGE. How did you find that out?

Mr. HIBBARD. I do not know anything about it.

Senator GEORGE. Then how can you tell anything about the percentage?

Mr. HIBBARD. I go to a man and say to him, "Do you buy oleomargarine?" He says, "No, sir; I would not have it at all." I say to another one, "Are you using it?" and he says, "I do not know, but I am afraid I am."

Senator JONES. But I want to know how you got the percentage.

Mr. HIBBARD. That is my estimate. A large portion of these goods are sold to manufacturing towns. I think that is where the greatest portion is consumed; there and in South Boston. I want to say one thing more in regard to this Eureka and Clover Leaf or Horse Shoe brand. I heard of them last winter, several months before we came here. We were handling a large quantity of Western dairy butter and continually coming in competition with this Eureka and Horse Shoe creamery, and parties would ask about it and how they could buy it, and it was sold very largely. I venture to say that that stuff was sold on our market at the rate of 500 to 600 tubs a week for several months before it was detected, and, then, I am pretty positive it was not detected until the statement was made here by Mr. Chapin in April; there were no prosecutions until after that.

Senator JONES. What do you base that statement upon?

Mr. HIBBARD. Either that the inspector was thoroughly ignorant or did not want to prosecute.

Senator JONES. I say, what do you base the opinion on that that was sold before?

Mr. HIBBARD. People told me that they were selling it.

Senator JONES. Did they tell you how much?

Mr. HIBBARD. Yes, sir. I supposed it was pure butter all the time, and wondered how they could sell it so cheap. It did not occur to me that a house of the standing of Fairbanks & Co., of Chicago, would do that kind of business.

Senator JONES. Did they sell it to the jobbers as butter?

Mr. HIBBARD. They sold it to the jobbers as butter and as oleo both. In some cases we knew nothing about this, but we knew that hundreds of tubs were put on the market as butter.

Senator JONES. These parties did not deceive their customers?

Mr. HIBBARD. Yes, the most of them. I understand they branded a great deal of it.

Senator BLAIR. Branded it what?

Mr. HIBBARD. Oleo and butterine, and whatever was asked.

Senator JONES. Were these parties prosecuted?

Mr. HIBBARD. Yes, sir, after we went home from here, and were fined \$500, but I have no doubt they have made thousands of dollars out of it. There are concerns who were doing a limited business a few years ago, and they are to-day wealthy, and the suspicion is they are continually selling this stuff for butter.

Senator JONES. Who has those suspicious?

Mr. HIBBARD. I have them.

Senator JONES. Do the customers of those people have them?

Mr. HIBBARD. Yes, sir.

Senator JONES. The people who deal with them have them?

Mr. HIBBARD. Yes, sir.

Senator JONES. Why do they not go to honest dealers?

Mr. HIBBARD. Because they are buying it a little less and they make more money on it.

Senator JONES. They are willing to take the chances, then, for the difference in price?

Mr. HIBBARD. Yes, sir.

Senator JONES. Are you a farmer?

Mr. HIBBARD. I farmed it until I was twenty-five years old, and since then I have been in the butter business in Boston. The question has been asked many times, if I knew or had reason to believe that the law was being violated in regard to the sale of this article why did we not complain. You must know enough of human nature to know that a man can make himself very unpopular by doing such things, and it does not pay any man to complain of his neighbors, even if he believes they are selling oleomargarine, and that the law is not being thoroughly enforced. Only once in the last five years has the inspector come into our place, and the last one who came there went down to the butter cellar and asked me where our oleomargarine was. I said to him that we did not sell it. He said he was the inspector, and turned around and walked out. I claim that the man who will sell oleomargarine for butter, knowing what it is, will lie about it if necessary. Now, assume that we are selling it for butter, and that inspector comes in and asks where the butterine is, and we tell him we do not sell it, and he turns around and goes out, what good does it do?

Senator JONES. Perhaps your reputation as business men had something to do with that?

Mr. HIBBARD. I should hope it might. There is another point I desire to touch upon, and that is this: The receipts in Boston in May, 1885, were 9,663 packages of imitation butter, called oleomargarine, and the receipts in May, 1886, were 17,577 packages, an increase of nearly 50 per cent. I ask you, in all candor, if this thing goes on five or ten years longer, where the whole dairy interest of the country will be? The whole Northwest will be grown up to bushes, for they cannot compete with fraud. In April, 1885, the receipts were 12,213 packages, and in April, 1886, 18,245 packages.

The statement was made here yesterday that about 9,000,000 pounds of this stuff was received in Boston, and about 24,000,000 pounds of butter was received. But the admission was made by the inspector that the two manufactories in Boston manufactured about 3,000,000 pounds, which, added to the 9,000,000 pounds received, makes 12,000,000 pounds of oleomargarine or butterine and only 24,000,000 pounds of butter. That shows that one-half of the receipts in the city of Boston, including what is made there, is of this imitation stuff. And I tell you, gentlemen, you cannot find, outside of the boarding-houses, restaurants, and hotels, but very few people who buy this stuff and know what they are buying. I see here to-day a gentleman from Boston whom I understand retails this imitation butter, and I shall put a great deal of confidence in his statement, and I do not think he can tell you that a very large portion of his people buy that stuff, and I believe that every pound he sells he sells for what it is.

Senator JONES. You said that a proposition was made to your firm to engage in the manufacture of this article. When was that?

Mr. HIBBARD. It was, I should say, four years ago, perhaps.

Senator JONES. An agreement was made to go into the business, but you did not go into it; what was the reason you did not?

Mr. HIBBARD. When the product first came out, in 1879 or 1880, we began dealing in it and kept it for sale for six months. I do not claim to be any more honest than any other man, but when three-quarters of the retail trade would come and say they wanted more of that oleomargarine, and would say they were selling it for butter, I could not stand it, and quit it.

Senator JONES. In the wholesale trade, not the retail trade?

Mr. HIBBARD. Yes, sir; and that is one of the reasons, and the great reason, why we did not go into the manufacture of this stuff.

Senator JONES. What year do you say that proposition was made to you?

Mr. HIBBARD. I think it was in 1883 or 1884; perhaps Mr. Chapin can tell you when the Standard Butter Company started.

Mr. CHAPIN. I think it was previous to that.

Senator JONES. At that time you entertained the proposition and for a time made an incipient organization for the purpose of going into the manufacture of this article?

Mr. HIBBARD. Yes, sir.

Senator JONES. Then you did not consider it deleterious or unwholesome?

Mr. HIBBARD. No, sir; we did not at that time; but the fact that it was deleterious or unwholesome has not been with me the great reason why I have not handled the stuff, but the reason has been because of the tremendous frauds perpetrated by the retailer on his customers.

Senator JONES. Then the point you think to be reached by legislation is to protect the consumers against being deceived in the matter?

Mr. HIBBARD. Not only to have the consumer protected, but to have the farmer protected as well. I would have the farmers protected against the fraud as well as the consumers.

Senator JONES. If the manufacture could be conducted in such a way that the contents of every tub would be known, and nobody would be deceived in regard to it, would not that meet the purpose you have in view?

Mr. HIBBARD. Yes, sir; that would meet the purpose, but I think this tax of 5 cents a pound will not injure them at all, and it will raise the price nearer the price of butter, and people can use it if they want to. I think it is a sad state of affairs when scientific men come here and say that oleomargarine is as good as butter, and as the poor man wants yellow grease on his bread it would be unfair and unjust to color it anything else. It does not help the poor man at all. It is in the interest of the rich man who manufactures it.

Senator JONES. Do you think a high grade of butter colored green, for instance, would be sold readily?

Mr. HIBBARD. No, sir; because it is not the natural color of it.

Senator JONES. Do you think it would be a popular butter?

Mr. HIBBARD. No, sir; because it is not a natural color for it. I think the fraud should have its natural color left to it, which is white, if they want it. But I do hope that the Senate will not make any amendment to this bill which will send it back to the House and so defeat it for this year.

Senator JONES. A large percentage of the butter is colored, is it not?

Mr. HIBBARD. I do not think more than 50 per cent. of it is colored during the whole year. I think Colonel Littler stated it too high.

In the winter time it is necessary to color it unless carrots and yellow corn are fed.

I have as much money invested in beef on the plains as I have in my business. My friend, Mr. Rearden, says to me, "If you get this bill through Congress, it will take three or four dollars a head from your cattle." One of our largest butter men, who has just been West, tells me that he knows of one farm where they have sixty cows, where they only milk one cow, and he says they can make more money raising beef than in making butter. I tell all these cattlemen that if this bill does pass and this stuff is sold on its merits, that the farmer will know where he stands on the butter question; that he will get better prices for his butter, and it will attract people to go into the dairy business, and in that way it will help the beef interest. I am as much interested in that as I am in butter.

STATEMENT OF W. P. RICHARDSON.

Mr. W. P. RICHARDSON, of Goshen, Orange County, New York, said :

When I appeared before the committee on a previous occasion I took up this question in its bearing or effect upon the crude milk industry of Orange County and other counties engaged in the sale of milk only. There were some points I did not touch upon at that time, which I shall be glad to present to your attention now. I spoke then of the depreciation of property in the farming communities supplying milk to New York, from the fact that the butter counties lying farther back, owing to the depression of their prices from the manufacture and sale of oleo and butterine, had turned the flood of their product upon the New York market and broken down our prices. I now wish to call your attention to the simple fact of the depreciation of our lands, brought about by this same business.

There are in the districts supplying New York City in New York State about 6,000,000 acres of land. Taking the difference in prices, or rather owing to the fact that the price has changed or been depressed by the sale of oleomargarine, or the effect that it has on the butter counties and their turning their product on our market, it has depreciated, at a fair estimate, every acre of that land at least \$10 an acre. I might say that in Orange County the depreciation has been \$20 an acre and not exaggerate the matter. But taking it through the entire districts I think that \$10 an acre is a fair average. At that rate these 6,000,000 acres of land have depreciated in value \$60,000,000, taking that theory alone.

Then, on the other hand, take the depreciation in the value of milch cows since this oleomargarine was placed upon the market, and from the very same reasons we find that the depreciation has been at least \$20 per cow. There are in that district about 400,000 cows, making an additional depreciation of \$8,000,000.

I offer these facts merely to show the immensity of them. If we take simply the State of New York, with its 241,000 farms and over 23,000,000 acres of land, and carry out this same estimate throughout the State (and I believe that it would be the same in every part of the State), we have a depreciation in value of land in the State of New York alone of about \$230,000,000. The value of the farm products in the State of New York, according to the census of 1880, was \$178,000,000 and the number of persons engaged in agriculture 351,000.

A statement has been made here, I think by Mr. Webster, that the enhanced value of beef cattle, from the fact that a portion of the carcass was used for the manufacture of oleomargarine, was about \$3 per head. I wish to call the attention of the committee at this moment to the fact that taking it in our own State, taking it in the Middle States, and in the Eastern and Western States, wherever dairying is carried on, there is a depreciation in the value of the beef cow, and that is where the farmer, as a last resort, must get his income from when he fails to get it from his milk or butter. That depreciation has been from \$10 to \$20 per head, without any doubt. In the section of the State which I represent it has been fully \$20 per head. So that we have had a depreciation in our lands of at least \$10 per acre, a depreciation in the value of our milch cows of at least \$20 per head, and a depreciation in the value of beef cows after they are through with milking of at least \$20 per head more.

I have an interest, as Mr. Hibbard has said he has, also in the cattle business of the West, and as to the statement made that there has been an enhanced value given to the beef-cattle of the West, all I can say is I fail to find it. I know that in the section where I am interested there has been a depreciation within three years in the value of beef-cattle of from \$8 to \$10 per head. I agree fully with what Mr. Hibbard has said that if this law was passed, and this production of butterine or oleo was regulated to an extent that would allow the farmer to get not an exorbitant price for his butter, but a fair price for it, he would let the raising of beef-cattle go and give his entire attention to dairying, and the raising of cattle in the West and Southwest would be improved, and an enhanced value would be obtained from the beef raised there.

The CHAIRMAN. Right there let me ask you a question. Suppose the depreciation you have described goes on in the dairying districts of this country until it is substantially broken down, what must the farmer do with his cows? Is he going to turn them into beef, or is there any other way to get rid of them?

Mr. RICHARDSON. In the dairy sections, where the farmer is engaged in the production of butter, this would be the result: Nature has provided that some cows shall give milk, while others are best utilized for beef purposes. When a cow begins to milk you cannot stop her. You have either to go on and put what you feed her on the rib or in the pail, and, as a result, there is no other recourse left to the farmer—

The CHAIRMAN. The result would be the turning of the entire dairy districts of this country into fat-cattle producing districts, would it not?

Mr. RICHARDSON. Yes, sir; it would have that tendency.

Senator JONES. Do you think that all this depreciation in the value of land and cattle comes from the oleomargarine manufacture?

Mr. RICHARDSON. No, sir; I do not think so. But I think I have left a sufficient margin in the figures to cover the effect of the general business depression of the country. I think the statement I have made is sufficiently within the limit. I might say here a word in reply to Mr. Webster's statement. Mr. Webster stated that they could get a certain proportion of oil from the steer, and they must then find a market for the balance of the beef. I want to say to Mr. Webster and these gentlemen that they have found that market, but it has been at the cost of the interests of every farmer who has a milch cow on his farm. That same beef has been thrown upon the markets, and from the very moment that the Chicago beef entered into competition with our cow beef, our prices—it was not the result of several years, but it came within

two or three months of that time—were depressed from \$10 to \$15 a head.

Senator JONES. You regard cheap beef, then, as a sort of calamity?

Mr. RICHARDSON. No, I do not, if that remark means that I take the ground that this cheap beef being thrown on the market is a calamity to the poor man. But I do not believe the poor man ever obtains one penny benefit from it any more than he obtains a benefit from the cheapness in the production of oleo when the retail dealer sells it to him for the same price as pure butter. I do not think that the price of beef to the consumer has been reduced in anything like the proportion or percentage that the price has been reduced of the cost of production.

Senator JONES. I did not get the effect of your remark as to how much this depreciation comes from the manufacture of oleo.

Mr. RICHARDSON. I said it would not be easy to get at the depreciation in the value of beef cows from the manufacture of oleo, taking Mr. Webster's statement that the balance of the carcass had to find a market, because I remember distinctly the difference I obtained in the price of my beef cows the moment the Chicago beef people located their beef establishment in our neighborhood. I think it reduced the price immediately \$10 or \$15 a head. Our butchers went there and bought beef for so much less than they could get it from us that it stopped the sale and reduced prices immediately.

Senator JONES. You mean they sold them beef cheaper than they could buy it from you?

Mr. RICHARDSON. They sold it cheaper to the dealer than the dealer had been paying us for that same beef. In the New England and in the Middle States and in the Western States until you strike the Missouri River, and perhaps even west of that, the effect of the sale and manufacture of these goods has been the depreciation of the value of everything that the farmer sells, as well as the value of the products of the dairy farm.

STATEMENT OF LAWRENCE J. CALLANAN.

Mr. LAWRENCE J. CALLANAN, of New York City, then addressed the committee:

I represent the retail grocers. I shall detain you only a few minutes in the remarks I desire to make. I appear before you to-day as a business man, not to oppose the manufacture of oleo or imitation butter, for I think it can be made in such a way and of such materials as to make it a healthy substitute for butter. I am here to ask you to report a bill which will place its manufacture under restrictions, and to impose a tax which will, in part, at least, restore to the tax-payers some of the money out of which they are defrauded by its sale to them as butter at the price of genuine butter.

The fraud commences in its manufacture. It is made to imitate, as closely as possible, genuine butter in color, texture, and flavor, for the simple reason that the manufacturer knows that as oleo or butterine it could not be sold.

I think I am keeping within the bounds of truth when I assert that at least 95 per cent. of it is sold for butter, and could not be sold as oleo or butterine. A short time since a stand was rented in Jefferson Market, in the city of New York, to sell it as oleo or butterine. After a brief career it has been closed; the cause, no demand. I know

that the same lot of it has been marked and sold at 20, 25, 30, 35, and 38 cents per pound, from the same lot of tubs.

A lady went into a large store to buy butter. She asked the price of the best butter they had. The clerk told her it was 30 cents a pound. She said "it cannot be butter, it must be oleo, as my husband told me that the best butter was 38 cents a pound at wholesale," and she left without buying. The clerk reported the fact to his employer, who immediately took the hint, marked up the price, and actually sold the same lot, which he had been offering at 30 cents a pound, at from 35 to 42 cents a pound. How can a retailer who sells genuine butter at a profit of 5 cents per pound, compete with a man who sells oleomargarine and sells it for pure butter? The gentlemen who have been stating that they know a great many people who formerly used butter are now using butterine, I think would have trouble in producing such persons before this committee; at least I have not seen any of them who said they ate it since I have been here, though I have not been here all the time during this hearing.

The CHAIRMAN. The manufacturers state that they eat it sometimes and sometimes use it for cooking.

Mr. CALLANAN. Yes; I heard it stated that it was used for cooking by a certain person, but it was also stated that he put butter on his table for his own use. He would not like to eat it without cooking it, I suppose.

Now, the retailers of New York, and, I think, of the country, do not want to prohibit the manufacture of oleomargarine or butterine; they simply want the trade regulated in such a way that it must be sold for what it is. It is a plain, simple question.

The gentleman who very eloquently dicated on the farming interest [Colonel Littler] omitted one statement that I think he ought to have made. He said the use of these articles was making us a nation of dyspeptics. I claim, in addition to that, that the manufacture and sale of oleomargarine fraudulently is making us a nation of rogues as well as dyspeptics. A man who will sell oleomargarine for butter and charge the price of genuine butter for it, and do it knowingly, is no better than a rogue, I do not care who he is.

We have a law in the State of New York that we have been trying to enforce for a good while, and I notice that in place of helping us to enforce that law the gentlemen who manufacture oleomargarine have all been trying to put as much opposition in our way as they could, in regard to testing the matter in the courts. If they had taken this product and put it on its own merits, and when they sold it, sold it as oleomargarine, and kept it properly manufactured and branded, I have no doubt they would be selling a good deal of it now; but under the present circumstances I do not think that they can sell it, because there has been a good deal of antipathy raised against it.

I think that all retail grocers ask is simply that a law may be enacted to compel manufacturers of oleomargarine to manufacture it under the supervision of the United States Government. We do not seem to be able to have the State laws enforced as thoroughly as they should be. When the United States has taxed other articles, the law has been enforced and properly carried out, and I think if the Senate passes this bill, and the law is enforced by the United States officials, so that oleomargarine and butterine are sold for what they are, there will be no complaint from the grocers and farmers in relation to that matter.

The CHAIRMAN. The New York law is directed towards preventing this material from being sold for butter, and compelling it to be sold for what it is. You say that the opposition to the enforcement of this law comes mainly from the manufacturers?

Mr. CALLANAN. Yes, sir; at the time of the arrest of some parties awhile ago, they were going bail for them, and an association in Brooklyn gave security to pay the costs for carrying the question up to the courts to test the law.

The CHAIRMAN. That hardly agrees with their statement that they always want it sold for what it is?

Mr. CALLANAN. It certainly does not.

The CHAIRMAN. Did a number of the retail grocers organize an association and sign an agreement some time ago not to deal in these goods?

Mr. CALLANAN. Yes, sir.

The CHAIRMAN. How many of the grocers signed that agreement?

Mr. CALLANAN. I could not tell you how many, but a great many of them did. The association is composed principally of the German grocers.

The CHAIRMAN. All the grocers in the city do not belong to that association?

Mr. CALLANAN. No, sir; not all of them.

The CHAIRMAN. In your opinion how is it usually sold to the consumer by the retail dealer; so that the consumer knows what it is or as butter?

Mr. CALLANAN. It is sold unquestionably as butter.

The CHAIRMAN. That is your opinion as a retail dealer?

Mr. CALLANAN. Yes, sir.

Senator BLAIR. I would like to know how you would protect a man who eats it?

Mr. CALLANAN. I would protect him by either coloring the butter or having it marked in such a distinctive way that he would be able to recognize it.

Senator BLAIR. Which, the butter or the oleomargarine?

Mr. CALLANAN. The oleomargarine and butterine.

Senator BLAIR. Is there any test that you can think of besides that of color that would protect the man who eats it?

Mr. CALLANAN. I am not enough of a chemist to be able to say.

Senator BLAIR. But can you think of anything? The man who eats it is not a chemist either. How am I going to know what I am eating? Do you know of any test but color?

Mr. CALLANAN. I do not know of any other.

Senator BLAIR. Have you ever heard any other test suggested which would protect the man who has to eat it three times a day, and in a hurry at that?

Mr. CALLANAN. I have not.

Senator BLAIR. Do you think that the test of color would protect him?

Mr. CALLANAN. Yes; I think it would.

Senator BLAIR. And you cannot think of anything else that would?

Mr. CALLANAN. I cannot.

Senator BLAIR. Have you ever heard anybody suggest anything else that would?

Mr. CALLANAN. No, sir; I have not.

Senator BLAIR. Then what is a law good for that does not contain that feature?

Mr. CALLANAN. I do not think it would be. I will tell you this, that if this law is passed, that will compel the manufacturers to make it under the United States laws, under the supervision of the Government, and to mark it in the way required, with a license attached to it as the law requires, I think that would go a great part of the way in controlling it.

Senator BLAIR. But made in that way, it would all look like real butter and cost only half as much as butter. How can I tell what it is? The better it is made the more likely I am to be deceived, if the color is the same.

Mr. CALLANAN. If it is made under the supervision of the Government it can be more easily traced.

Senator BLAIR. But can I stop and go through with a chemical experiment every time I want to eat a meal?

Mr. CALLANAN. You will not be asked to. If this law is enforced, I will guarantee that within five blocks of me no man will be asked to do that, to find out whether it is butter or not.

The CHAIRMAN. You mean by that it would not be sold?

Mr. CALLANAN. Yes, sir.

Senator BLAIR. Do you mean that it will not be made?

Mr. CALLANAN. No, sir; it will be made, but—

Senator BLAIR. All this evidence shows that the best oleomargarine can be made at a cost of not over one-half the cost of butter, and if it is made with the same color as butter it is the more likely to deceive, and it is less in the power of the consumer to detect it. Now, unless the consumers can see a difference in the color, how do all these measures tend to protect the consumer against the imitation butter?

Mr. CALLANAN. The law as it stands now will not do it. You get it from any manufacturer now, and you will find it is made under no supervision except his own.

Senator BLAIR. You propose, then, that he shall manufacture it so that it shall be absolutely good oleomargarine?

Mr. CALLANAN. Yes, sir.

Senator BLAIR. But all the testimony shows that the better oleomargarine it is, the more it is like butter, and you put in a color like butter to make it still more so.

Mr. CALLANAN. Yes, sir.

Senator BLAIR. Then it is all the more difficult for me to tell whether I am eating oleomargarine or butter by reason of that requirement.

Mr. CALLANAN. It will not be more difficult for the reason that the manufacturer would be under supervision of the Government in making it.

Senator BLAIR. The effect of that would be to see that he makes good oleomargarine?

Mr. CALLANAN. Yes; to see that he does make good oleomargarine. Not only the manufacturer but the retail dealer is compelled to take out a license under the bill.

Senator BLAIR. But how is the farmer to get any protection, or how is the consumer of the butter to be protected?

Mr. CALLANAN. The farmer will only get 5 cents a pound protection, and that is not enough.

Senator BLAIR. Do you think it is right to tax the men who eat an honest, healthy food in this country for the benefit of any one class?

Mr. CALLANAN. I am not here to advocate that.

Senator BLAIR. But that is what you do advocate in effect.

Mr. CALLANAN. I am here to distinctly and plainly disavow anything of the kind. I am here to advocate the selling of oleomargarine for what it is, and to advocate this law, simply because under the existing laws we cannot get that done. We cannot get any protection at all. I am here to advocate some protection.

Senator BLAIR. Do you not misconceive what hurts you? It is not that oleomargarine is bad which hurts you, but it is that it is taken to be butter, and therefore the man who consumes it pays twice what he ought to for it, and the man who makes it can put it just low enough to ruin true butter.

Mr. CALLANAN. Our principal cause of complaint is that oleomargarine is sold for butter at butter prices.

The CHAIRMAN. You think if the consumer knew what he was buying—

Mr. CALLANAN. That he would not buy it at all.

The CHAIRMAN. Or if he did he would get it cheaper?

Mr. CALLANAN. Yes, sir.

Senator BLAIR. If this testimony we have heard is true, that it is a healthy food, and just as soon as people can get rid of these matters of sentiment and taste, learn that it is healthy food, and it is just the color of butter, they will go to eating it?

Mr. CALLANAN. You heard my statement that if they had started in and taken it as a healthy food, and put it right straight down all the time for what it is and said "it is as healthy as any butter you can have, but we sell it to you as oleomargarine and not as butter," they would be selling plenty of it to-day, I believe.

Senator BLAIR. I agree with you; I think so too.

Mr. CALLANAN. But the way they have done has created a prejudice against it which is so instilled in the minds of the people that it will take a decade to remove it, so that they will eat it.

STATEMENT OF W. S. TRUESDELL.

Mr. W. S. Truesdell, of Saint Louis, vice-president of the Mississippi Valley Dairy and Creamery Association, then addressed the committee:

Mr. Chairman and Senators, I was so suddenly called to your presence that I came prepared with no speech, and shall just simply make a statement containing a few facts that have come within my knowledge as vice-president of the Mississippi Valley Dairy and Creamery Association, representing the Northwestern States and the States of the Mississippi Valley, and as secretary of the local Butter and Cheese Dealers' Association, of the city of Saint Louis, Mo., occupying which positions I have naturally given these matters some attention, and have been quite directly connected with their investigation and prosecution during the past year.

Having been absent during the presentation of the case by gentlemen from the other side, I am, of course, without foundation for answer to any arguments which may have been advanced, as I am not familiar with them. But it seems to me, from what I have heard this morning, that one point especially has been presented to your honorable body in a false light, and that is, regarding the article most complained of and chiefly involved in the action we ask at the hands of your committee.

The scientific gentlemen who have presented before you their testimony as to the healthfulness of the product under consideration, have told you that samples of oleomargarine investigated by them as pre-

sented by the manufacturer were absolutely healthful. They have no doubt told the truth. But I want to say to you, as a man who has handled butter for twenty years, and a bitter enemy of oleomargarine in its present guise, that I am not here to deny the healthfulness of oleomargarine. But I do say to you, gentlemen, that it is unfair to manufacture a sample article for investigation rather than to present in such investigation the actual commercial article that is consumed day by day in the markets of the country.

I want to say to you further that the question of oleomargarine cuts but a limited figure in the manufactured product that we are competing with in the United States. Oleomargarine is an article for export, and if these gentlemen will tell you the truth, as no doubt they will, they will tell you that not 5 per cent. or 1 per cent. of oleomargarine as an article of food is marketed and consumed in the United States. They manufacture an article of oleo oil which, as an oil, is exported, and they put a certain proportion of oleo oil in the butterine compound; but the article of oleomargarine itself, under the Mége system, and examined by these chemists, is not an article of present construction, has not been for the past two or three years, and you cannot find a tub of it on sale in the markets anywhere to-day.

We admit that oleomargarine is healthful, and if these gentlemen will confine themselves to the manufacture of oleomargarine alone there would be no question about the healthfulness of it. But I do not admit that the butterine and suine compounds which are now manufactured for consumption in the United States are healthful, and we ask you to legislate for the people of the United States and not for the people of Great Britain or Germany. These articles are manufactured of a different material, require a different process of manufacture, and in their manufacture chemicals are used that were not used and are not found in the samples that these gentlemen analyzed and examined.

Now I do say that in the process of manufacture at present that while it can be made, and perhaps is made, the better quality of it, absolutely harmless, by reason of the competition already encountered by the original manufacturers, they have been compelled to so reduce the cost of manufacture and necessarily to cheapen the cost of the original ingredients in the compound manufactured, that they have been compelled to use impure materials, and in the use of impure materials have been compelled to use injurious chemicals to destroy the impurity and to prevent its discovery.

I want you honorable gentlemen to keep that one fact before your minds when you give proper weight to these certificates as to healthfulness: that the certificates were absolutely based on an article that is not consumed in the United States, and consequently has no bearing whatever on your judgment in your decision as to whether it is healthful or not. I do not think that that question should have much bearing on your decision in the case any way.

As has been well stated, we come before you gentlemen to complain of a fraud, and we ask at your hands simply protection against that fraud. I am not here as an advocate of a 10-cent tax or even of a 5-cent tax upon the manufactured product, as these gentleman make it to-day. I say I do not care whether the tax be 10 cents or 2 cents; and if in your wisdom you can discover a process by which the machinery of the United States can be put into force without the imposition of any tax, I am perfectly satisfied, if you will give us a law that will stamp the thing for what it is, independent of any tax.

I say to you that the people of the agricultural sections of this coun-

try, the farmers of the United States, do not come to ask a protective tariff against the manufacture of oleomargarine. They simply ask that the article shall be placed where these gentlemen tell you they are willing to place it as an article of consumption and commercial value in the United States. I understand that assertion has been made. I want to speak of my own knowledge regarding the correctness and honesty of such an assertion as that. They say, "We are perfectly willing to come into an absolutely honest and open competition with butter; it is not the tax we complain about so much." But I tell you, gentlemen, if you strip the bill of the tax you will find the opposition just as strong on the part of these gentlemen. The trouble is the effort to strip the mask from the counterfeit article and place it before the consumer for what it is. I know this.

In the State of Missouri we have a law absolutely prohibitory. It was a mistaken policy in securing its enactment. It is a law which absolutely prohibits, under severe penalties, the manufacture or sale of any oleaginous substance made in imitation of butter, and not made from the pure product of milk or cream. We have been striving for three years past to enforce that law, but we have been utterly unable to secure its enforcement; and it is a fact, gentlemen, that in the hope of improving our position we went before our legislature last winter with a law framed after the manner of the New York State law, with this distinction: that learning that we could expect the passage of no law which involved the expenditure of a dollar of the money of our State, we provided in that law that a tax uniformly upon the good and the pure, and upon every package of butter received in the State of Missouri should be levied, and from that the expenses of the commissioner and his assistant should be paid. They simply required in that act that the goods should be branded, and that the brand under penalty should not be removed. In other words, we did the best we could to hold its identity until it came to the consumer.

What is the result? Some of these very gentlemen who are here before you to-day have contributed to a fund of \$5,000 now being raised in the city of Saint Louis to defeat a law placing oleomargarine and butterine upon their merits as a pure, honest, fair competitor of butter, and to hold in enforcement the strict prohibitory law that we now have. Why? Because that cannot be enforced, and under it they can continue to sell their goods as exact counterfeits. We have made a great many prosecutions this winter. We have absolutely proved before our court possession and sale, as butter, of goods that a careful chemical analysis proved to have only from 4 per cent. of butter to 30 per cent. of butter. We have actually analyzed goods that contained 4 per cent. only of butter—"the poor man's friend." These goods were not sold at 20 cents, very cheap, to the consumer. The wholesaler paid 20 cents for it and the consumer 25 or 30, and got 4 per cent. of butter, some oleo, and some lard. He could have bought the lard and made his own mixture cheaper.

In my judgment the necessity of this uniform law we ask at your hands is this: That in the State of New York, if my memory does not prove me false, you have had some thirteen different enactments or attempts to regulate and control the manufacture and sale of these goods; and while they have been skilfully drawn, and while they have been faithfully executed so far as the officers were able to do it, they have been utterly inoperative. That has been the experience in every State of the Union where, under a State law, we have attempted to make these men sell their goods for what they were. We come to you and

ask for this national legislation simply because the States have failed to regulate it in their way, because we believe it to be utterly impracticable for them to do it for one reason, and because we believe it a duty that our national legislature should protect the brawn and muscle of this country, the men who have contributed so much towards its greatness and grandeur.

I want to say to you, gentlemen, as a man of twenty years' experience in the butter business, and one who has given this matter careful thought and study, that the statement which has been made before you that the people cry for this article and want it, that they crave it because it is so nice and so good and so cheap, is not borne out by the facts. The two largest retailers of butter in Saint Louis, who retail on an average over \$2,000 worth each per month, have told me emphatically, in answer to the direct question, that in all their business experience since the introduction of oleomargarine and butterine in Saint Louis they have not had one single solitary consumer of butter come into their stores and ask for it. These are facts, gentlemen. That tells the story as to how badly people want it when they know what they are asking for.

I say to you as a man engaged in commercial pursuits and trying to make an honest living, that if it be true that the people do want the goods, if it be true that the goods are healthy, give us this law regulating their sale, so that we honest men can put them into our stores and sell them as we sell butter, cheese, or anything else, and I will as quickly place it on sale in my store as any man who is or has been before you. But I will not place it on sale until I can show it and say to customers who come into my store to buy it, "*There is the oleomargarine, and there is the butter.*" We want you gentlemen simply not to afford the farmer unfair, unjust protection; give him that which is his due; he asks nothing more. Surely he is entitled to that—the man who, by the brawn and muscle of his good honest arm, for years has dug from the soil of these Northern States the grandest monuments to commercial prosperity that this country has ever witnessed or that the statistics of this country have ever recorded. Show me any other product of the country, if you can, that has equaled in grandeur the product of the dairy States. What would these gentlemen do? They would have you bury that grand effort and that grand product beneath a monument erected to their own dishonesty and to their own fraud. It is simply, gentlemen, a question of the protection of the many honest men of the country as against the unfair and dishonest practices of the few.

If these gentlemen are honest in their statement that they have no objection to placing their goods upon the market as a fair competitor to butter, and if all they want is open, honest, fair competition, why is it that in my State, in New York State, and in every State of the Union where dairy laws have been passed, these very gentlemen are the men who are advocating against them? These men are the very men who combat attempted measures to regulate the sale of the goods. Why is it? That is a question that I cannot answer in my own mind satisfactorily. If they are honest in their statements that all they want is fair competition, why are they objecting to this bill?

In regard to the question of the honorable Senator, directed to one or two other gentlemen here who addressed the committee, as to whether this bill in its operation would afford the protection that we seek, I will say this: I think it would; it would at least to a satisfactory extent. There are offenders against all laws, from the first offender against wise Divine law down to the present time, and no laws have been

enacted, human or Divine, which there have not been breaches of, and that will be the case to the end of time. But I believe that by the regulation that this act provides, by the safeguards thrown around the manufacture and sale of this product, the identity of the article will be established, and so continued and fixed that it cannot be removed until it comes before the consumer. That is all we want; nothing more. If a man wants butterine, if he wants oleomargarine in preference to butter, by all means let him have it. We simply want, gentlemen, that you shall give us a law which will enable him to take his choice, knowing that he is having his choice and is not being imposed upon.

Senator BLAIR. Allow me right there to ask you this question: Assume the enactment of the law and its honest administration, and that you and I are at a hotel together, and you have no more technical knowledge of the subject than I have. I may be paying \$6 a day for my board at the Fifth Avenue Hotel in New York or fifty cents a day for my board at some other hotel, as the case may be, or I am boarding at a restaurant, we will suppose, or boarding-house, where the most of it is consumed, in addition to that consumed in the manufacturing villages and cities of the country. Now will you tell me how I may know whether I am buying and eating butter or oleomargarine?

Mr. TRUESDELL. Have you any means of knowing in regard to the cigar you smoke, whether the proper tax upon it has been paid or not?

Senator BLAIR. I might tell whether it was a good cigar or not, if I was a judge of cigars. But you all tell us, on both sides, that to the uninstructed taste it is impossible to detect the difference practically between good butter and good oleomargarine. Now have you not in your answer admitted that the consumer who foots all the bills has no protection under this act?

Mr. TRUESDELL. I think he has. I do not think he has perfect protection, nor that any law could give him that. If a law was enacted requiring them to color the goods black, that law would be evaded.

Senator BLAIR. You propose to put every manufacturer of this article in this country under the supervision of this law, and you propose to examine the materials of the manufactured product and pursue it to its market wherever it is consumed. There is a coloring matter in it as a part of its original manufacture. You supervise that as well as everything else. How is it, then, that you cannot give, if your law should require it, a distinctive color or hue to oleomargarine which would at once show, all through, until it falls under my eye as a consumer at a boarding-house, what it was?

Mr. TRUESDELL. I see no objection to any such proposition. It would rather add to the enforcement of the law.

Senator BLAIR. I ask you how I am to get protection unless it be by some test addressed to the eye?

Mr. TRUESDELL. You cannot possibly get absolute protection any more than you can get protection under the operation of the present laws regulating the manufacture and sale of liquors and cigars. Those laws are in the main enforced, but in some cases they are evaded; and no matter how stringent a law is regarding the manufacture and sale of oleomargarine and other products, that law will be measurably evaded.

Senator BLAIR. Do you know of any law regulating the manufacture and use of compounds put into intoxicating liquors?

Mr. TRUESDELL. No, sir.

Senator BLAIR. You propose to do that with oleomargarine. You propose to have a law which shall regulate the actual structure and con-

struction of the manufactured article itself, and you provide by this bill for the protection of everybody except the man who has to pay the bill in the end.

Mr. TRUESDELL. My answer to that would be that if that law is enacted and the provisions of the law are enforced, if a man were to be deceived he would receive no special harm; but if the manufacture was kept under such strict control, in accordance with that idea, he would not be deceived.

Senator BLAIR. But who is the man who is harmed by this bogus counterfeit product; is it not the man who pays the bills in the end?

Mr. TRUESDELL. It is the consumer, of course.

Senator BLAIR. No other human being is harmed under the existing state of things. A few honest men are damaged a little in their consciences, but they contrive to have somebody else carry on the business, and the consumer is entirely without protection. Now you come here and ask for legislation which shall protect these intermediate parties and save the conscience of the honest producers and middlemen; that is all right. But it seems to me that you leave out of account the interest of the comparatively intelligent ordinary citizen who buys and eats the product, and who is himself the real victim of the fraud.

Mr. TRUESDELL. We think that the penalties attached to the law as now drafted would deter the retailer from imposing upon the consumer.

Senator BLAIR. But the trouble with all laws is that we cannot enforce them, and you all say that the man who knows that oleomargarine is tendered to him will not touch it, or the majority of them will not. Therefore if you can make it patent to the man whose market you are after, the consumer, if you can make it patent to him that he is dealing in oleomargarine on the one hand and butter on the other, you have rectified the whole thing.

Mr. TRUESDELL. Possibly I can answer your suggestion by saying that so far as I am personally concerned, if you will amend that act so that oleomargarine shall be colored pink you will meet my views.

Senator BLAIR. Well, suppose we say they may color it anything but yellow, and let butter have its natural color?

Mr. TRUESDELL. I have no objection to that.

Senator BLAIR. I do not like to be obtrusive with the thought; I do not care anything about this legislation except to accomplish honest results; but I do not think the farmers have any right to call on the country at large to protect them as against honest healthy food. I was born on a farm and know the struggles of farmers. I do not understand you claim anything of the kind?

Mr. TRUESDELL. I do not.

Senator BLAIR. You only want us to put an actual test, which will enable the consumer to know what he is eating.

Mr. TRUESDELL. Yes, sir.

Senator BLAIR. Is there any other suggestion, except the one of color, addressed to the eye, that you would suggest?

Mr. TRUESDELL. There is not, and I do not think that would be absolutely effective.

Senator BLAIR. Of course not. There would be some blind men and some other false article put upon the market. But I do not see how you can get much, if any, protection unless you do that.

Mr. TRUESDELL. I think the provisions of the present law, with penalties attached, would be sufficient.

Senator BLAIR. I know you are apprehensive that if this bill goes back to the House with an amendment of the Senate there will be de-

lay. But you had better have a law worth something even if you have to wait for it.

Mr. TRUESDELL. I am satisfied in my own mind that the provisions of that law are sufficiently stringent now, not to afford absolute protection, but to afford sufficient protection at least to give the farmer as much protection as he needs until the people determine, at all events, as between the excellency of the two products, whether the new discovery is superior to the original discovery or creation of Divine Providence.

Senator BLAIR. How are they going to determine that question when they cannot tell them apart?

Mr. TRUESDELL. They can put it under its true name as an experiment.

Senator BLAIR. They cannot put oleomargarine by the side of every platefull of butter?

Mr. TRUESDELL. No, but I should put it into my store, and I suppose these other gentlemen would.

Senator BLAIR. It will go to the same men as butter, just as it does now.

Mr. TRUESDELL. The difficulty now is that the goods leave the hands of the manufacturer so absolutely like unto butter in all respects that there is not the least safeguard for the protection of the retailer or consumer. The packages are exactly alike, the color is exactly the same, the style of the package uniform, and there is no stamp or brand indicating what it is. It is simply a blank dollar upon which the counterfeiter places the stamp when it comes into his hands.

Senator BLAIR. But with all the enactments and provisions of that law, the article will eventually reach the consumer as it does now.

Mr. TRUESDELL. Not if the provisions of the law requiring the stamp to be put on at the manufactory are carried out, and the penalty for removing it stands.

The CHAIRMAN. Is there any gentleman from Chicago here who wants to be heard on this question? I understood there were three gentlemen from the cattle-yards of Chicago who wanted to be heard.

Mr. WILLIAM J. CAMPBELL. Yes, sir; Mr. Washburn, Mr. Coy, and Mr. Wagner desire to be heard.

STATEMENT OF IRUS COY.

Mr. IRUS COY, of Chicago, one of the committee representing the Chicago Live Stock Exchange, then addressed the committee.

I am sent here as one of the committee from the Chicago Live Stock Exchange to appear before you, and state some reasons why we think the bill under contemplation should not become a law. And in order that we might not weary your patience or repeat anything we have to say, we agreed that Mr. Washburn, who is chairman of that committee, should make the statement here of statistics with regard to live stock and other matters, and Mr. Wagner should also take one branch of the subject, and between us it was agreed upon that I should call attention more particularly to some of the arguments that have been made before you, and show, if I could, that the reasons given here were not well taken, and would not answer for the purpose for which they were presented.

In the outset I wish to say that I, like some of these gentlemen who have spoken to you this morning, was born on a farm in New York, worked on a farm until I was of age, and that my brothers, five of them,

are farmers; that my sympathy is entirely with the farmers of this country, and I would not say anything here upon this question that could unnecessarily hurt the feelings of any man engaged in that or any other honest calling.

Mr. Washburn will state to you more fully, as he is prepared upon that subject, the relation the Chicago Live Stock Exchange has to certain classes and interests throughout the length of this country, and the amount of money that is invested, and so forth. Therefore I will not touch upon that part of the question. But I consider that this question before us at this time is one of the most important questions probably that has come before Congress or will come before it for a long term of years, if we give credit to these people who have come here who manufacture oleomargarine, and if we are willing to admit that they are honest. Some of those who have come here from Chicago I have been acquainted with for a long term of years, and I believe they are as strictly honest, upright men as are engaged in any business, and I believe the statements that they make here as to the ingredients contained in oleomargarine and butterine are strictly true.

I know there has been a great deal said here by people who surmise or say that they believe there are acids or poisonous substances put in, but I take it for granted that these men have stated the facts here to you gentlemen, and if those substances that they say are used in oleomargarine and butterine are the only ingredients contained, and you determine that those ingredients are wholesome and healthful, that they are not injurious to the people who consume them, then it seems to me that this law in its operation and effect would be unjust, and a calamity if it goes into effect.

We are told here that you cannot tell the difference in the taste and looks of this oleomargarine from butter. They tell us, too, upon the other side, that chemists, when they analyze this product, are not able to tell the difference. But they still infer that there are some deleterious ingredients in it, and say they can only be tested by use and by a physiological test.

Is it not a fact that beef fat and the fat from pork, that lard and tallow, have been used and tested physiologically for thousands of years? They are articles of food which have been used on the tables of the most educated and refined people in the world for thousands of years. No one claims that they are unwholesome in themselves. Now, if these articles are manufactured from these wholesome properties, if they are not deleterious or injurious to the public health, then it seems to me that a law of this kind that requires the manufacturer to pay a license, and the wholesale dealer to pay a license, and the retail dealer to pay a license and then compels a tax upon the article claiming it necessary for a revenue when no revenue is necessary, when it is admitted that the present revenue is a burden and is a temptation to dishonesty and crime—that a law that would encumber the manufacture of a wholesome article of food in this country with such oppression is unjust, and I say it is the opening wedge to legislation that would ruin the country.

I would say here that I am opposed to the selling of oleomargarine or butterine for butter. I have nothing to say in justification of any man who will sell oleomargarine or butterine for butter, or for any man who would sell half cotton cloth for woolen cloth, or commit any fraud upon the purchasers of those articles. But I do not believe it is possible for Congress to frame any law which will make men honest. We cannot make men honest by law. This thing resolves itself down just to this, from the arguments I have heard here: That the manufact-

urer sells this as butterine or oleomargarine; that the wholesale dealer buys this in every instance knowing it to be oleomargarine or butterine, but that it is the retail dealer who imposes upon his customer.

We are liable to be imposed upon in every other branch of business and in all the transactions of life. We have to trust to the honor of the men with whom we deal to a great extent in all branches of business. If I were dealing with a groceryman in whom I had not confidence enough to think that he would not put oleomargarine or butterine on me for butter, I would quit dealing with him in an instant. They may do it. But when you undertake to encumber a business which is legitimate in itself with these unnecessary restraints and encumbrances, especially in business like this where there has been a clamor raised throughout the country that there is something wrong in it, that there is something deleterious in it, and that the people who manufacture it are trying to introduce it throughout the country, and you require the wholesale dealer to pay a license, as you prescribe in this law, and the retail dealer to pay a large license, it is in effect prohibiting the sale and use of that article. Why? Because every man who retails these goods anywhere in the country, in all these small towns where they are trying to introduce (if they are honest) this new food product, before he can sell it to his customer, before he can have an opportunity of selling it at retail, some man has to take the responsibility of paying a heavy license fee before he can test this matter to see whether the people want this butter or not. The wholesale and the retail dealer must pay this, and in consequence it is a prohibition, because he cannot get it into the market and dispose of it. And then you propose to put a tax of 5 cents a pound upon all that is offered for sale. Why is this?

There is no use of covering this up in any disguise. These gentlemen who represent the dairy interests of this country have described to you the waste and desolation of some portions of this country—in New York, New Hampshire, and Vermont—in consequence, they say, of this competition with butter; and they ask you, in so many words, to add this tax upon oleomargarine and butter in order that it may make it come up nearly to the cost of the price of butter; and one gentleman stated that if they could do this the butter-makers of this country could get a quarter more for their butter, because it would bring the price of oleomargarine nearly up to the price of butter, and the balance they would get then over and above what they are getting now would be clear profit, and it would put the dairy interests of the country on their feet. That without any disguise is the real object and intention of this bill, and I believe, and those with whom I am associated believe, that it is wrong, and contrary to the spirit and institutions of our country to tax one legitimate branch of industry for the protection of another branch of industry, and it is for that reason more particularly that I am opposed to the passage of this bill.

These gentlemen who appear here in behalf of the dairy interests have accused the introduction and sale of oleomargarine as the cause of all the depreciation of the land and of the cows, the price of the cows and the price of butter; they have charged all these things upon this manufacture. I have read the stenographic report of the statement made by Mr. W. P. Richardson to this committee on a former occasion. He said he was president of the Orange County Milk Association, and that the competition between oleomargarine and butter affected them first in about 1884. He went on to state that in 1881 or 1882 the milk brought a very low price; that the people got up sharp practices on them in

New York, and they finally organized a society, and I think he said they were incorporated, and they got up what is known as the Orange County Milk War, and they carried on this fight until finally they accomplished their purpose, and the consumers in the city of New York were obliged to pay them remunerative prices, and in consequence of this combination that they made they got up "a corner," so to speak, on milk, and by carrying that into execution the people in Orange County and the surrounding counties who joined in that combination made, he stated, in the year 1883 and 1884, a million dollars, and in the whole of the country embraced in their organization some three million dollars in addition to what they would have had if they had not had this organization. Then he says that in 1883 the people of the surrounding counties, those who had been making butter more particularly, seeing the good prices that these people had received for their milk, dropped the making of butter, and sent a quantity of their milk to New York, and in 1883 they sent more, and in 1884 they finally quit the making of butter and sent the milk to New York, so that it swamped them and broke up this combination.

Now he charges this effect and loss to the sale of the competitive oleomargarine coming into the market. I do not believe that they can reasonably say that it was the competition with oleomargarine which reduced the price of milk and which brought this affliction which they claim upon them.

I want to call your attention to this fact also. Mr. S. P. Hibbard, a butter and cheese dealer in Boston, stated that the competition commenced in 1881, but he said that butter was cheaper in 1879 than he had ever before or since known it, and he had been in the butter business for twenty years. He said that in 1879 butter sold at from 12 to 14 cents a pound; but he goes on and says that the farms had depreciated in New England about 50 per cent., especially in Vermont, since 1870 and up to the present time. And we have had this statement made by several different gentlemen. They have called your attention to the depreciation in the price of farms that were particularly adapted to the dairy business.

I refer to this, and call your attention to the fact that in 1873, when the panic came, it reduced the price of real estate, of cattle, and of everything else all over this country from one end of it to the other; it was not only in the dairy districts of New Hampshire, Vermont, and New York, but it extended all over the country. In proof of this I can make a statement from my own experience. Just before the panic, in 1872, I think it was, I was living in Chicago, and at that time I bought a house and lot. The panic came in 1873, and there has never been a time from that day until now that I could get one-half the amount I paid for it; I never have been offered one-half of what I paid for that property, and I have had it for sale.

Another instance came under my own observation. A piece of property near where I lived about the time I bought this house I refer to, was appraised by good real-estate men in the city of Chicago; they appraised it to be worth \$47,500. That was in 1871 or 1872, and on that appraisement \$35,000 was actually loaned upon that property. In 1880 the persons who owned it, and who had borrowed this money, had gone through bankruptcy, and I bought that property for \$20,000.

I allude to this to show you that this depreciation in property cannot be traced to the introduction of oleomargarine or butterine or anything of that kind, but is one of the calamities that befell this country and which is liable to befall any country. Neither can these people say

that because beef cattle are not worth as much now as they were four or five years ago, at the same time that they are not worth from \$2 to \$3 more now in consequence of the ability to turn a certain portion of the fat into oleo oil. We cannot reason in that way. But when these men who are buying cattle and slaughtering them by the thousands, and who are hunting every opportunity to find an outlet for every part of these animals, the hoofs and horns, the hair, and everything which has been utilized in some way in order to meet sharp competition—when these men who have been engaged in this business for ten, fifteen, or twenty years come before us and say that they are enabled by the manufacture of oleomargarine to use the substance, this pure fat of the animal, and realize from \$2.50 to \$3 and \$3.50 a head, I take that as true unless somebody can come up and show some other argument against it than the one that cattle are lower now than they were a few years ago notwithstanding the manufacture of these articles.

I want to call your attention to a statement I have here—I will not take up your time unnecessarily, but I have marked a passage and can refer to it easier than I can explain it in any other way. I want to call your attention to the statement also of Mr. G. W. Martin, of New York, on this same subject, as contained in a stenographic report made of the proceedings before this committee at a former hearing. He says: "Go to the New England States to-day, where we can produce the best butter in America, and you will find the land there growing up into bushes and brambles. The old farm of my father in Vermont is nothing but a wilderness to-day, and his farm in Jefferson County will be a wilderness in ten years more if he is not protected, but is driven to the wall. That is why we want this tax imposed. If we do not have the tax we cannot have anything."

That, I claim, is an honest expression so far as the object of this bill is concerned. They desire for you to put a tax upon this commodity, this oleomargarine without regard to its wholesomeness or unwholesomeness, without regard to whether it injures people or not, but to put a tax upon it so that it cannot be produced without making it cost as much as it costs to make butter in order that they may get a larger price for their butter. But how is it that they can say to you, without a smile upon their face, that, when this oleomargarine has been upon the market only since 1880—one gentleman here to-day said that it came into strong competition in 1883—how is it that they can tell us that in that short time these farms in Vermont and in New Hampshire have been abandoned and grown up to be bushes and brambles and are fit only as a home for rabbits? Gentlemen, that is not the real reason. It is not because oleomargarine has been made and put upon the market. Those reasons are not good.

I also want to call your attention to the statement or argument of Gardiner B. Chapin, of Boston, who was here also to-day and made a statement to you in regard to this subject. He said in his testimony: "I have seen on one little road in New Hampshire the remains of nineteen houses where the houses have rotted down and nothing but the cellars remained; the people had abandoned them and gone away. And that is only in one part of New Hampshire. In the State of Maine there are similar instances."

He also says: "The people often come down to Boston and say to me, 'Show me some butterine; show me some oleomargarine.' I take them to the place where they retail it, and they try it and shake their heads and say, 'I have got through; that is enough.' One gentleman told me that in a district where he lived in New Hampshire there were

80 schools. 'When I visited my old home last year,' he said, 'I found they were keeping up a school there for four scholars.' The farmers—the young men—had been driven away from home by this same depression, and they come to the city and live there as long as they can, and then go somewhere else. But they leave the New England farms because they cannot compete with these manufacturers of oleomargarine or butterine."

Now did anybody ever see a more glowing picture of poverty described than this? Here is oleomargarine that these men say has been in competition since 1880, perhaps, or 1883, and yet this gentlemen comes here and tells you that as he goes back home and looks at his old homestead and sees right along in a little road the remains of nineteen houses that had rotted down—there is not a vestige of a door or window or anything left of them, the chimneys even had gone, and they have become absolutely so poor up there that they cannot raise children—and, he says, it is in consequence of this competition with oleomargarine. He says the people come down to Boston from there—this little remnant that is left—they come down there and they say, "Show me oleomargarine—this five year-old monster which has depopulated our homes and which has rotted down our houses and left nothing but the cellars remaining." And he shows them oleomargarine, and they look at it and shake their heads and—go West.

Now, gentlemen, do you believe they have any right to charge all these things upon the manufacture of oleomargarine? Is there any question, can there be any question here before you at this time, as to what the object of those who are urging you to recommend this bill is? Is it not that you may tax one of these industries, which, they say, is a wicked monster, full of destruction and death? And there is not one of them who undertakes to show its unwholesomeness, except that some neighbor has said so, or surmised it. Yet these men, honest men, come and tell you just what is in it, and every ingredient in it has been on the tables of refined people for ages, and nobody has received any injurious effect from it. We know what its effects are.

The object of this bill is to have you tax this industry and put it in such shape that the poor people of this country cannot be benefited. They ridicule that idea. I want to tell you what I saw myself, as you ask people to state facts. Last Saturday I had occasion to go through one part of Armour & Company's establishment in Chicago where they retail their butterine, and it is at least a half mile from the street-cars or from any public conveyance. To reach there the people must go through the stock-yards and over the viaduct a long distance, and when I was there there were at least one hundred, if not one hundred and fifty, men, women, and children. They were mechanics, laboring men, and the wives and children of laboring men and mechanics, and there the sign was displayed in large letters, "Oleomargarine and Butterine," and those people were there buying it. Nobody could suppose that they did not know what they were buying. They had to go right by groceries where they claimed to be selling pure butter; they had to go nearly three quarters of a mile from the street-cars on foot in this warm weather. They went there and they were buying this at the factory where they knew they made it and where there was a large sign upon which was displayed the words "Oleomargarine and Butterine." There was not a person there who could, by any construction that anybody could put upon the circumstances, be said not to know that he was buying butterine.

Senator BLAIR. What prices do they pay?

Mr. COY. I asked, and they said, I think, they were selling it at from 9 to 10 cents a pound.

Senator BLAIR. These people were consumers?

Mr. COY. Yes, sir.

Senator BLAIR. And were getting it at 9 or 10 cents a pound, the wholesale price, and they got an article which they knew they were buying?

Mr. COY. There is no question about their knowing it. I asked Mr. Cuddy, who is one of the members of the firm (I had some business with him), how much they sold in that way to consumers who came there to get it, and he said some days they sold as high as 2,000 pounds of it.

Senator JONES. Do they sell any genuine butter, or butterine and oleomargarine alone?

Mr. COY. They never pretend to sell anything but oleomargarine; they do not claim to sell anything else.

Senator BLAIR. And they sell it, and the purchaser gets it, for a low price?

Mr. COY. Yes, sir. I understand that 10, 12, and 14 cents are the prices of the three grades which they retail there at their establishment, and they are selling now from 500 to 1,000 pounds at their establishment a day.

Senator BLAIR. What is the price of butter in Chicago?

Mr. COY. The last I bought there from a farmer who came into town cost me 35 cents.

Senator BLAIR. If the circumstances were such that that 10-cent article could be sold to people who did not understand it at 35 cents, there would be room for protection. But these are honest gentlemen, who make an honest article, which they sell for an honest price. The grievance complained of is that other circumstances intervene in other cases, so that a 9 or 10 cent article is sold for 35 cents to the man who cannot detect the difference.

Mr. COY. That is the point I was trying to make a few moments ago, how to do away with this prejudice, and do away with this cry that there is something wrong in this article. As one of the gentlemen who is in favor of this bill stated, the grocers have had to sell it for butter because they could not sell it as oleomargarine. But if this product can be put upon the market at the price they sell it for there, and people know what it is, this prejudice that has been created by people saying that it is poisonous, &c., could be done away with, and then the laboring classes of people all over the country would buy it.

I say if you pass a law like this and require these people to pay a license, and every man who sells it has to pay a license before he can offer any for sale, you "boycott" the business; you put it in such a shape that they can never send it out to the country where men can buy it and know just what they are getting and pay the reduced price for it. The trouble with this thing in Boston is, as has been stated, that they have been saying that this article is poisonous. It looks just like butter, but, as they say, when a person offers it cheap they will not buy it, and then the dealer puts a higher price on it and they buy it readily. If this prejudice could be done away with, the article would sell upon its merit. I never have seen a prejudice created which was dying away so fast as the prejudice against oleomargarine is dying away in the communities where they are using it and know what they are getting.

The CHAIRMAN. What is the objection then to having it inspected, branded, licensed, and sold for what it is?

Mr. COY. One objection is this: The objection to the licensing is that it is a commodity wholesome as an article of food, and which goes into general use in the place of butter, which is the most commonly used article throughout the country, and when you go to licensing you license the manufacturer and you license the wholesale dealer. Nobody pretends but what every wholesale dealer knows that he is buying oleomargarine when he buys it. But you make him pay a license, and you make every man who keeps a store at the cross-roads, or in a town, pay a license be for he can offer it to anybody to let them see what it is and let them become accustomed to it. You make him pay a license of \$48 and it amounts to a prohibition. You cannot introduce it under those circumstances. You boycott and prohibit it by your licenses and taxes. The law would tend to make all people more dishonest. I hold that to tax this property, if it is a wholesome commodity, in order to make people pay more for butter, or to pay more for cheese, is as unjust a proposition as was ever offered to any legislature, under the spirit of our institutions.

The CHAIRMAN. I do not understand your answer. You commenced telling us about people who bought it knowing what it was, and then stated if the retail dealer of the country had to have a license it was equivalent to boycotting it. Then you state that the prejudice is wearing away. Now, is it not better, if the article is good and wholesome, that it should be put squarely on its own merits, and sold everywhere absolutely for what it is, and let it work its way into the favor of the public if it can?

Mr. COY. Yes, sir; and anything that would bring that about I am in favor of. I would advocate the selling of it for just what it is.

The CHAIRMAN. Any legislation that would secure that result absolutely would meet with your approval?

Mr. COY. Any legislation which would place this article before the public so that everybody would know exactly what he was getting would meet with my approbation. It is understood at the present time that the mass of the people who use it are the poorer or laboring classes, and they buy it because it is cheaper than butter, and if you tax it—

The CHAIRMAN. We do not care to go into the question of taxation; that has not been discussed much. We are not getting at the details of legislation which must be settled by a legislative body. What we are trying to get is the opinion of people as to some general plan to be adopted. Whether it shall be done by taxes, licenses, inspection, or any other processes known to the laws is a question that the committee do not care to hear much about; that is a question of opinion. We want to know how it is sold and made, and whether it finally makes its way, when sold, upon its own merits.

Mr. COY. There is one thing I omitted to say. It has been my conviction that the manufacture and sale of oleomargarine, instead of depreciating the price of good butter, really enhances it. That was my idea when I came away from home, and I find that Mr. James Hewes, who is president of the Produce Exchange of Baltimore, stated to you on a previous occasion that when this matter first came up, when oleomargarine began to compete with butter, he says he thought they would defeat it by making good butter; but he says the men who manufactured these articles were sharp and went to where good butter was made and put up the prices of good butter until they could not get butter without paying fictitious prices, because the oleomargarine men bought it and used it in their manufacture. I believe that corroborates the statement of Mr. Webster here, that the butter they use in this product is the best butter they can get. I believe from what I have known and seen of

these articles that first-class butter will bring a better price in consequence of them, and that they only compete with second-class butter after it is put on the market. I was glad, in looking over the evidence, to see that his opinion coincided with mine upon this subject.

There can be, it seems to me, but one question about this. With a tax such as is proposed by this law, this article cannot be put upon the market and sold for what it is, so that people may buy it knowingly. I believe it would be a great blessing to the people of this country. Surely economical men, if this is just as delicious to the taste and smell and answers every purpose of butter, will buy it, and the people generally will lose their prejudice against it if these restrictions are not put upon its manufacture.

Senator BLAIR. How would you attain that end; what legislation would you have to accomplish that purpose?

Mr. COY. I think if the dairymen themselves would speak of it just as it is, instead of trying to scare and prejudice people against it, and let it be sold for what it is, I think it would accomplish every purpose desired; but how to accomplish that, I tell you frankly, I do not know.

Senator BLAIR. Here are just two senses you can appeal to if you want to find out whether it is oleomargarine or not, the taste and the eyesight. You do not handle it; you keep your fingers out of it. It is conceded you cannot tell the difference by the taste of most people; then what other sense is there except that of sight to appeal to?

Mr. COY. That is about all there is for ordinary people.

Senator BLAIR. If you make a difference in the color, have you not got the only earthly test there is?

Mr. COY. That I think is the only real test. But I tell you in five or six years from now, if you color this oleomargarine black, these second-class butter fellows will be imitating it by coloring their butter black.

Senator BLAIR. It is very likely that butterine may sell better than poor butter. But the oleomargarine people will never pretend that oleomargarine is better than good butter.

Mr. COY. I will make this one suggestion, which will cover the idea I have about it, and then I will not say anything more, because there has been a great deal said upon this subject. The Egyptians, in the dark ages, at the time of the building of the pyramids, worshipped a bull, an idol, and in the days of Moses the people fell down and worshipped a golden calf. If this bill becomes a law in the present Congress we may have the spectacle presented of an altar being erected in America, in the nineteenth century, for the worship of the dairy cow, and a law prescribing sacrifices more galling than any hideous god ever made; because every man, woman, and child, without regard to age or color, health or sickness, three times a day, will have to sacrifice some of their hard earnings upon this altar, or, as a penance, eat dry bread. If you pass this law you prohibit the manufacture, sale, and use of oleomargarine, and you put it into the hands of the dairymen so that they can charge an advanced price for butter, or fix whatever price they see fit, and the poor people throughout the country have to go without or pay those exorbitant prices.

The CHAIRMAN. What did they do before this wonderful invention was discovered?

Mr. COY. They went without, I suppose; that is, they could not afford to pay for butter.

Senator BLAIR. Butter was not so high?

Mr. COY. No, sir; the price was not as high. These ravages in New England had not commenced where the oleomargarine has rotted down the houses.

Senator SAWYER. Do you believe that there is any other way to regulate it besides coloring it? Could there not be a license tax, a light tax, so that the Government could control it and so that it would be absolutely certain that it was sold for what it was without doing any injustice to any one?

Mr. COY. I do not know but what that could be accomplished.

Senator SAWYER. There is no way for the Government to deal with this matter unless they do it through a tax; at least I do not know how it can. But if the tax was made a light one, so that the Government could absolutely control the matter and know absolutely what was done, it would not increase the price very seriously.

Mr. COY. The only sure way that I can see to regulate the matter is the way designated by Senator Blair, to color it. But I am not here to recommend that.

The CHAIRMAN. Do you know what the cost of manufacture is?

Mr. COY. No, sir; I have no knowledge on that subject except from hearsay.

The CHAIRMAN. Do you know what the wholesale price is?

Mr. COY. I do not; I could only tell from hearsay.

The CHAIRMAN. What do you understand the retail price of it is?

Mr. COY. The retail price in Chicago, where it is sold, where they go to Armour & Co.'s factory—

The CHAIRMAN. I do not refer to that; I refer to the price after it is sold by the retail dealers throughout the country.

Mr. COY. I suppose it is sold at from 12 to 15 cents, but I do not know positively about that. That is my idea of it, that it is sold for several cents less than butter.

The CHAIRMAN. If it is sold for just what it is, so that everybody knows it, it will not be likely to be sold very much above its actual cost, will it?

Mr. COY. I think it would be sold for a fair and square profit, like any other commodity, if everybody knew just exactly what they were getting. I think it would be better for the manufacturers dealing in it.

The CHAIRMAN. It would be better for the consumer to buy it at a fair profit on the cost, instead of paying the same price as for butter, as frequently is done?

Mr. COY. Yes, sir.

The CHAIRMAN. Would it not be sufficient to the manufacturer and offset any prejudice that has been created in regard to it if it were sold at actual cost price with a fair profit added?

Mr. COY. I think it would, but how to get at it is another thing.

The CHAIRMAN. It would seem as though if it were sold for what it was the consumer would get the profit instead of the middle man.

Mr. COY. All the objection I can conceive that anybody could have to the sale of this article is that it is sold for butter instead of being sold for what it is. When you come down to the facts of the case that is all there is of it. But I do not know that people who offer it in this way are any more entitled to be called swindlers and other hard names than those who make white butter and color it so that it looks like good grass butter; it amounts to about the same thing. But if people can get this article, and know just what they are getting, and are sure they are getting what they pay for, I think it would be better for the manufacturer, the consumer, and everybody else.

Senator SAWYER. Do you know of any way in which we can do that? Could we do it by imposing a light license or a tax? I would like to get your judgment in regard to that.

Mr. COY. I have thought about that matter considerably and am free to confess that it is an enigma to me. Here are other branches of business; for instance, the manufacturing business where they mix cotton with woolen goods. I might mention other branches of business in the same way. You cannot legislate to make men honest.

Senator BLAIR. No, but you can legislate to save others from the consequences of their dishonest.

Mr. COY. You can if you can contrive some way that will just fit the case, but that is a pretty difficult thing to do.

The CHAIRMAN. Have you anything further to add?

Mr. COY. No, sir; I have not.

STATEMENT OF PETER COLLIER.

Prof. PETER COLLIER, of Chicago, ex-chemist of the Department of Agriculture, then addressed the committee.

As it seems to be the rule to give one's agricultural pedigree, I would say that I am a great-grandson of a New York farmer, a grandson of a New York farmer, and the son of a New York farmer, and formerly was connected with farming operations myself.

I have been for twenty-five years of my life devoted to the interests of agriculture and am to-day. I have only a personal interest in this bill which is before the committee. I have read the statements which have been made by many gentlemen high in official position and of acknowledged influence in the country, and I feel that statements which have been made, some of them this afternoon, are alarming in their character; and it is because I feel that their conclusions are not justified, that their statements are incorrect, that I am anxious to present what I have before you.

I think that in this matter it is of the utmost importance that a proper diagnosis of what is really a serious case should be made, and I think this bill proceeds on the principle that a very erroneous diagnosis has been made of this disease; but if you will give your attention to the matter, as you are doing, with a proper diagnosis you might legislate in some way to correct what we admit is an acknowledged evil.

I would say that for ten years I was living in Vermont, and was secretary of the first board of agriculture they had there, and remained in that position for years. I am familiar with all this testimony which has been given in regard to the depopulation among the farming people of Vermont. That was common in 1872 and 1873, long before Mège even discovered oleomargarine.

Now, in regard to some of the facts, I have prepared here simply a series of diagrams. They are all based upon facts which were collected long before any thought of the use to which they would be put was raised. They are gathered mainly from the Bureau of Statistics of the Treasury Department and from the statistical division of the Agricultural Department. Allow me to quote one or two things which have been claimed that I propose to disprove. For instance, Mr. Moreland, secretary of the American Agricultural and Dairy Association, says: "I stand here to speak of the capital invested, 16,000,000 cows, worth in the aggregate \$600,000,000." He also says: Had it not been for this oleomargarine fraud, instead of 16,000,000 of dairy cows in this country there would to day be 25,000,000, and this vast number of cows would be worth \$1,000,000,000." Again he says: "Our farms have depreciated in value for the reason that there is no demand for our dairy products."

Mr. Joseph H. Reall, president of the American Agricultural and Dairy Association, says: "I speak in behalf of the owners of 15,000,000 milch cows, employed in the production of butter and cheese, worth \$600,000,000, at \$40 per head." Again Mr. Reall says; "The industry affected by this fraudulent traffic is a principal one in Vermont, New York, New Jersey, Pennsylvania, Ohio, Illinois, Wisconsin, and Iowa, while it is an important one in Massachusetts, New Hampshire, Michigan, Indiana, Minnesota, Nebraska, Kansas, Missouri, Tennessee, and Kentucky." He says: "We have kept away from Congress for ten years, trying all other means, only to find the evil growing daily and the dairy business declining, until now we must have relief or the nation loses an important industry"—showing that these disastrous results have been going on for ten years. I speak of this because I have taken the last results of the Department of Agriculture, the report of 1884, and consequently can cover but eight of the last ten years.

With more authority, the chairman of the Committee on Agriculture of the House in his report, submitted on the 28th of April, favoring a tax of 10 cents per pound on oleomargarine, is reported to have said, that—

After an exhaustive examination the committee find that there are in the United States over 15,000,000 cows, producing annually over 1,000,000,000 pounds of butter, and 300,000,000 pounds of cheese, worth \$250,000,000; that an amount of milk of equal value is annually consumed, making the value of the annual products of the dairy interests \$500,000,000; that cows were worth on the average \$40 per head until the introduction of counter-fit butter, and are now worth but \$30 each, making a total loss of \$150,000,000 in milch cows alone.

I have here, gentlemen, some diagrams which have been prepared with great care, which show the average value of milch cows from 1870 to 1884; the number of milch cows in the United States from 1870 to 1886; the average value of principal farm crops from 1870 to 1882; the average monthly wages of farm labor from 1866 to 1882; the percentage changes in the acreage and values of the hay and all crops of the farm from 1874 to 1883; the exports, in pounds, of butter and oleomargarine since 1877; the fluctuations of value per pound of the butter and oleomargarine exported since 1877; the butter and cheese productions of Canada for the years 1851, 1861, 1871, and 1881; the average value per head of farm animals from 1870 to 1884, and the changes in values of farm animals by per cent. of values in 1870.

The diagrams and explanatory statements submitted by Professor Collier in this connection are as follows:

Diagram No. 1 exhibits the fluctuation in the value per head of milch cows in the United States, as also in the States of Wisconsin and Illinois from 1870 to 1884.

These figures are all taken from the statistical reports of the Department of Agriculture, the last annual report being that of 1884.

The Elgin Board of Trade, in a recent resolution declared that "the manufacture of oleomargarine has depreciated the value of all dairy cattle in these States (Wisconsin and Illinois) by at least \$10 per head." Since 1872 cows have been continuously lower than in 1884.

Diagram No. 2 shows the number of milch cows and their average value per head since 1870. It will be seen that there has been an uninterrupted and steady increase in the number of milch cows since 1870, without any reference whatever to the very great fluctuations in price, thus proving that the profits of the dairy at any period were regarded as being fully as good as any other branch of the agricultural industry, and that those profits were controlled by causes which oper-

DIAGRAM No. 1.—Average value of mitch cones, 1870-1884.

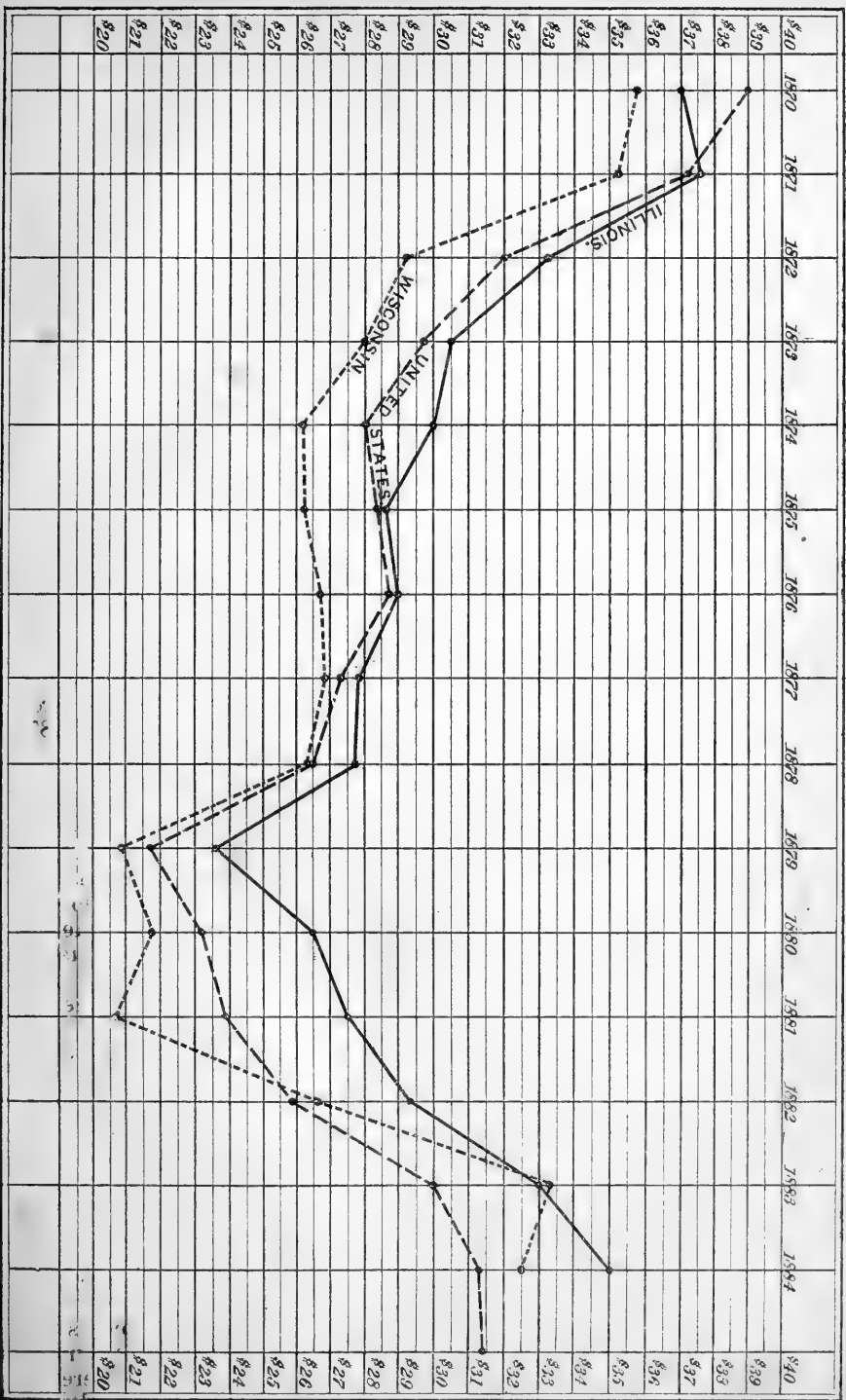
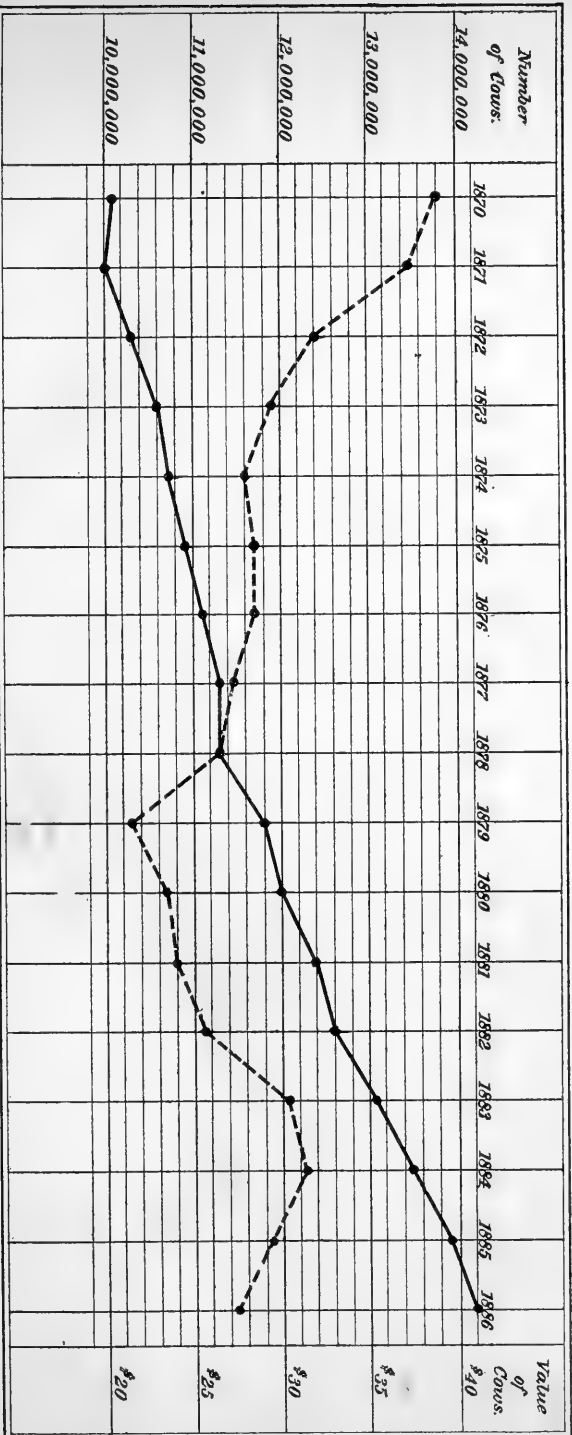


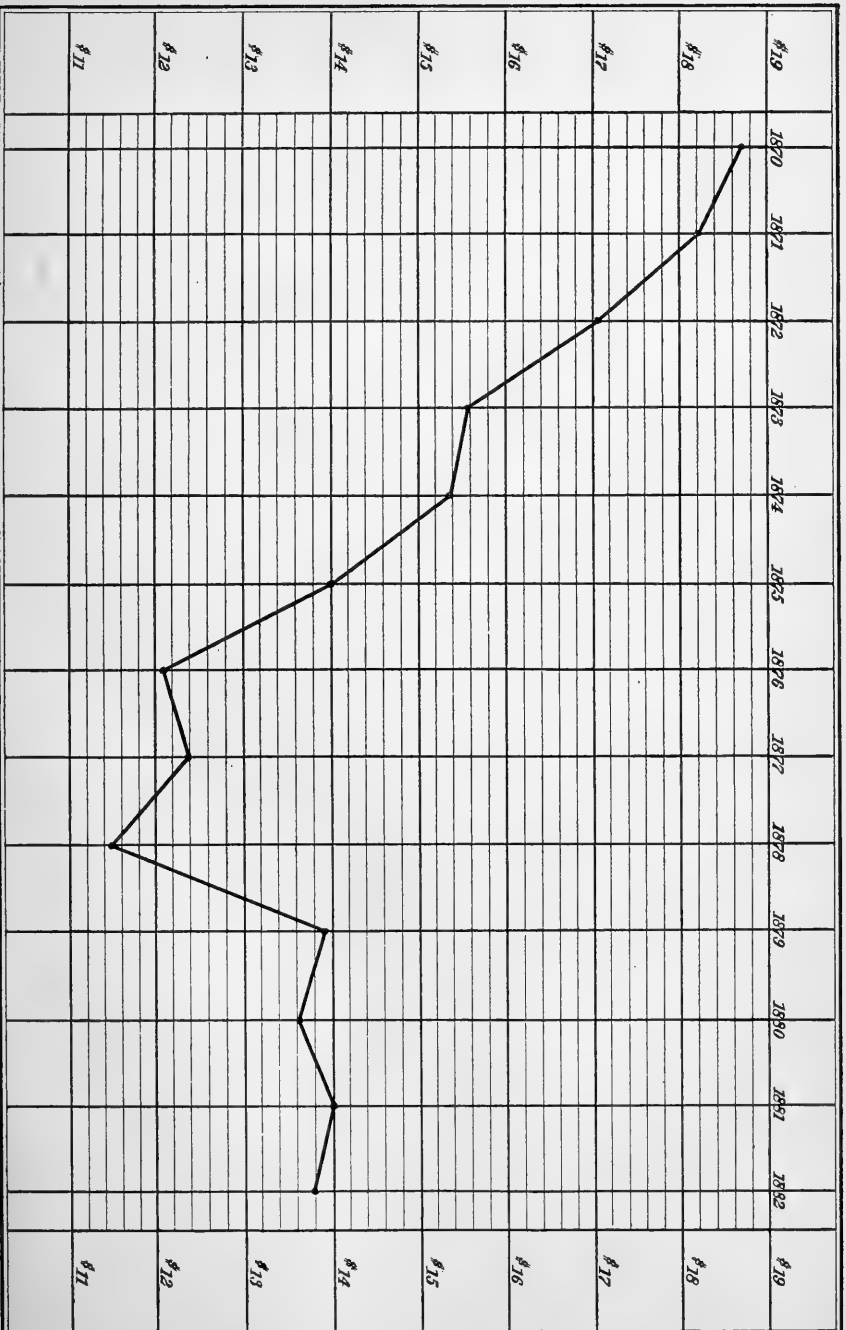


DIAGRAM No. 2.—Number of milch cows in United States of America, 1870-1886.



Dotted line is average value of milch cows, 1870-1886.

DIAGRAM No. 3.—Average value of principal farm crops, 1870-1892.



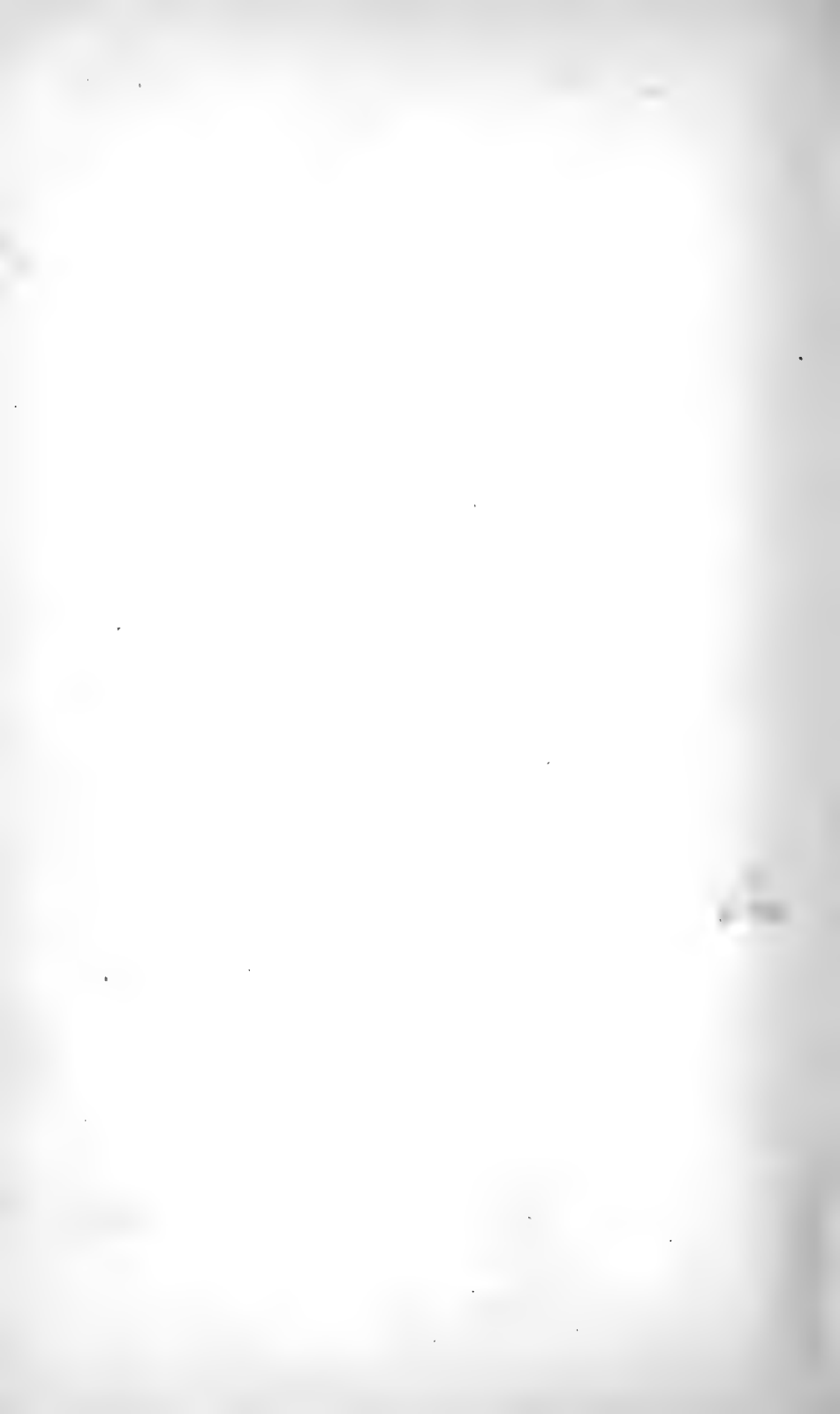


DIAGRAM NO. 4.—Average monthly wages, farm labor.

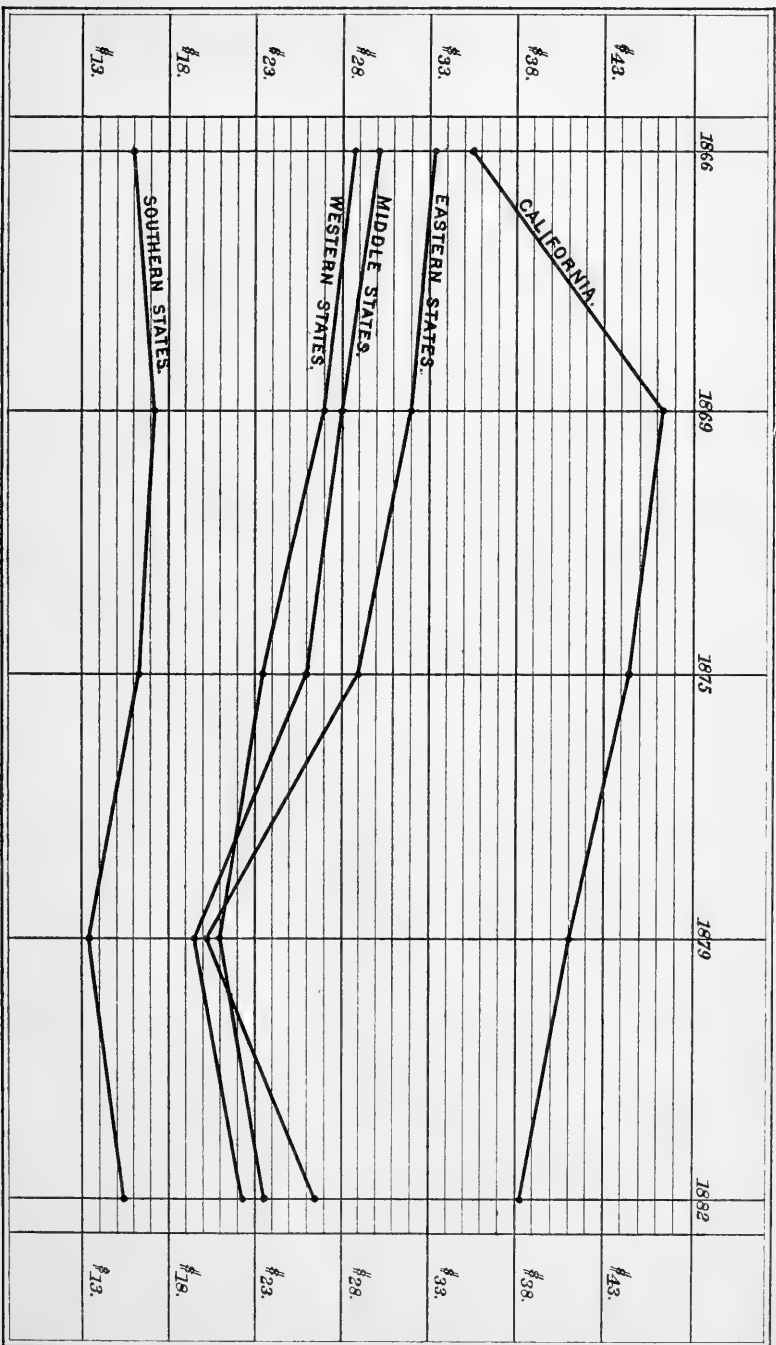
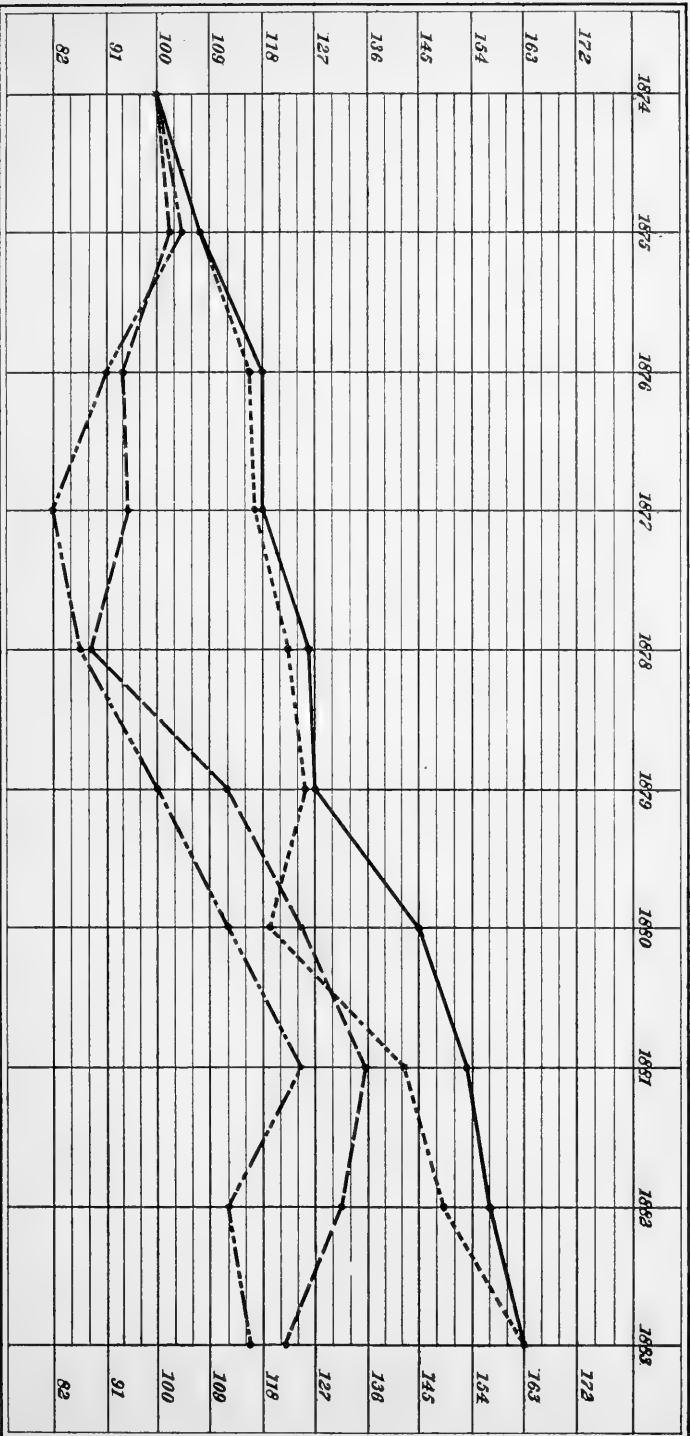


DIAGRAM No. 5.—Showing percentage changes.



Acreage, all crops ———
 Acreage, hay crops - · - · - ·

Value, all crops - - - - -
 Value, hay crops · · · · ·



DIAGRAM No. 6.—Butter and oleomargarine exported.

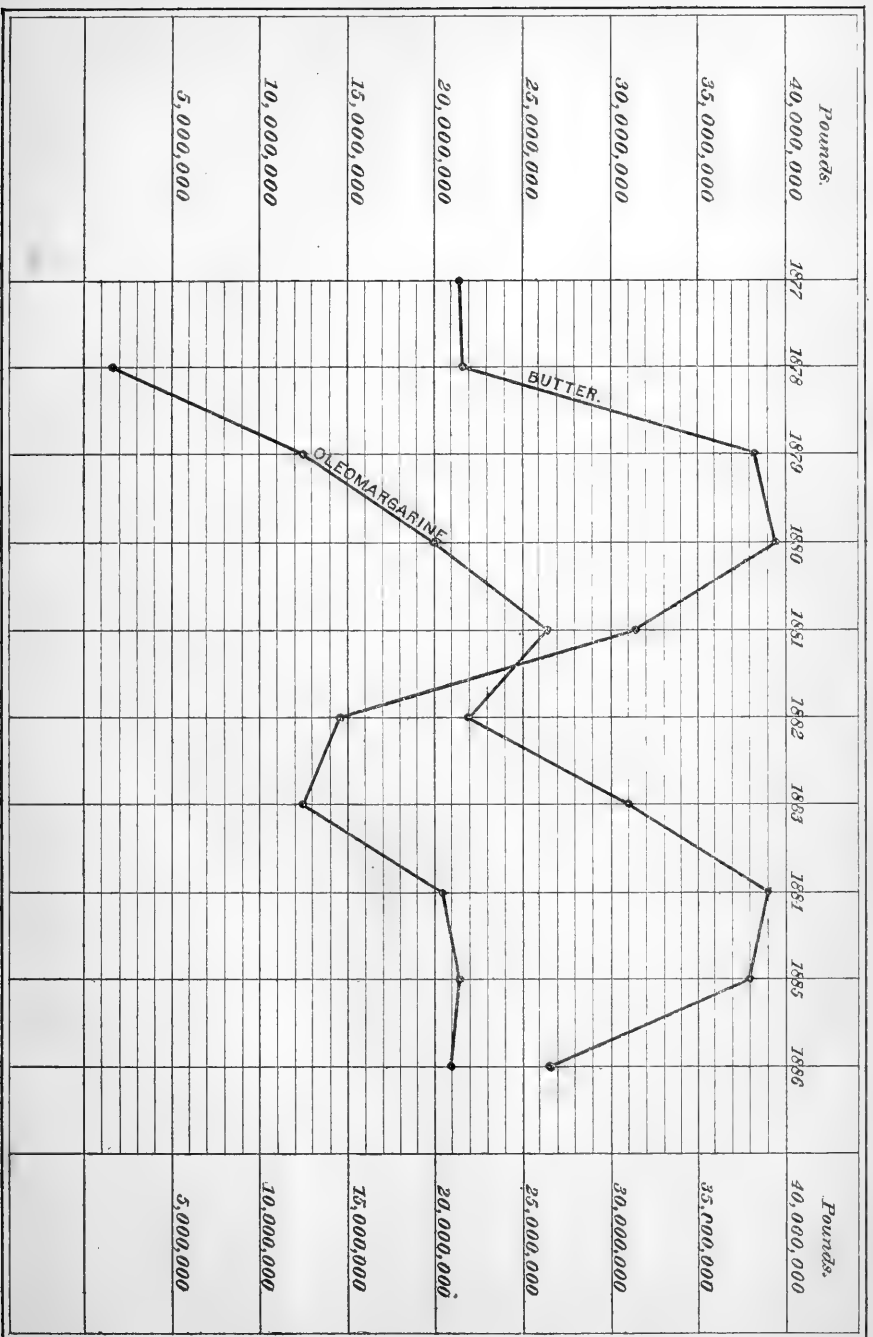




DIAGRAM No. 7.

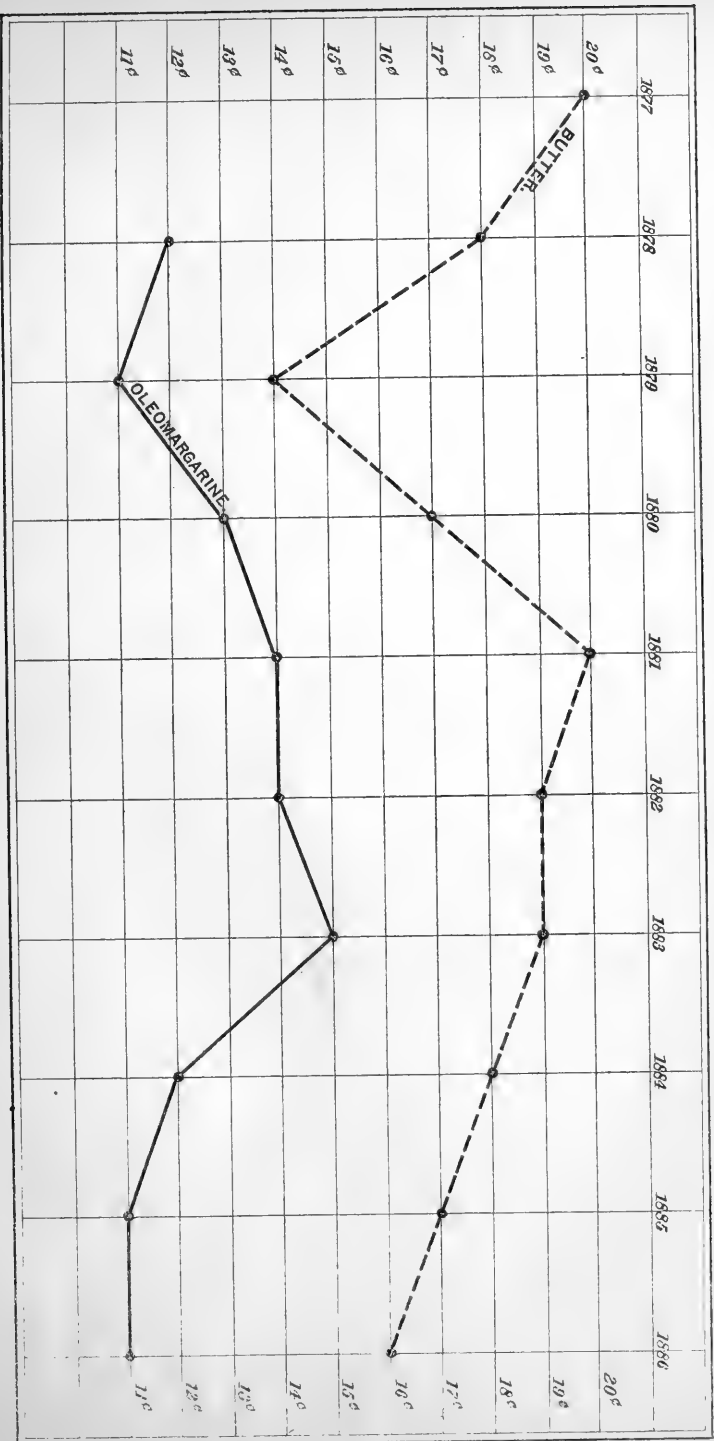
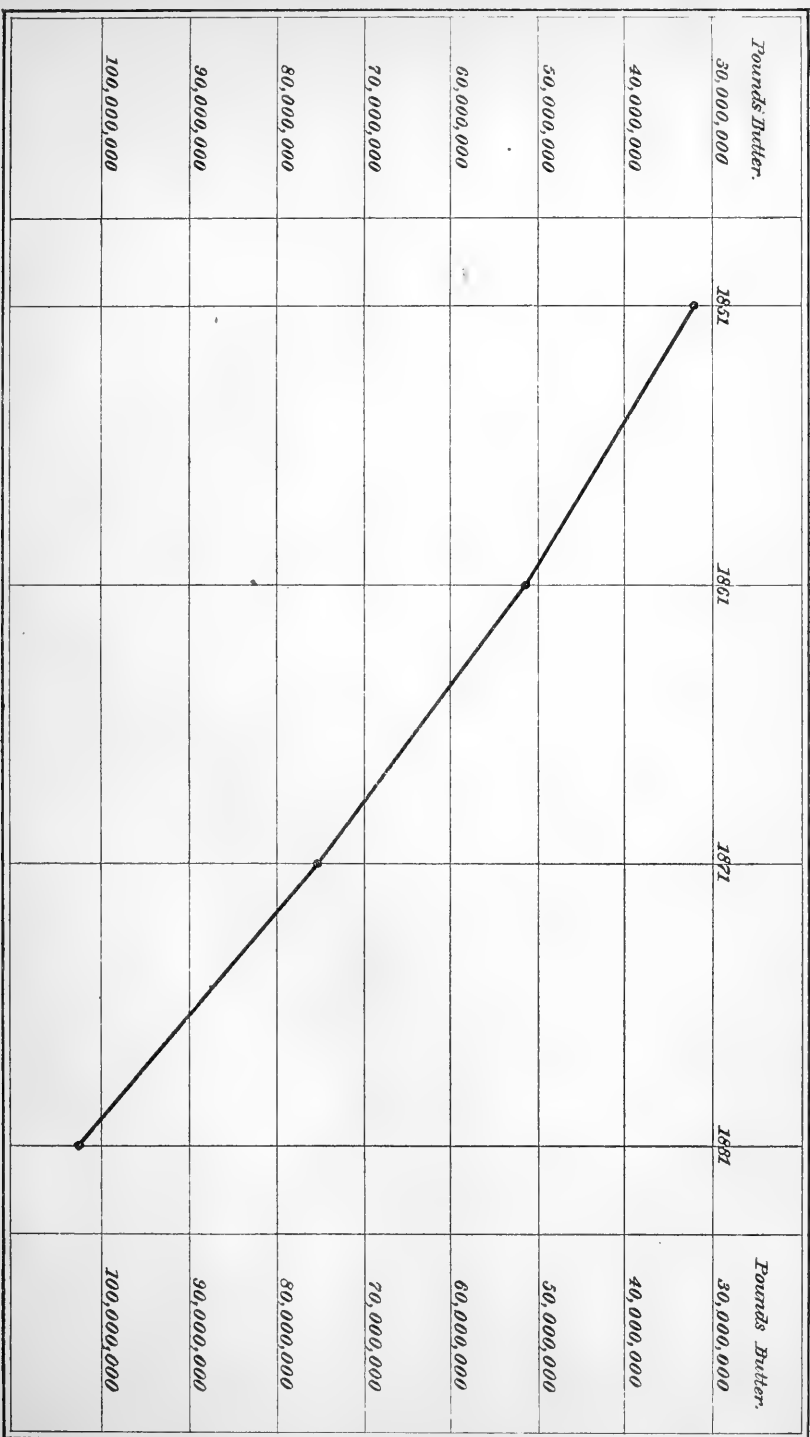


DIAGRAM No. 8.—Production of butter in Canada, 1851-1881.



ated largely upon all the industries of the country alike. Compare diagrams Nos. 3 and 4.

Compare with diagram No. 3 the one giving average value of milch cows, No. 1; also the one giving average wages of farm labor per month, No. 4.

It will clearly appear that similar causes operated in all three cases, and the past three years have seen prices for many products, in very many cases, lower proportionally than have been those of dairy products, as, for example, flour, pork, lard, beef, sugar, coffee, tea, and many other products of similar character. Wheat and corn have been and are almost phenomenally low.

Diagram No. 4 shows the changes in the average monthly wages of farm labor for the several sections of the country from 1866 to 1882.

They clearly show, as does the diagram No. 3, giving the values of farm crops, as also does diagram No. 1, giving the value of milch cows, that, "these remarkable fluctuations, from the highest rates after the war to those of the era of industrial depression and return to specie payments, followed by an upward swing of the pendulum," during the past three years we have also passed through a serious depression in all business, and prices have been unprecedentedly low.

Diagram No. 5 shows the percentage changes in the acreage and values of the hay and all crops of the farm from 1874 to 1883.

It will be seen that in the increase of value and of acreage the hay closely follows the total of all crops, thus showing that there has been no falling off either in the relative acreage or in the relative value of the hay as compared with the acreage and value of all the principal farm crops since 1874.

The acreages and values of the hay crop and of all crops in 1874 is taken as 100, and it will be seen that the acreage of each had by 1883 increased about 63 per cent. The total value of the hay crop had increased about 16 per cent., and of all crops about 21 per cent.

Diagram No. 6 shows the exports, in pounds, of butter and oleomargarine since 1877. It should be considered in connection with diagram No. 7, giving the prices of each, as also in connection with diagram No. 8, giving butter production in Canada.

It will appear from the prices that butter can hardly have been displaced by oleomargarine, and the very great increase in production of Canadian butter will explain the falling off in our exportations since 1880.

Diagram No. 7 shows the fluctuations of value per pound of the butter and oleomargarine exported since 1877. It will be seen that the prices have risen and fallen together, a result not in accord with the opinion that the one has displaced the other. This diagram should be considered in connection with No. 6, which gives the exports of butter and oleomargarine in pounds.

Diagram No. 8 shows the butter and cheese production of Canada for the years 1851, 1861, 1871, and 1881. The average exports of butter from the United States from 1871 to 1881 was 16,728,490 pounds, and it will be seen that the increased butter production of Canada from 1871 to 1881 was 27,372,646 pounds, nearly double our export of butter. This large supply from Canada has doubtless interfered seriously with our exportations.

It will be seen that while the butter production of Canada increased from 1851 to 1881 over 200 per cent. the production of cheese actually decreased.

Diagram No. 9 shows the fluctuations in value per head of farm animals from 1870 to 1884. It will be observed that they closely follow each other, thus conclusively proving that whatever cause or causes have been operative in increasing or decreasing the value of one have been operative in all. Compare diagram No. 10, which shows the change in percentage of value since 1870, and which shows, therefore, a more marked agreement between the changes of value in farm animals. This chart and No. 10 prove beyond a doubt that the prices for milch cows have not been exceptional.

Diagram No. 10 shows the fluctuations in values of farm animals from 1870 to 1884, by percentage of value. The value per head of each at 1870 is taken as 100, and prices each year since are given in per cents. of the value per head in 1870. It will be seen that they all show remarkable agreement; that they all attained the minimum price in 1879, and since then rapidly increased. Compare with this diagram No. 9, also Nos. 1, 2, 3, and 4, which fully confirm this and each other.

The CHAIRMAN. How are those figures compiled?

Professor COLLIER. From the records of the Department of Agriculture and from the Bureau of Statistics of the Treasury Department.

The CHAIRMAN. Will you turn back to the first chart in regard to the value of cows. You make the highest point of value at what year?

Professor COLLIER. The highest point is at 1870. They were then a trifle over \$39 per head.

The CHAIRMAN. That chart comes up to what time?

Professor COLLIER. The year 1885 is the last, and I secured that from the statistics presented, I think, by Mr. Henderson in the House. He used them, and I use his figures for the United States for 1885. I was unable to get them from the Agricultural Department.

The CHAIRMAN. What do the figures show for that year?

Professor COLLIER. That was slightly more than in 1884. It was about \$31 40, or something like that.

The CHAIRMAN. Does that refer to the whole country, or to the Western States only? I do not quite understand.

Professor COLLIER. It refers to the United States. I have here indicated also the values in Illinois and Wisconsin. They averaged a little higher in those States than in the United States.

The CHAIRMAN. Do you not think the average farmer of the country would be somewhat surprised to know or to be told by a statistician that his cows were worth more now than they were two years ago.

Professor COLLIER. This does not show what the value is now. I have no results except this one for 1885, which I got from Mr. Henderson's speech.

The CHAIRMAN. Where does Mr. Henderson's information come from?

Professor COLLIER. It was published in the Congressional Record. I think he got it from the Agricultural Department, an advance report which I was unable to get; but I get it from the published annual reports of which I have a set, and the last published was 1884.

The CHAIRMAN. I think the bulk of the farmers, so far as I know, would be delighted to know that their cows were worth more now than they were two years ago.

Professor COLLIER. This does not seem to assert that.

The CHAIRMAN. If they could only be made to believe it and could get the money it would be very satisfactory.

Professor COLLIER. But the figures from the Agricultural Department show that there has been a continuous increase in the average value from 1879 up to 1885. What it was for 1886 I do not know.

DIAGRAM No. 9.—Average value per head of farm animals, 1870-1894.

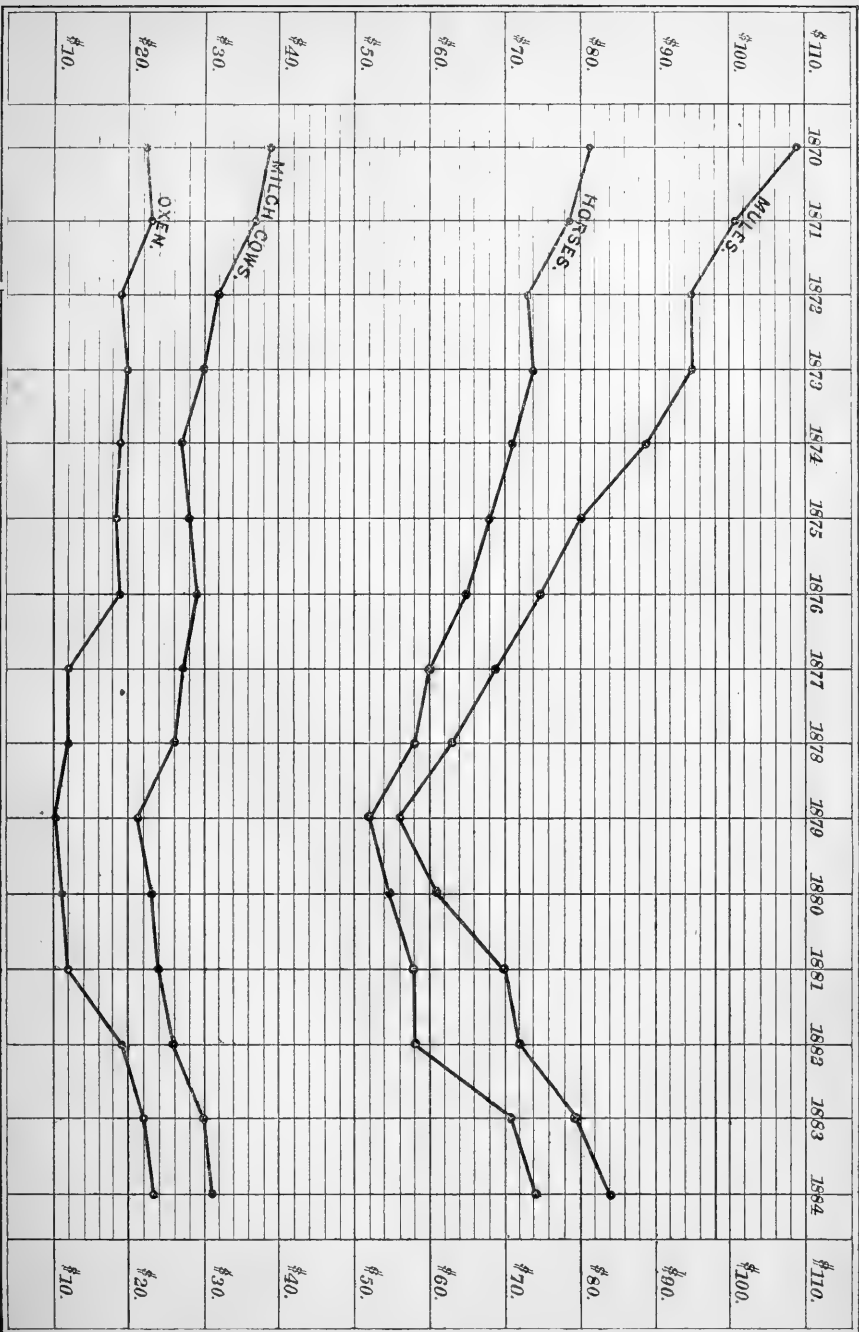
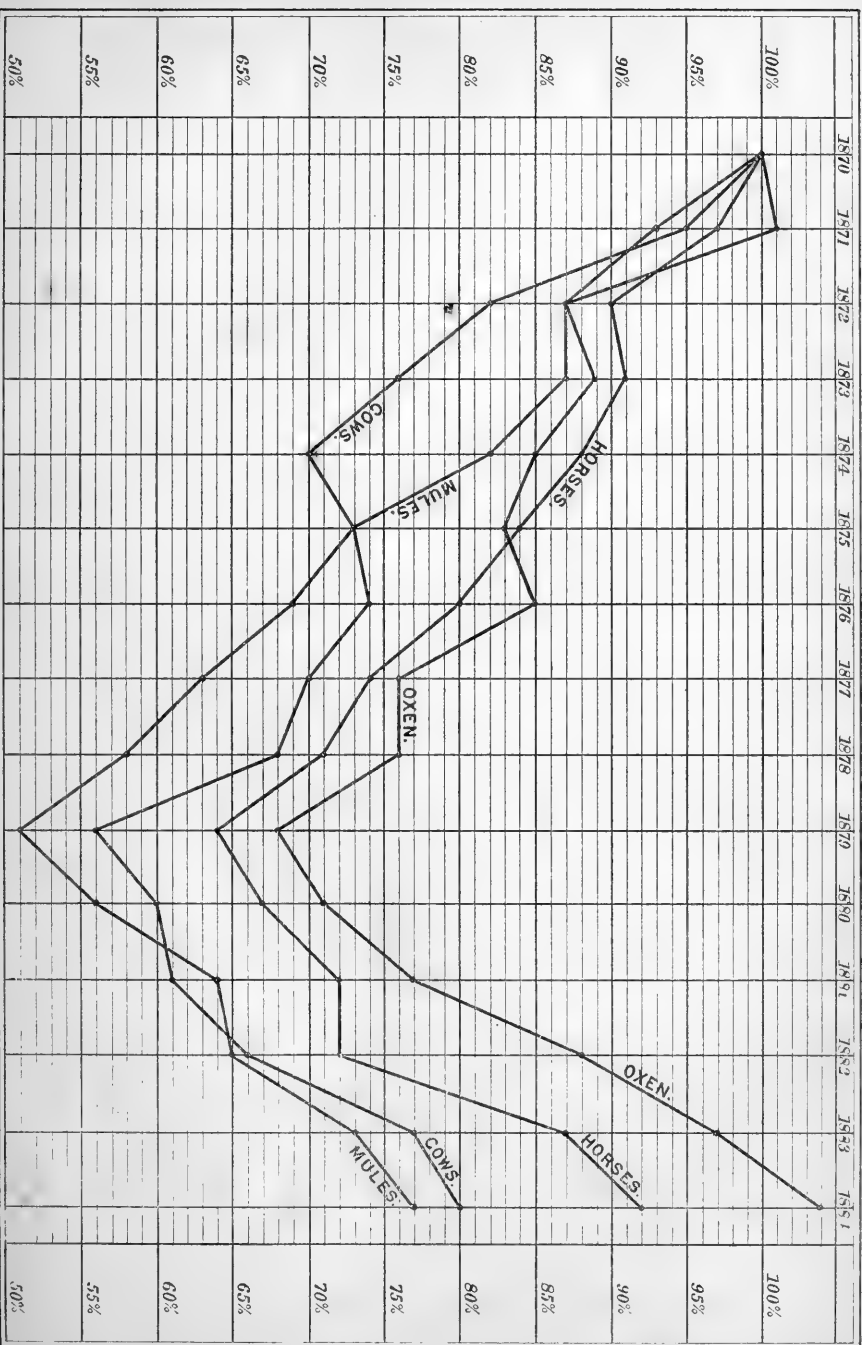




DIAGRAM No. 10.—Changes in values of farm animals by per cent. of values in 1870.





Senator BLAIR. I would like to ask a question or two of Professor Babcock. What are the principal substances which you obtain from the animal which are mixed with the dairy products and make the oleomargarine and butterine?

Professor BABCOCK. There are stearine, palmatin, olein and margarine. Those are the chemical names of well-defined fatty bodies, which are slightly modified in the fats of different animals, but belong to the same general class.

Senator BLAIR. I understood from yourself or Professor Morton that some of these substances are obtained from cotton seed.

Professor BABCOCK. A certain amount of stearine and more of the product known as olein are obtained from cotton seed.

Senator BLAIR. Are any of those substances obtained from other vegetable sources than cotton seed.

Professor BABCOCK. Oh, yes, sir; all vegetable oils, what are called fatty oils.

Senator BLAIR. Please mention some of the vegetable substances which yield them most freely and are most cheaply obtained by proper and suitable processes.

Professor BABCOCK. Palm oil contains less of olein and more of stearine, solid bodies, and is used for making soap largely.

Senator BLAIR. That comes from the palm tree.

Professor BABCOCK. Yes, sir.

Senator BLAIR. I want to know the vegetable growths from which these substances can be obtained most cheaply and plentifully.

Professor BABCOCK. Do you mean, to be used in making butter?

Senator BLAIR. Yes.

Professor BABCOCK. Palm oil is not of that character.

Senator BLAIR. I ask you what other sources of competition the dairy interests have by the taking of these outside substances and painting them the color of the dairy product.

Professor BABCOCK. There are a great many bodies which contain stearine, margarine, and olein. Perhaps, as a very general statement, it might be said that all fatty bodies contain one or the other of these in different proportions. So does butter. In addition to this pure butter contains 4 or 5 per cent., and that only, of quite a number of fatty bodies which give it a flavor. Some of those were mentioned in the list of dangerous poisons which it was alleged were referred to in the specifications of patents for making these compounds.

Senator BLAIR. Is there anything but cotton seed growing in this country that is likely to yield these oils to an appreciable extent so as to be utilized in the manufacture of oleomargarine or butterine, or any substance competing with pure dairy butter?

Professor BABCOCK. There does not at this moment occur to me any vegetable product other than cotton seed which would be likely to be substituted or used in that way.

Senator BLAIR. If cotton seed was utilized to as full an extent as it could be for that purpose, to what extent would it compete with the animal fats?

Professor BABCOCK. It must be solidified; it could not be used as a whole, because it is a fluid.

Senator BLAIR. How is that done?

Professor BABCOCK. By a mixture with solid fat.

Senator BLAIR. Which must come from the animal?

Professor BABCOCK. Yes, sir.

Senator BLAIR. There is no way of dispensing with the animal altogether?

Professor BABCOCK. I know of none.

Senator BLAIR. Then there must be some natural limit to the amount of oleomargarine and butterine which can be produced in the country?

Professor BABCOCK. I never heard any one of intelligence doubt that proposition.

Senator BLAIR. What is that limit, as it is in your mind?

Professor BABCOCK. I could not say. I do not know. I should have to guess at it; I have not any data at all. But the amount could be estimated (based upon figures which I have not) about the production of cotton seed.

Senator BLAIR. But probably cotton seed is not an important factor in this, is it?

Professor BABCOCK. No, sir, I think not.

The CHAIRMAN. Mr. Webster said they used but a very little of it.

STATEMENT OF ELMER WASHBURN.

Mr. ELMER WASHBURN, of Chicago, next addressed the committee:

Mr. Chairman and gentlemen of the committee: I am engaged in the banking business at the Union Stock-Yards at Chicago. I am a member of the Chicago Live Stock Exchange, and am here in company with two other members of that association, asking a hearing before your honorable committee upon the pending legislation "imposing a tax upon and regulating the manufacture, sale, importation, and exportation of oleomargarine." Our exchange has a membership of two hundred, among whom are the largest feeders, dealers, shippers, and slaughterers of live stock, the largest packers, canners, and shippers of meats, the largest margarine, and butterine in the world. We are here in the interests of shippers of dressed beef, and the largest manufacturers of oleo oil, oleo-the vast cattle-raising industry of the land, and in the interests of equal rights to all, and in the interests of the millions of consumers to whom this object of taxation proves a cheap, wholesome, and almost indispensable article of food, to earnestly, but respectfully, protest against the passage of the bill under consideration, and to present such facts as we have at command to justify our protest.

Referring to the cattle industry, and in order to give the committee a clearer idea of its magnitude and the consequent loss to the farmer by taxing one of its products, we will state that in the year 1885 there were received at the Union Stock Yards of Chicago 1,905,518 head of cattle. Of this number 1,322,385 head were slaughtered in Chicago, and at least 450,000 more were sold in Chicago and shipped alive for slaughtering in the East. From an average recently made from the books of our largest cattle-slaughtering house, it seems that during a period of four months ending 10th June, 1886, they slaughtered 147,893 head, which produced:

| | Pounds. |
|----------------|---------|
| Oleo oil | 28.1 |
| Stearine | 21.2 |
| Tallow | 12.2 |
| Total | 61.5 |

The value of which would be, at the average prices, for 1885:

| | |
|--|--------|
| 28.1 pounds oleo oil, 10 $\frac{1}{2}$ ¢ | \$3 02 |
| 21.2 pounds stearine, 6 $\frac{1}{2}$ ¢ | 1 45 |
| 12.2 pounds tallow, 5 $\frac{1}{2}$ ¢ | 63 |

Sixty-one and five-tenths pounds tallow at the average price for 1885, $5\frac{1}{2}$ per pound, equals \$3.19, which subtracted from \$5.10, leaves \$1.91 net loss per head if manufacture of oleo oil should be stopped.

In addition to this, the price of tallow would certainly be very much decreased by so large an addition to the supply. Figuring the amount of butter stock in a beef as shown by my statement, to wit, 61.5 pounds, at 3 cents per pound, which would not be too low for tallow with a largely increased supply, and we have \$1.84, which subtracted from \$5.10, leaves \$3.26 for the net loss per head. The net loss could not certainly be less than \$3 per head. It will be seen, as previously shown, that the number of cattle slaughtered in Chicago and sold there to be slaughtered in the East, amounted in 1885 to 1,722,385 head, and that the net loss on these cattle alone for one year at \$3 per head would amount to \$5,167,155. To this sum add the loss at same rate per head on the cattle slaughtered at other considerable points, and not coming to the Union Stock Yards of Chicago and not included in that estimate, which, although comparatively small, must reach 500,000 head, and we have a total loss on cattle, annually slaughtered at the slaughtering points, of more than \$6,500,000. Whatever tends to depreciate the value of fat cattle in the Chicago market tends to depreciate the entire stock of cattle on the ranges and on the farms and elsewhere in the country, and we think it would be pertinent to consider the loss that the passage of this bill would immediately entail upon the holders of the entire stock of cattle in the land, other than milch cows, which number some 31,275,000 head.

The CHAIRMAN. Would it interrupt you right there to ask a question? Of course that statement is based on the assumption that the passage of this law would absolutely stop the manufacture of oleo-margarine and oleo oil; you think none of it would be sold if it was compelled to be sold for what it is?

Mr. WASHBURN. If it was compelled to be sold for what it is I think it would be sold.

The CHAIRMAN. Then, if business went on after the bill was passed, and the goods were sold for what they are instead of something else, the consumption of oleo oil would continue to the extent to which the business was conducted?

Mr. WASHBURN. Yes; if the tax and other obstructions were not thrown in the way of its manufacture.

The CHAIRMAN. The loss is based entirely on your own figures. In making those figures you have counted out not only the oleo but the stearine also, and reduced the price of tallow, in case tallow was made, to $3\frac{1}{2}$ cents per pound. Before oleo was made at all, stearine was extracted from the fat of the beef and used for making candles and for other purposes, and would continue to be, even if the business of making oleo oil were entirely abandoned.

Mr. WASHBURN. I do not know; I could not say as to that.

The CHAIRMAN. It would be fair to assume, perhaps, that a business carried on for many years would still continue, even if the business of making oleo ceased entirely. I do not see how you can afford to assume that this entire business is to be stopped by this bill, unless you go to the other extreme and say that it will not be sold at all if sold for what it is.

Mr. WASHBURN. That is the impression among all the manufacturers.

The CHAIRMAN. You think that is their idea; that if this bill were to become a law the entire business would be given up?

Mr. WASHBURN. Yes sir.

The CHAIRMAN. That must be then on the ground that it cannot be sold under its own name and upon its own merits. However, I will not interrupt you further.

Mr. WASHBURN. The largest interests to be indirectly and injuriously affected by the passage of this bill are the interests represented by our exchange, amounting in values invested to \$100,000,000, and giving employment to 30,000 men, upon whose daily wages 90,000 people subsist.

It has been claimed by the dairymen, or some one representing them, that competition with butterine and oleomargarine manufacturers has been so destructive to their interests that it has compelled the sale, at a great sacrifice, of as many as 300,000 milch cows in one year, at the Union Stock Yards of Chicago. The facts do not justify any such statement. In 1885 there were slaughtered at the Chicago yards 117,794 branded or range cows; 83,925 native cows; total, 201,729. The branded or range cows were never fit for, nor used as, milch cows. Of the total number of native cows at least 90 per cent. were totally dry, and, by reason of age or barrenness, wholly unfit for milch purposes. The other 10 per cent. could not be called good milch cows, and found their way to the slaughter houses because of vicious habits or for similar reasons. It is not true that cows fit for dairy purposes are slaughtered in Chicago in any numbers, as they always sell readily to dairymen for more than they would bring for slaughtering purposes.

It is further claimed that this competition is fast destroying the export trade in dairy butter. There must be some mistake in that claim; for, while the statistics show that our exports of cattle, salted beef, tallow, lard, cheese, and butter were considerably less during the first five months of 1886 than the first five months of 1885, both in the aggregate and in separate items, the statistics also show that of all these articles the exports of butter alone during the month of May, 1886, show a marked increase over the month of May, 1885, while they show a marked decrease in the exportation of all of the cattle and hog products for the same time. My statement in relation to these exports may be easily verified at the Bureau of Statistics.

The CHAIRMAN. How do you account for that?

Mr. WASHBURN. I am unable to account for it.

The CHAIRMAN. Is it not a commercial fact that butter only goes abroad according to the range of the foreign price; that when butter is low in New York City it is shipped abroad, and when it is high it does not go abroad at all? If butter was lower in May, 1885, than usual, the tendency would be to export it until it reached the export price or became too high to export.

Mr. WASHBURN. When the butter market is low, of course the export trade is larger. The bill under consideration provides that the manufacturer of oleomargarine, butterine, &c., shall be taxed \$600, the wholesaler \$480, and the retailer \$48 per year. I would respectfully call the attention of the committee to the tax at present required of those engaged in rectifying and dealing in liquors, and dealing in tobacco, to wit:

| | |
|--|----------|
| Rectifier, according to capacity, \$100 to | \$200 00 |
| Wholesale liquor dealer | 100 00 |
| Retail liquor dealer | 25 00 |
| Wholesale dealer in malt liquor | 50 00 |
| Retail dealer in malt liquor | 20 00 |
| Dealer in manufactured tobacco | 2 40 |

I will also add that the honorable Commissioner of Internal Revenue in his report for the fiscal year ending June, 1882, recommended the

reduction of all of these taxes (except that of the dealer in manufactured tobacco, which has since been reduced from \$5 to its present sum) 40 per cent., and at the same time he said: "The supervision over dealers in taxable articles, which experience has shown to be necessary in order to fully and fairly collect the taxes from all alike, would still be preserved." So it can be seen that our Bureau of Internal Revenue has, at one time at least, considered only the smallest sum of taxation necessary in order to maintain its supervision over taxable articles.

We do not want and are not willing that any tax should be placed on these food products; we deny the right to tax them until the proceeds of such taxation are needed for revenue, and then we will bear the burden manfully and pay the tax without defalcation or discount. We only want to be let alone to pursue an honest living in an honest way. While we can neither see nor understand any legitimate reason for taxing these products in any sum, it is still more difficult for us to understand why (if indeed any one has conceived any legitimate reason for taxing them in any form) it is proposed to make the tax so largely in excess of the amount levied upon persons engaged in manufacturing and selling liquors and tobacco. We can neither discern sound policy nor justice in taxing the manufacture of a wholesome food product three or six times as much as a manufacturer of alcoholic drink, nor the wholesale dealer in the food four and four-fifths times as much as the wholesale dealer in whisky, nor the retail dealer in the food twice as much as the retail dealer in whisky, nor the wholesale dealer in the food nine and three-fifths times as much as the wholesale dealer in beer, nor the retail dealer in the food twice and two-fifths times as much as the retail dealer in beer, nor the retail dealer in the food twenty times as much as the dealer in tobacco. In short, it is proposed by this bill to tax an industry which is supplying a wholesome and almost indispensable food product, and to make that tax very much heavier than the tax already levied by the Government upon a calling which, in part at least, is stuffing our almshouses, cramming our jails, filling our prisons, and supplying candidates for the gallows. We cannot satisfactorily account for this proposed inconsistency, and fancy that it will be hard indeed for candidates on the stump to explain why it is that a poor man must pay 25 to 30 cents per pound for an abominable and unwholesome article of dairy butter, when but for the passage of this bill he would have buttered his crust for 10 to 12 cents per pound with a sweet, pure, and wholesome article of oleomargarine.

A word in relation to the purity and healthfulness of these products. I have frequently visited our manufactories of oleo oil, oleomargarine, butterine, &c., and I have always found them cleanly and in good order, and have never seen or heard of anything of a suspicious or doubtful character being used in or about these works. I recently went through one of our factories with a party of some dozen gentlemen from Boston and surrounding country, and they all expressed themselves well satisfied with the product and the methods of its manufacture, and declared themselves "converts to butterine."

Our manufactories of these products are situated in the town of Lake, adjoining the city of Chicago on the south. This township has a population of 60,000, and it is safe to say that 90 per cent. of them, rich and poor, eat this imitation butter. I have been engaged in business in that community three and a half years, and have never witnessed but one funeral procession, and I believe that there is no land under the sun where the human race is more prolific, or enjoy better health. For the past three months I have used oleomargarine exclusively, in

lieu of dairy butter, and in a house-keeping experience of twenty-five years I have never before known what it was to have uniformly good butter for that length of time.

It is claimed by the dairymen that the manufacture of oleomargarine and butterine is interfering with their business and rendering it unprofitable, and if continued, that their occupation will be gone. While we do not admit the existence of such conditions, we are forced to ask, what if they do exist? Is it sound public policy, is it lawful, to tax one industry to support and perpetuate another?

Paths of commerce change and vast cities go into decay. The march of improvement lays a heavy hand upon some industries and builds up others. Such has been the history of the world, and such may be the result of honest competition. And to quote an eminent lawyer who has written well upon this subject, "the dairyman is only having his share of the burden of advancing civilization." And we now submit that if any legitimate reason exists for taxing and supervising the manufacture of butter made from beef fat and cream, the same reason exists for taxing and supervising the manufacture of butter claimed to be made from cream alone.

Our interests are immense and varied. Competition presents many rough corners, and we naturally guard with jealous care the reputation of our market. For doing this, parties representing the dairy interest here have sought to stigmatize us with the name of "stockyard gang."

But in closing, I wish to assure the committee that the stockyard gang never will appear in Washington extending the hand of a mendicant to Congress, and beseeching them to tax the daily food of every man, woman, and child in the land to perpetuate a waning business, to use the language of the dairymen, "to set us on our feet."

STATEMENT OF D. C. WAGNER.

Mr. Chairman and gentleman of the committee: I came here at the instance of the Live Stock Exchange of the city of Chicago with a delegation, of which Elmer Washburn, esq., is chairman, and Hon. Iras Coy and myself members. The Live Stock Exchange represents an industry compared with which the dairy business cannot even claim second place. I shall not attempt to give you comparative figures. These you already have, and if "figures don't lie," you will have had all you want to arrive at an intelligent conclusion. I will simply submit that, in my humble judgment, you will first have to decide the question upon which all other questions relating to this problem hang, namely, are each and all the component parts that make up and finish the product known and sold as oleomargarine, butterine, &c., wholesome, healthy human food? If yes, then I apprehend you will have done all you consistently can or ought to do as between domestic competitors. If, however, on the other hand, you decide that this product is deleterious, injurious, or hurtful to health, then, through the health department, condemn and prohibit its manufacture and sale. Otherwise let it take its place legitimately in the commercial world on its own merits.

After the question of healthfulness of the product shall have been established the demand for the consumption of the product will only be circumscribed by taste, superinduced or limited, as the case may be, by one's necessities. Taxing an internal product, unless it be a luxury, will hardly be tolerated in times of profound peace, and I imagine that the

friends of this bill would hardly consent to the distinction when applied to this product. Personally, I never expect to habitually use oleomargarine or butterine in my family, not, however, because of any scruples or prejudice in the matter, but simply because I have farmer friends who supply me, and have for many years, with the old-fashioned home-made butter, churned in the old spring-house manner. But there have been times in the past when, for various reasons, we failed to get our glorious old-fashioned butter in time, and then has come our discontent. On one of these occasions, not many months since, I asked the butler or steward of a restaurant, where I have been taking one meal per day for years past, where he got his butter; it was good, nearly, if not quite, as good as my old country butter; in fact, he always had good butter, even before butterine was made. He answered by saying it was butterine. Well, I did not then believe him, but upon investigation the story of the butler was duly corroborated, and not only so, but I found I had been eating it once a day for months. I am quite sure you will ask me whether I still like it as well as I did before I knew the name of it. Well, I don't care to answer that question directly, but will say that whenever I get short on my old-fashioned country home-made article, I shall buy this much-abused butterine in preference to the so-called dairy butter commonly on sale in the Chicago market.

STATEMENT OF GEORGE W. SLADE.

I am a member of the firm of Allen, Slade & Co., of Fall River, Mass., wholesale grocers. The firm has been in existence a little over twenty years. We deal largely in cream butter and oleomargarine and butterine. We commenced the sale of butterine about twelve or thirteen years ago, when it was first introduced into New England. Our business in these goods, at first small, has gradually increased. Our city has a population of about 60,000, 17,000 of which are cotton factory operatives, who, with their families, number 35,000 to 40,000 persons. These people consume oleomargarine almost exclusively. The goods are sold in 10-pound tubs, with the full knowledge on the part of the consumer of their character. These tubs are all marked and sold in accordance with the Massachusetts law, being stamped with the word "oleomargarine" or "butterine" upon the top and sides in one-half inch Gothic letters.

One of our largest retail grocers constantly advertises these goods under their true name in the daily papers, price \$1.10 per 10-pound tub. I have never heard any complaint as to the character of the goods or of any sickness occasioned by their use.

We should regard it as a calamity to the poor people if they were to be taxed upon an article which now costs them all they are able to pay for it. Fall River is in competition with the world in the manufacture of cotton goods, and we should regard any tax upon a food product, used largely by our operatives, as being quite as detrimental to our interests as a manufacturing city as a tax would be upon any of our improved machinery. We are stockholders in nearly all of the large cotton mills of Fall River.

STATEMENT OF WILLIAM B. CLARK.

I am of the firm of Clark Bros., of Worcester, Mass., wholesale produce dealers. We make a specialty of handling oleomargarine and have done so for seven years. So far as I know, the Massachusetts law is generally complied with.

I recently saw in the hands of a party engaged in collecting oleomargarine tubs from families for packing lard 61 empty 10-pound tubs, all of which had regular oleomargarine stencils upon them as required by statute. About three-quarters of our sales reach the consumers in the original marked packages, mostly 10-pound tubs.

Consumers of these goods in Worcester and vicinity do not altogether belong to the poorer classes, though the larger number of them do. I am personally acquainted with several farmers in our neighborhood who sell their milk and do not make butter, who regularly purchase butterine to use upon their tables.

Our firm is interested in several creameries in Vermont, and we have not seen that the sale of oleomargarine interferes with or lowers the price of fresh made creamery butter.

STATEMENT OF J. MERRILL CURRIER.

I am a member of the firm of J. M. Currier & Co., of Lawrence, Mass. Our business has been that of retail dealers in groceries and provisions since 1850. Among the articles which we keep for sale are the best grades of butter, and within the last five years we have dealt in oleomargarine. We commenced the sale of these goods because our customers demanded them, and because if we did not supply them we found that they would go to our competitors, so that we thus lost their trade for other goods. We have found the call for these goods to constantly increase, and that they give general satisfaction. We have less complaint from them than from our cream butter of prime quality. We account for this from its uniform character and quality. We have never heard that any person was made sick by it or that it was unhealthful. Many of our customers say they prefer it to creamery butter, which costs much more. Our customers for this article are principally laboring people with families, and I understand they use it for the purpose of saving money with which they are able to procure other necessities.

The law in our State, so far as I know, is very generally observed, and is thought to be a sufficient protection against imposition. Every one who buys oleomargarine at our store knows what he is buying, and no one gets it unless he calls for it.

If a person calls for butter he gets butter, and if he calls for oleomargarine he gets that. We desire and intend to continue our business in this way. We do not wish to be obliged to say that the price has gone up 5 or 10 cents per pound, or that we cannot furnish it, because the Government has put such a tax upon it, while the corresponding article on the rich man's table is exempted from this burden, and all for the benefit of those who are better off than those upon whom the real burden would come. So far as I know, the feeling in the community in which I live is unanimous in the opinion that any tax would be unjust and bear heavily upon those who are the least able to sustain it.

STATEMENT OF T. C. EASTMAN.

GENTLEMEN: I have heard the statement of Mr. G. H. Webster, of Chicago, before your committee. So far as it concerns the fatty product of cattle, it is in the main correct. I have been in the business of handling and slaughtering cattle for thirty years, and for the past few years have handled over 100,000 yearly, which have been used mostly in foreign markets. My opinion is, that any tax on oleomargarine would materially affect the price of the products of all beef cattle sold in the United States, and that the amount so affected would fall indirectly on the producer. In my opinion, therefore, to tax the cattle growers of the Middle and Western States by the levying of a duty upon a completed product derived from cattle would be a very unjust thing to do, and if rightly understood would not be done.

There is already ample evidence of discontent and fear upon the part of American cattle-growers, developed by the now uncertain condition of the beef trade of this country and of Europe.

Values of all beef products have greatly depreciated, partly caused by the growing belief that action on the part of Congress relating to the sale of butter substitutes will still further decrease the profits of the cattle business and the general adjustment of lower values of all food products. A further cause for the decline in cattle is seen in the present attitude of foreign buyers of beef oil, who, prompted by the general talk of national legislation, are at present refraining from purchases of oleo oil in the expectation of soon being able to replenish their supplies at much lower prices than have usually prevailed.

Calculated upon the average value of beef fat derived from the class of cattle regularly slaughtered at my establishment and which is utilized in the manufacture of oleomargarine oil, I am led to believe that if this industry is interfered with in the way proposed, beef cattle will be depreciated in value from \$3 to \$3.50 per head.

The committee then adjourned until Friday, June 18, 1886, at 10 o'clock a. m.

WASHINGTON, D. C., *Friday, June 18, 1886.*

The committee met pursuant to adjournment.

The CHAIRMAN. We will resume our hearing in regard to this question. I understand that Mr. Holden, of Kansas City, desires to address the committee.

STATEMENT OF HOWARD M. HOLDEN.

Mr. HOWARD M. HOLDEN, of Kansas City, then addressed the committee.

I will consume but a very few moments of your time, and will state at the outset that what I have to say grows out of the belief on my own part and those for whom I speak, that this legislation is aimed at the suppression of this oleomargarine industry, a belief which we think is warranted by the degree of taxation that is sought to be enforced against it, and by the language used by those who have been prominent in urging such legislation.

I was very much gratified yesterday to observe that our friends on the other side seemed to have come down from their high horse of suppression and are talking more now of regulation, and I hope that they may advance in time to a due appreciation of the old maxim of "live and let live."

I appear before you at the request of the Live Stock Exchange of Kansas City, of which place I am, and for twenty years have been, a citizen, to represent its interests and those of its large constituency in the tributary country in the pending legislation on the subject of oleomargarine.

I am also largely personally engaged in the business of raising beef cattle and fattening them for market, and I also appear in behalf of myself and of others similarly situated.

You are doubtless aware that Kansas City is one of the largest primary live stock markets in the United States. In the year 1885, 2,358,813 hogs and 506,625 cattle were received for sale in the stock-yards of that city. These animals came from Western Missouri, Kansas, Southwestern Iowa, Southern Nebraska, Colorado, New Mexico, Arkansas, Texas, and other sections, and the trade is rapidly increasing. It will, therefore, be readily appreciated that whatever tends to affect the values of cattle and hogs, must be a subject of prime interest to our people.

In addition to this, the manufacture and preparation for consumption of the various products of such live stock, is a leading industry in Kansas City, giving employment to thousands of men.

It is calculated that by the utilization of the ingredients of oleomargarine and butterine, the value of beef cattle is enhanced from \$2 to \$4 per head according to the degree of fatness, and the value of hogs from 12 cents to 15 cents per head over what the animal would be worth if these ingredients were thrown back to be sold merely as lard and tallow—the market value of the latter, in consequence of competition of cotton-seed oil and other substitutes, being but one third to one-half that of former years.

The interest, therefore, which I represent to-day, simply with respect to the enhanced value of cattle and hogs received for sale at Kansas City, is that of nearly \$2,000,000 per annum, in the maintenance of oleomargarine and butterine as articles of food and commerce.

Behind this body for which I speak is that great constituency of farmers and stock raisers upon whom this threatened depreciation must eventually fall. The cattle and the hogs that daily appear in our various stock-yards for sale are gathered up from thousands of farmers, and the money they sell for is distributed among the masses of the people. Every part of the animal is as truly a farm product as is butter or cheese, and whenever any new and legitimate use is devised for any product of the farm whereby the market for that product is enlarged and enhanced, a proportionate benefit accrues to every farmer who raises such product for sale. We claim that such benefit, aggregating many millions of dollars, is constantly being distributed among the farmers and beef raisers of the country as a consequence of the use of portions of the beef and hog product in the manufacture of oleomargarine and butterine. We make no apology for opposing discrimination by Congress against these articles and against the live-stock interests which we represent.

We would have no moral right, for the sake of any pecuniary advantage, to seek the countenance or protection of law or of public sentiment, of an article that is deleterious to public health, but we claim that the

articles in question are healthful and wholesome food products, of practically the same constituent elements as good dairy butter, and, by reason of their cheapness, affording to the masses of the people, an acceptable substitute for butter far superior to the commoner grades, and at much less cost than the highest grades of butter which multitudes of the people are not able to buy.

In proof of these assertions we point to the long array of certificates by leading chemists, food inspectors, boards of health, and other authorities of eminent repute, many of which have already been brought to the notice of the committee.

If single instances of unwholesomeness are quoted with a view to create a prejudice against these articles generally, we ask of what food product might not the same be alleged in single or occasional cases? Certainly butter itself would not be exempt. We assert that as a class and in general the articles are pure, wholesome, and clean, and this the dairymen practically admit when they charge that they displace their products from the market; for if these articles have such character as their enemies allege, how can they stand comparison and competition with good butter? Even such concealment of their true character by selling them under the name of butter, as is charged, could not avail; but by a visit to the market-house right here in Washington one can see these articles for sale under their true name, and selling largely on their merits, and have abundant opportunity of testing their merits. Butterine can be purchased there that is quite as cleanly, as palatable, and as wholesome as the high grades of dairy butter.

If, then, as is claimed, these articles be legitimate and wholesome food products (and their friends invite proof to the contrary), what ground can there be for the proposed legislation? Certainly not for revenue purposes, for the Treasury of the country is already full to overflowing.

The object sought is plainly that of their destruction, because of their alleged interference with the butter interest, and in order to obtain jurisdiction for such purpose, Congress is asked to make it a revenue bill.

But if, in the progress of events, one legitimate home industry does happen to impinge upon another, is that any ground for legislative interference? Should not such things be left to the operation of those laws of trade which in the long run adjust to themselves and to the right, with unerring faithfulness and certain sweep, the relations of men and things?

If the contrary doctrine is to be indulged by setting a precedent in this instance, where shall the end be? How soon before the sugar planter of Louisiana may be demanding of Congress that proscriptive legislation be enacted against the sorghum and beet sugar of the North; or the swine-raisers of the Northwest, that cotton-seed oil be proscribed because some of it finds its way into the manufacture of lard, and the revenue department of the Government take under its charge every slaughter-house and lard-rendering establishment in the country; or the corn-raisers, that oil-cake be proscribed, because, to some extent, it takes the place of corn in feeding cattle; or the coal-miners, that the natural gas wells be destroyed because of injury to the coal interests? And so on *ad infinitum*, until, with the false pretense of raising revenue, every new or competing interest would be throttled by its rival that might seek to exercise a larger political influence over Congress, and until the revenue department of the Government would be converted into a vast inquisition, the real object of which would be not to raise

an honest and constitutional revenue, but to torture into extinction the rising industries of the country.

We believe that Congress will pause before settling such a dangerous precedent and before embarking upon such an uncertain sea.

The plain legal proposition that, even were the article as bad as its enemies claim, its regulation belongs to the police power of the States and not to Congress, I will not discuss.

It is not true, as is claimed, that on the one side are a few manufacturers only, while on the other side are the many who are interested in the dairy interest. If such were the case, we think Congress could not rightfully discriminate against a single citizen for the benefit of the many. But there is not a farmer or stock-raiser in the land who markets a fatted beef who does not receive additional value therefor because of the industry which this proposed legislation seeks to suppress; and the number of such is doubtless as large or larger than they who are said to be adversely affected. If their voice has not been so largely heard, it is because they are not organized and have had little notice of this assault upon their interests, while the advocates of this measure are thoroughly organized and prepared beforehand for the purpose, and actively seek by inducing petitions and correspondence to impress Congress and make it appear that the predominant interest of the people is on the side of such legislation.

We claim that, even if the effects of this new industry were as disastrous upon the dairy interest as is alleged, that would furnish no ground for the interposition of Congress in suppressing the legitimate industry that might be responsible for such effect. In the onward march of invention and of human affairs such conflicts and disturbances of previous relations and interests are continually occurring in every direction. Hence it seems superfluous to discuss whether or not the representations upon this point be true. But it may be observed, in passing, that many of these statements are largely overrun.

For instance, it is said that, in consequence of this competition, the price of milch cows, during recent years, has declined \$10 per head, and that in 1885 about 300,000 cows were slaughtered in Chicago.

Fairness should have led the parties making these representations to have stated how much the prices of other classes of cattle, and of hogs and other live stock and of commodities generally, have declined in the same time; such a general and comparative exhibit as would show that a fully proportionate decline has been experienced in the prices of beef and all other grades of cattle and other live stock, and of the staples of life generally. Every well-informed person knows this to be true. As to the drainage of cows into the Chicago market for slaughtering, it is known that between 1880 and 1883 there was a great speculative movement in cattle and consequent rise in prices, hundreds of foreign and home companies embarking in the business in the West. The mania was such that of all classes of cattle the most difficult to purchase was female breeding stock. This inevitably tended to an overdoing of the business, and, as has often been illustrated in almost every line of trade, to subsequent depression. A large portion of these cows which have been finding the Chicago market are of the surplus stock from the far western ranges where no dairy interest exists.

The receipts of cattle of all classes in Chicago are about 2,000,000 head annually. One-half of the cattle in the country are females. Every farmer will admit that, whatever the value of milch cows for dairy use, a due regard for their age, breeding qualities, and condition, constantly requires him to make selections from his herd for the beef market. Ou

this I speak from personal experience. If oleomargarine were unknown, the receipts of cows for slaughtering in the great live-stock market of Chicago would be large and incessant from the causes I have stated, and, in the mind of every man who is informed and experienced in these matters, it is at least a concealment of the truth for the advocates of this legislation to make these statements and leave it to be inferred that the oleomargarine industry is alone responsible.

A leading friend of the bill gives figures to show that the price of butter has declined from 19 cents in 1881 to 15 cents in 1886, and he attributes the depreciation to the competition of oleomargarine. This decline does not exceed and is in strict harmony with the general decline in values within that period, as we shall be glad to show if the committee desires. On the other hand, it is shown that the price of the best grades of butter is not lower than before these butter substitutes were known, the makers of them being large buyers of creamery butter for mixing with the other ingredients. We do not believe that good butter will ever be displaced or depreciated by any butter substitute.

A list of the patents issued for the manufacture of artificial butter has been made, showing a great variety of compounds. Every one knows what a multitude of impractical patents that are never worked under, issue from the Patent Office. The oleomargarine of to-day is not made under any patent and is not composed of the articles indicated by these theoretical butter-makers, but is made from a few simple and natural true butter ingredients, which are none the less so because they come from the animal in another form.

I do not pretend to speak for the consumers of butter, but it is a noticeable fact that they do not ask for this legislation. It is also noticeable that the petitions of the dairymen, upon which the legislation may be supposed to be based, ask for the suppression of the industry. Can that be an honest revenue bill which seeks to suppress the article taxed? The proposition involves a paradox, for how can revenue result from an article the making of which is suppressed by the tax?

Section 14 of the pending bill provides that the Commissioner may decide whether any substance made in imitation or resemblance of butter and intended for human consumption contains ingredients deleterious to the public health. And section 15 says that—

All oleomargarine intended for human consumption, which contains ingredients adjudged as hereinbefore provided, to be deleterious to the public health, shall be forfeited to the United States.

Aside from any legal aspects, we can see but two grounds, in the reasonableness of things, for this legislation. One is, the need of revenue, and evidently that is not the object sought. The other is the suppression of an article that is deleterious to the public health. Do not the sections of the bill that I have referred to, by fair implication, concede that, in general, oleomargarine is not deleterious? And do not they contemplate that only in occasional instances, as in the case with almost every article of food, the Commissioner *may* find some of it deleterious?

We think that such is the only reasonable view. The bill professes to deal with the article as one that enters largely into the commerce of the country, and provides the machinery for its taxation, and contemplates its continuance on a large scale and not its extinction; but those portions, if any, are to be forfeited which are found deleterious to the public health. This recognizes that oleomargarine *may* not be deleterious; and it would seem impossible that while treating of the article as

a thing of commerce, and producing regulations for its handling by wholesalers and retailers after it has paid the tax and after it has passed from the surveillance of the revenue agents, the framers of the bill contemplated a wholesale and general confiscation of the article by the million pounds on the ground that it is *all* deleterious.

If, then, as the bill itself would seem to recognize, the article be not deleterious generally, why should it *all* be so legislated against because of possible occasional deleterious qualities? Why should it thus be singled out from the great number of other food products into which deleterious elements are believed to be introduced?

And if in the consciences of men having to do with this bill the object be not to raise a revenue, and if, as the bill on its face confesses, the article is not deleterious, as we think we have shown, and therefore not to be suppressed, then what *can* be the object of its promoters but that of its extermination, simply because of its alleged conflict with another article of trade?

On behalf, then, gentlemen, of the beef-cattle interest of the section I represent, which interest includes in its scope hundreds of thousands of people, we ask of Congress not to pass this bill, believing that neither in the character of the article itself, in the predominant interest of the people, in sound public policy, or in law, can any justification of it be found.

The CHAIRMAN. You give the figures as to the amount of live stock marketed in Kansas City. Can you give the figures of the number slaughtered there each year?

Mr. HOLDEN. I am not prepared to do so; I have not those figures with me; I could only estimate.

The CHAIRMAN. It is not material, except that the value of the fat for oleo or for neutral lard in Kansas City would be only of those animals that were killed there; that is to say, those that went on to Chicago and were killed there were included in Mr. Webster's statement of the number slaughtered in Chicago and the value of the oleo fat and lard for the manufacture of neutral. It is not material, but I did not know but what you might have the exact figures.

Mr. HOLDEN. I have not the figures, but I know a great many are slaughtered there; it is a large slaughtering point.

The CHAIRMAN. You object to the taxing of this product upon the ground that it is a wholesome product, and therefore ought not to be legislated against in favor of anything else. What objection, if any, is there to laws which would compel this material to be sold to the consumer at all times for what it is, under its true name and label?

Mr. HOLDEN. I do not see any objection to that. I think the principle involve in that proposition is a correct one, but it is equally as applicable to a hundred other articles of food as to this.

The CHAIRMAN. You think if oleomargarine and butterine were sold under their own names, eventually they would make their way and become regular articles of consumption?

Mr. HOLDEN. I believe they would; I have every reason to believe so. I was led to investigate this matter on my own account within the last two months, and I am led to that conclusion.

The CHAIRMAN. Have you any experience in the manufacture of oleomargarine?

Mr. HOLDEN. No, sir; I have not.

The CHAIRMAN. You made a statement in regard to its cleanliness, and I thought perhaps you had personal knowledge of its manufacture.

Mr. HOLDEN. No, sir. I will say that I base that statement not on

personal experience but, as is done in regard to most of the affairs of life, from the conclusions we come to from what we consider reliable evidence.

Senator BLAIR. Just one question: In speaking of the different grades of oleomargarine, is it a fact that the improved or higher grades of oleomargarine are rendered so simply from a larger admixture of dairy product, a larger proportion of dairy product?

Mr. HOLDEN. I understand that to be the case.

Senator BLAIR. There is no other element that enters into the increased value of the higher grades of the oleomargarine?

Mr. HOLDEN. In addition to the value of the oleo itself?

Senator BLAIR. They make an ordinary quality of oleomargarine and a good article; that is, there are higher grades, are there not?

Mr. HOLDEN. Yes, sir.

Senator BLAIR. I have gathered from the testimony that the increased value of the oleomargarine over this average or good quality is produced by a larger admixture or larger proportion of the dairy product.

Mr. HOLDEN. I understand that to be the case.

Senator JONES. But he says that he has no practical experience.

Senator BLAIR. He says that he has investigated it for two months.

Mr. HOLDEN. I have in a general way, but I cannot speak as an expert.

Senator BLAIR. I would like to ask that question of a manufacturer.

The CHAIRMAN. That has been answered. Mr. Webster, of Armour & Co., answered that by coming back and qualifying his statement. He says they have a lower grade and that they do use a cheaper kind of fat than the kind which is used for oleomargarine. Mr. Webster came back and corrected his statement to that effect.

Mr. HOLDEN. I will add, gentlemen, something that I know; that our manufacturers in Kansas City are very large buyers of creamery butter and of milk from the creameries and dairies in the neighborhood.

The CHAIRMAN. Do you happen to know what the market price of this raw fat is which is used for the manufacture of oleo?

Mr. HOLDEN. I cannot state as to that, the raw fat before it is rendered. I have noticed the price of tallow.

The CHAIRMAN. But I speak of the raw fat of the animal as it goes to the oleomargarine factory.

Mr. HOLDEN. I should not like to state as to that.

STATEMENT OF G. W. SIMPSON.

Mr. G. W. SIMPSON, of Boston, next addressed the committee.

Mr. Chairman and Senators, I am here as a manufacturer and dealer in genuine creamery butter made from the cream of the milch cow.

The CHAIRMAN. Please state your residence.

Mr. SIMPSON. I live in Boston, but our creameries are principally located in Western Iowa. I also am president of the Bay State Live Stock Company, a cattle company located in Western Nebraska and Wyoming, owning about 90,000 head of cattle and about 400,000 acres of land. It might seem at first that my interests were somewhat antagonistic, but I do not consider them so, for this reason: I do not recognize oleo or butterine as any competitor for fine butter, and I base that statement on this ground:

Some ten years ago I made my first trip West with a view of trying to secure a fine grade of butter, something better than the average

dairyman in Vermont, New York, and New England was making at that time. I arrived in Chicago and bought a little of what was called Western butter, a very fair article, and on the express label it was marked Monticello, Iowa. I thought that was a pretty good place to go to, and I went there and made an arrangement with a gentleman, who is now dairy commissioner of the State of Iowa, to ship some dairy butter which he purchased there. Shortly after that we decided to enter the creamery business, and "Number One" was erected. We have followed this business to the present time, until we own and operate thirty creameries, which I understand is the largest number owned and operated by any one house in the world. And at the present time, with the flush of feed and the large amount of butter that is being made, we are sold ahead, and for the greater portion of the entire winter we were unable to in any manner supply our trade, as I can vouch for and prove by friends I have here.

I do not recognize oleo to be as much of an injury to the dairy interest as many of my friends, for this reason, that there are a certain class of people who make a cheap grade of dairy butter, and to-day the price of low grades of dairy butter in Western Iowa and in Eastern Nebraska averages from 4 to 8 cents a pound. This can be verified by prices current, which can be obtained at any time from Omaha, Chicago, or New York. On the other hand, in the eastern part of Iowa, where we are located, we pay more than double that for the butter in the milk before it is manufactured, and return the skimmed milk for food for hogs and calves. In that locality they do not destroy their calves, as they do in New York and Vermont, as soon as they are born into the world, because the milk is worth more money. They have their stock industry, and they have their hog industry, and they feed them from the product of the cow after selling the cream. And any one who will go to Jones County, or inquire of the assistant dairy commissioner, who lives there, will be convinced that that is a prosperous locality at the present time, and has been increasing rapidly in wealth during the last ten years. Last year we paid for butter in the milk 25 cents a pound. On account of getting so small an amount of milk as we did it cost us to manufacture it nearly 10 cents a pound. For instance, we were only getting about 1,000 pounds a day, and that would make 40 pounds of butter, which at 10 cents a pound would only make \$4, and \$4 will fail to run any creamery a single day, even if there is only one man employed in it.

The CHAIRMAN. That was the cost during that time?

Mr. SIMPSON. Say about three months; maybe a little more than that.

The CHAIRMAN. What does it cost to make it in the flush season of grass.

Mr. SIMPSON. About 16 cents.

The CHAIRMAN. And the manufacture aside from the cost of the milk?

Mr. SIMPSON. About 3 cents a pound, and that includes the package, the tub, the salt, and color. We color our butter the year round in order to make it perfect in form. The substance we use is annatto principally, a little creamery butter, and a little salt. I have here a copy taken from the circular of the Boston Produce Exchange, giving the prices for 1880 of several articles of food, and I think this is evidence that butter has been affected the least during the past few years of any article of food. I notice—I hardly know why, except that I came from Boston, and that is the home for baked beans—that beans are put down first on this list, and the price of them in 1881 per bushel was \$2.80;

in 1885, \$1.65; a lower percentage of $41\frac{1}{5}\%$. Lard in 1881 was 11.98 cents; in 1885 it was $7\frac{1}{3}$ cents. The list I have here shows the percentage of reduction, and with the permission of the committee I will make it a part of my statement.

The paper submitted by Mr. Simpson is as follows:

Statement made from Boston Produce Exchange reports of 1881 and 1885, showing the average price of several food products in the above-named years.

| Articles. | 1881. | 1885. | Decrease. |
|---------------------------------------|---------------------|---------------------|------------------|
| | | | <i>Per cent.</i> |
| Pea beansper bushel.. | \$2 80 | \$1 65 | 41 $\frac{1}{5}$ |
| Lardper pound.. | 11 $\frac{98}{100}$ | 07 $\frac{1}{3}$ | 38 $\frac{2}{3}$ |
| Clear pork (Boston)per barrel.. | 21 16 | 13 77 | 34 $\frac{2}{3}$ |
| Flour (winter wheat)do..... | 8 04 | 5 55 $\frac{2}{3}$ | 30 $\frac{2}{3}$ |
| Cheeseper pound.. | 12 $\frac{74}{100}$ | 10 $\frac{23}{100}$ | 19 $\frac{2}{3}$ |
| Best dairydo..... | 27 $\frac{1}{2}$ | 22 | 19 $\frac{2}{7}$ |
| Best creamerydo..... | 31 $\frac{1}{4}$ | 26 | 16 $\frac{1}{5}$ |
| Plate beefper barrel.. | 14 21 | 13 21 | 7 |

The CHAIRMAN. Where did you obtain those figures?

Mr. SIMPSON. From the circular of the Boston Produce Exchange.

The CHAIRMAN. If they are not more correct in other things than they are respecting the average price of cheese, they are not worth anything. I know in regard to that.

Mr. SIMPSON. The chairman of the Produce Exchange is present, Mr. Chapin, and I think he will vouch for this statement. It is copied from the circular of which Mr. Chapin has charge. We take the market report of Boston, supposing it to be correct.

The CHAIRMAN. What is the price of creamery butter in Boston now?

Mr. SIMPSON. Do you mean the price of creamery butter as we sell it to grocers?

The CHAIRMAN. No; I mean the market price.

Mr. SIMPSON. I would suppose that the market price would be about 19 cents, the average market price.

The CHAIRMAN. Do you sell your creamery butter from Iowa in the open market at ordinary market prices?

Mr. SIMPSON. No, sir; we have a special trade for it; I am not quoting our prices; I will do so if you desire it. But the average price, from the best information I can get, of the finest Northern creameries in New York or Boston would be, I think, about 19 cents.

I claim that the sale of the dairy products of our country has been, in Great Britain, injured very materially by the sending of a poor grade of butter to that market. In former years we were compelled to buy, throughout the season, dairy butter which would come into use each week, and we would select the best quality and as a rule the poorer grades were set one side to be worked off as best we might. When it came spring-time we found we had no outlet for them and we would ship them to Liverpool, and they were sold as American butter. But on account of the oleo, the fresh flavored oleo which they claim to make over on the other side (and I dare say they make a very good article of goods), it has become impossible for us to find a market for anything on that side except the finest grade of creamery butter.

I do not claim that it is any advantage to the farmer to make poor butter. I claim that cream, properly handled, will produce a fine article of butter the year round, and every day in the year, and because the farmer who has been making his butter and selling it at from 3 to

5 and 8 cents a pound is being driven out of that business, it is no injury to him, but rather a benefit. I claim that the creamery system which is now practiced in this country and the cheese-factory system have been of great value to the dairyman and the consumer. But, on the other hand, I doubt if they could have reached their present standard, if they could have accomplished as much as they have, had it not been for the oleo which has been taking the place so largely of the cheap grade of butter that the farmer was obliged to sell his milk to the creamery because the people would not buy or consume his cheap dairy butter. The shippers will buy fresh creamery at the present time, and it is about the only article in the dairy line which they are willing to buy.

Admitting that this oleo is a healthy article of food, I see no reason why the people should not have it, those who cannot afford to buy fine butter. Last winter our prices of butter were beyond the reach of men in ordinary circumstances.

The CHAIRMAN. Do you refer to the price of it in your creameries or the general price?

Mr. SIMPSON. The general price. I think my friends will bear me out in the statement that the prices averaged about 35 cents at wholesale for a long time, and I can prove it by the price current. I know our price for milk ran an average for three months, and we vary the price of milk on the market from July. I am satisfied that the retail price of fine butter could not have been below 40 cents in Boston or New York for at least three months, and I think it was a little more than that.

The CHAIRMAN. You buy your milk based on the market price for butter?

Mr. SIMPSON. Yes, sir.

The CHAIRMAN. Then if butter goes down as it is now to 18 cents or even to 16 cents, as a good deal of it is, you would not be the loser at all?

Mr. SIMPSON. We would not be except in this way—

The CHAIRMAN. It would all come out of the farmer who furnishes the milk?

Mr. SIMPSON. No, sir. We make out prices at the first of the month as a rule. Take the month of April; we paid more for milk during that month than we could afford to, because when we started in in the month the price was higher and declined. It was the same in May. We paid above the market value for milk in April and May. On the other hand, we shall probably offset that, which is only fair, when the advance comes in the fall of the year.

The CHAIRMAN. But your interest in the buying of the milk would not injure you, because you are getting your price on the value of the butter in the market?

Mr. SIMPSON. Yes; just as the manufacturer regulates his price on the value of the product which he uses.

The CHAIRMAN. But if you were to use the milk and cow, what then?

Mr. SIMPSON. That is further back than we wish to go.

The CHAIRMAN. Very well; but you gave it as your opinion that the reason our export of butter had fallen off so largely was that poor butter had been sent abroad, and therefore had injured the market for American butter. Is it not true that butter does not go abroad at all until it reaches a certain price at which it will be taken by the foreign market, and that the price is the entire regulator of the matter?

Mr. SIMPSON. To a certain extent; but when we had under the old system no outlet for our cheap butter in the spring of the year, there

was nothing else for us to do but to ship it, and get rid of it at the best price we could get.

The CHAIRMAN. It went abroad for the best price you could get, without regard to cost, as any surplus does?

Mr. SIMPSON. Yes, sir.

The CHAIRMAN. Do you not think the manufacture of oleomargarine and the export of oleomargarine has also had a tendency to depress the price abroad?

Mr. SIMPSON. Yes, sir; I dare say it has.

Senator JONES. Do you mean of all grades, or that low grade of butter simply?

Mr. SIMPSON. I think possibly it may have had a tendency to reduce the price of all grades to some extent, but fine butter has been affected but very little indeed.

The CHAIRMAN. According to the reports of the markets, particularly the New York market, I noticed this morning that the best creamery butter from New York State or from Iowa is quoted at 18 cents a pound. Now do you not think the large amount of butterine and oleomargarine made and sold in the country has reduced the price of that dairy butter very materially at the present time?

Mr. SIMPSON. If you mean creamery butter, I do not think so. I think that in 1879 butter averaged at as low a price as to-day.

The CHAIRMAN. I am speaking of the price to-day. Do you think if there was no oleomargarine or butterine made, that fine creamery butter would be sold in New York to-day for 18 cents a pound?

Mr. SIMPSON. It might be. But I say the purchasing power of a dollar was never so great as to-day. In 1879 I claim butter was sold as low as it is this year, and that was before butterine came into use to any extent.

The CHAIRMAN. I understood you to say that, in your judgment, the manufacture and use of oleomargarine and butterine had not materially reduced the price of creamery butter?

Mr. SIMPSON. I so stated for the reason that we were able to sell creamery butter during the winter months at 38 cents a pound, and that is high enough, and that is the time when they use the most of the butterine. In the face of all this, when they were making so large an amount of butterine and buying creamery butter to put into it to make a fine grade, I say in the face of that there was a high price being asked and received, and milk was very short for fine butter for weeks.

Senator BLAIR. Is it not a fact that what you call "fine butter" is a luxury of life rather than one of its necessities?

Mr. SIMPSON. Yes, sir; at certain seasons of the year.

Senator BLAIR. And it depends on purchasers who know very little of the ordinary struggles for life?

Mr. SIMPSON. Yes; the finest of it.

The CHAIRMAN. What do you mean by a "fine" butter; do you mean creamery made butter?

Mr. SIMPSON. No, sir; not all creamery made butter.

The CHAIRMAN. Do you mean fine butter, then, simply a fancy or gilt-edge grade that is sold to people at 75 cents or a dollar a pound?

Mr. SIMPSON. No, sir.

The CHAIRMAN. I supposed not. I supposed you meant by fine butter a creamery butter?

Mr. SIMPSON. No, sir; I mean more than that, an extra creamery butter grade in New York and Boston markets, which is quoted as extra creamery butter.

Senator BLAIR. What would that sell for at retail ?

Mr. SIMPSON. At about 25 to 27 cents, the retail jobber getting about 5 cents, and the retailer 2 cents.

Senator BLAIR. I am speaking of fine butter. I think you mentioned 38 cents.

Mr. SIMPSON. But that was last winter. Butter is just about 50 per cent. lower now than it was last winter, and it is no unusual thing for it to be that much lower June, for that was the case before oleo came in.

Senator BLAIR. Generally is much butter manufactured in the summer ?

Mr. SIMPSON. No, sir ; I would say not. I would not suppose they would try to make any of the higher grades, and I do not think they do.

Senator BLAIR. Why not ?

Mr. SIMPSON. Because butter is so cheap it would not pay them to do it, and they have all the higher grades of butterine put in the market against butter.

The CHAIRMAN. Are you interested in the manufacture or sale of oleomargarine ?

Mr. SIMPSON. Yes ; a little oleomargarine.

The CHAIRMAN. Where is that made ?

Mr. SIMPSON. It is made in the West. The butter business of course is a much larger business with us. For instance, our milk bill is \$1,000 a day at the present time. We make a half a cent a pound profit on it. Our reason for doing it is this, that we have a certain class of trade who demand it. We opposed the manufacture and sale of it for years, except that we believed it should be manufactured and sold for what it is. I believe that now. I believe every restriction which can possibly be thrown about it should be placed upon it in justice to the manufacturer, dealer, and consumer. We think they should be treated alike in these matters. We commenced to handle these goods a year ago last April. We formerly had a large trade in Gloucester ; they bought our cheapest butter and kept driving away from us until we lost every one of them for that class of goods. We still retained their trade on the fine goods because they could not get anything better, I suppose, and we found that all our trade in that direction had drifted away, and we thought it better to have some of these goods for them if they wanted them. We make no special effort to sell it, but the result is that most of the Gloucester trade has drifted back and is buying this oleomargarine for a cheap grade of goods. I think this is the experience of thousands of people. A gentleman was speaking to me here in Washington to-day who handles nothing but fine butter, and he said the time was not far distant when we would have butterine on our hands.

Senator BLAIR. Is not the tendency of the whole thing towards the amalgamation of the dairy and the oleomargarine products ?

Mr. SIMPSON. No, sir ; I do not think so. I think they will separate as my two fingers will. I think many people will never buy oleomargarine if they can't get fine butter—that is good enough for me.

The CHAIRMAN. You do not eat oleomargarine yourself ?

Mr. SIMPSON. No, sir ; I eat the finest creamery butter.

The CHAIRMAN. Are you interested at all in the manufacture of oleomargarine.

Mr. SIMPSON. We sell them both. I understand the whole thing, Senator. I am a stockholder in the George H. Hammond Company, but I have no part in the management of the company. I also am

president of a refrigerator car line, which brings butterine and butter from the West. But I have nothing to do with butterine as far as that is concerned, and I have nothing to do with the management or manufacture of it. I am only a stockholder.

The CHAIRMAN. Are you interested in the raising of cattle on the plains?

Mr. SIMPSON. Yes, sir; I am interested in them from the time they are grown in the West until they reach the butcher's block.

The CHAIRMAN. Then it would not make much difference to you which way the thing went?

Mr. SIMPSON. Yes, it would, and for this reason: I started twenty years ago in Boston, and I commenced in Northern New York to buy butter, and we gave that up and started West, and we have worked up from a very small business to a good one, and I take a pride in the butter business. Our brand of butter is the best known of any brand anywhere, and for that reason I propose to continue in the butter business if I give up everything else, and I propose to bring up my boys in it. We put it in tins and send it all over the world; we supply the United States Government with it. We use nothing but pure cream and salt and color. We are down on these creamery men of the West (if there are any of them—I do not know of any of them) who are using any adulteration, and sooner or later they will come to grief. One gentleman who addressed you yesterday said the creamery business was going to the wall, was closing up. We have kept on buying, and will buy them almost any time in our own section; we will not go beyond that, because we are located.

The CHAIRMAN. You have special advantages in disposing of your fine grades of butter, I suppose?

Mr. SIMPSON. No, sir; no more than other men can get.

The CHAIRMAN. You do not mean to say that you think all the farmers of Iowa can go to Boston and establish houses?

Mr. SIMPSON. No, sir; the middle men ought to have a chance in the world, and the farmer cannot put it into the consumer's hands; that is not possible. On the other hand, we pay the farmer more for his milk than he could get for it otherwise. What is the cause of these creameries in New Hampshire? It is because they make it cleaner and better than it was made under the old process, and I do not think, therefore, that the creamery is any enemy to the common dairyman, and I do not think that oleomargarine is his enemy. If he will handle his milk properly and if he will make fine butter, like most of the single dairymen in Franklin County, Vermont, he will have no trouble in disposing of it. I do not think the farm dairies are going to the wall there, and the cows selling at a loss. I know farms are not selling at a loss in our locality in the West, and I have a partner in Northern New York who owns three hundred cows, and he says he does not recognize oleo as any competitor, because he can sell his milk; they manufacture it in the creameries as we do, and get as good a price for it as he would expect to get for any other product that he can raise on his farm.

The CHAIRMAN. Is not this extra creamery butter sold in New York to-day for 16 to 18 cents substantially as good butter as you make?

Mr. SIMPSON. I would say if it was they ought to get more money for it; I can.

The CHAIRMAN. You seem to be fortunate.

Mr. SIMPSON. I do not think it is because of my looks, but because I have the goods.

The CHAIRMAN. Of course the great prices you obtain cannot be obtained by the farmers.

Mr. SIMPSON. No, sir; but I believe every year the percentage of fine butter is increasing. The fact is many people thought anybody could run a creamery. A large number were farmers, and they said, "We will not sell our milk to monopolists, but we will use it ourselves," and they have started creameries in a slipshod way, and have lost their money. Fine creamery butter can be made if you will pay the necessary attention to it, but not in any other way. You have to watch it carefully from the time the milk is received until the butter is packed for market. Other people have the same feed, the same cows, and the same facilities. We have no patent rights for running our creameries.

The CHAIRMAN. Are you willing to state what you pay for milk now and what you get for butter now?

Mr. SIMPSON. Yes, sir; I am.

The CHAIRMAN. I should be glad to have the figures.

Mr. SIMPSON. We pay fifty cents a hundred pounds for milk, and I can prove by the dairy commissioner that the most of the neighbors around pay but forty-five cents. What makes us do it? Because we have over \$100,000 invested in creameries that are not worth fifty cents on the dollar without the patronage of the farm. Because prices run low for a few weeks we do not want to put prices so low as to discourage the farmer in making milk, and so we pay fifty cents, and it costs us about sixteen cents a pound to make it.

The CHAIRMAN. But if butter should remain permanently low you could not afford to pay that average price?

Mr. SIMPSON. No, if it should continue so; but it has never been the case that it has remained permanently low; it always opens up when the season opens up.

Senator BLAIR. I should like from your standpoint to have you give us your idea, very briefly, as to the occasion of this hearing, how it comes about, this complaint, and what remedy you would administer for it.

Mr. SIMPSON. I think this hearing comes about in this way very largely. I think it comes from the early manufacturers of oleomargarine manufacturing it and the dealers selling it for butter. I do not think that that is fair play. I do not think the present oleomargarine manufacturers ask anything of that kind. I think they are satisfied that their product is so good, healthy, and cheap that it will sell on its merits. I think if sold on its merits for a year or two there will not be more need of this than there is to-day. I think the grocers would individually take hold and make a lead of it. They would say, "So many pounds of oleomargarine for a dollar," just as they say "So many pounds of sugar for a dollar." I believe that the population of the country has increased very much beyond the increase in the production of butter. I believe that fully ten million people would have been deprived of any butter, or substitute for butter, during the past winter, and I think roll butter would have been 50 cents a pound if it had not been for the oleo. I think that would have been the difference if it had not been for the manufacture of oleo. I think there is a demand for all the fine butter that can be made at a fair price.

The CHAIRMAN. Right there, speaking about the high price if there had been no oleo; would not that matter regulate itself, as every other matter does, by the law of supply and demand? If butter became high, would it not lead to the growing of a much larger number of cows and a much larger portion of the people of our country going into the dairy business, and would it not be self-regulating?

Mr. SIMPSON. To a certain extent, but there are only so many States in the dairy belt. They cannot make fine butter in Tennessee.

The CHAIRMAN. We thought in New York ten years ago that there was not any other State in the Union that could make fine butter west of us, but we have discovered that in Iowa they make it just as good as they do in New York.

Mr. SIMPSON. We claim that we can make it better, and we own dairies in New York. I claim that the increase of population has gone far ahead of the increase of supply, and that if the farmers concluded to produce a larger amount of milk in the winter time, it would equalize this price. But they are not inclined to do it. There is no necessity for butter being so high in winter if the farmer would arrange to have a larger supply in winter and not have it so low in summer and average the matter.

The CHAIRMAN. Farmers as a body move very slowly in matters of that kind, but nevertheless they do move when the price is such as to warrant it; and if the price was likely to be permanently large, anywhere near the figures you have mentioned, do you not suppose that the dairy States could and would very largely increase the output of butter by increasing the number of cows? They are not all stocked up to their capacity.

Mr. SIMPSON. I think they would increase. But I do say this, that we have tried to encourage winter dairying ever since we have been in Iowa by paying a little more in the winter than we can afford to, trying to educate the farmer up to the fact of having a large supply in winter when it was bringing double the price it does in summer. But we have not succeeded in doing it. We keep our creameries open and supply the trade at that loss. The fact is the trade is changing. A customer used to come and say, "We want a June butter." In a short time they would say, "We want October butter." But now they want the finest fresh butter just as soon as they can get it, and all the legislation in the world will never bring people to eat the old flavored butter. Now I claim that the fresh oleo made by these gentlemen is better than an article of butter which is spoiled and not worth over 5 or 6 cents a pound.

The CHAIRMAN. That is not worth eating at all, any more than spoiled meat or vegetables.

Mr. SIMPSON. I understaud that, and it is being driven out of the market. It applies not only to this, but to everything else. A few years ago the small towns in the Eastern States were satisfied with the class of beef they raised. Now, even as far east as Bangor, they want corn-fed beef, and they are producing more and more corn-fed cattle. Our company is commencing to fatten more and more cattle every year and makes a larger amount of this tallow and beef fat. I believe it would be very much less in value were it not for this manufacture of oleomargarine. I received a telegram here yesterday from the Wyoming Stock-Growers' Association, an association of cattlemen representing a capital of \$100,000,000, which reads as follows:

To GEORGE W. SIMPSON,
Riggs House, Washington, D. C. :

Present to Senate committee the united protest of this association, representing the range interests of Wyoming, Nebraska, and Dakota, against passage of oleomargarine bill. A prohibitory tax will destroy the pincipal market for tallow and decrease value of all beeves East and West \$3 per head. We consider it an honest food product when sold by its own name. We protest against injustice to our industry in order to aid another.

JOHN A. McSHANE,
THOMAS STURGIS,
Officers Wyoming Stock-Growers' Association.

Senator BLAIR. I want you to have an opportunity of answering the question you were proceeding to answer. I asked you how you would remedy this state of affairs?

Mr. SIMPSON. I have to say this: That I have no plan in my mind, but I say distinctly that something should be done which would regulate the manufacture and sale of this product. I think great injustice is being done to the consumer by charging him, as the retailer does when he sells it for butter, 25 per cent. above its commercial value. I claim that such a law as exists in New York State at the present time encourages the dealer to commit fraud—that very thing, a prohibitory law. Last winter it was almost impossible for a man to get butter at a reasonable price, so that all these men who sell the article—the retailers—took the chances and sold it for butter. But I believe a national law could be passed beneficial to all alike.

Senator BLAIR. What provisions would you put into that law?

Mr. SIMPSON. That is a question that cannot be answered in a moment or without a great deal of thought and more experience than I have. The members of this committee in their wisdom would be better able to determine that. A license might possibly regulate it. I would think that a tax no larger than what really the Government was obliged to put on would be all right; but I do not believe in putting on a tax which will be a burden upon the industry in any sense of the word.

Senator BLAIR. Here is the trouble. These gentlemen advise a remedy, and you say the evil exists and ought to be removed, and yet you have no suggestion to make. What can we do but to enact such a law as this?

Senator JONES. I do not think the gentleman gets exactly your point. He thinks you are asking him for the details of the bill, but I thought you were asking for the purpose to be reached and not the details of the bill.

Mr. SIMPSON. The purpose to be reached is protection to all manufacturers, dealers, and consumers.

Senator JONES. Your idea, then, of what ought to be accomplished by legislation is that the manufacturer, dealer, and consumer ought to be protected by the law in knowing exactly what is sold, especially to know the imitation butter from the real butter?

Mr. SIMPSON. Yes, sir.

Senator JONES. Do you think that would correct the evil?

Mr. SIMPSON. Yes; let every tub stand on its own merits, whether oleomargarine or creamery butter, and not color it pink or black or anything of that kind; there is no advantage in that.

Senator SAWYER. Would not a moderate license tax accomplish what you desire, and what we all agree should be accomplished?

Mr. SIMPSON. I think so, with a penalty attached to it for selling it for what it is not.

Senator SAWYER. What would you think about taxing it a penny a pound; would that, in your judgment, affect the manufacture seriously?

Mr. SIMPSON. Not the manufacture, but it would the consumer. It is quite a percentage when it sells for 10 or 11 cents a pound.

Senator SAWYER. It would have the tendency to carry it up a penny a pound; there is no doubt about that?

Mr. SIMPSON. Yes, it would.

The CHAIRMAN. I understood the gentleman to mean to say that a tax or license should only be in the direction of more fully carrying out the law?

Mr. SIMPSON. Yes; and the smallest possible amount, to protect all alike.

Senator JONES. You mean by protection that everybody shall have full notice of what is being done?

Mr. SIMPSON. Yes, sir.

STATEMENT OF PROF. D. E. SALMON.

Prof. D. E. SALMON, Chief of the Bureau of Animal Industry, Department of Agriculture, then addressed the committee.

It is only within a day or two that I have had the intention of appearing before this committee, because I have friends on both sides of this question, and it was only when I was requested by the dairy interests of the country to correct certain points or give my opinion on certain points of expert testimony which has been offered here before the committee that I consented to appear at all.

I have prepared some notes of what I wish to say, and what I intend to say is suggestive rather than exhaustive, as the facts that I shall refer to I believe are correct and incontestable from a scientific standpoint.

I have been informed that at least some of the scientific gentlemen who have been before this committee have stated very positively that oleomargarine and similar butter substitutes are equally wholesome and of equal value as a food product with genuine butter, and that the fat from which it is made is not infested by any parasites or germs of parasites, and I have been requested to make a statement in regard to such facts as have come to my knowledge bearing upon this subject. I am neither an expert in chemistry nor in butter-making, but I have given considerable attention to physiology, to the diseases of animals, and to the influence of animal foods on the public health, and the statements in this paper are made from this point of view.

By way of introduction, it is well to assert my conviction that these questions are rather physiological and pathological questions than chemical ones. The chemical composition cannot in all cases be relied upon to give the properties, the solubility, or the digestibility of the substance analyzed. For instance, the chemist tells us that the phosphate of lime in bones and in mineral phosphates is in both cases tri-basic phosphate; that it has the same composition, and is chemically the same substance; and yet when ground into fine powder and placed in the soil the one is very much more soluble and available for plant food than the other, and is valued at about twice as much per pound. Chemically there is no difference in the composition of cellulose as it is found existing in different plants, or between cellulose and starch, but practically there is a great difference in the results of feeding animals upon sawdust, wheat or oat straw, and young and tender plants. There is also a difference in the digestibility of cellulose and starch. Such facts lead us to ask if there may not be a variation in the digestibility of fats from different sources, and they admonish the chemist that it is not always safe to hazard a conclusion as to the digestibility of a substance from its chemical composition alone.

DIGESTIBILITY OF FATS.

In 1880 the French Academy of Medicine appointed a committee to report upon the advisability of substituting oleomargarine for butter in the public asylums of the Department of the Seine. This committee made

a report which appeared in the Bulletin of the Academy of Medicine for 1880, a report which appears to be sound both from a chemical and a physiological point of view. I quote as follows from this report, with the single explanation that the word "margarine" is used synonymously with "oleomargarine":

In the case where oils are added to the margarine the product certainly does not become dangerous or even unhealthful, nevertheless it may have disadvantages. M. Berthé has made very careful tests of this point, the results of which have not been contradicted. According to this savant, fatty substances are not absorbed with anything like the same rapidity, nor even in equal quantity, when equal weights are administered under the same conditions. Thus, the oil of sweet almonds, olive oil—in a word, the vegetable oils, would be less easily absorbed than the animal fats. Consequently the presence of peanut oil cannot be without disadvantage, above all with persons in delicate health.

The mixtures which to-day constitute margarine, and which are necessarily very variable, will place the sick persons on a variable alimentation of fats, that is to say, in unfavorable conditions, and as the absorption of fatty bodies is not accomplished with the same facility as that of the other aliments, the employment of margarine is to be regretted from this new point of view. (Page 464.)

Suppose that the margarine delivered to the asylums is pure, that is to say, that they succeed in holding the bidders (*adjudicataires*) in awe by fear that analysis will discover the fraud, will the substitution of margarine for true butter be without any disadvantages? We do not think so.

The experiments of M. Lailler, pharmacist to the asylum of Quatre-Mares, leads us by another way to the same conclusion. He has taken equal weights of margarine and of pure butter and suspended them in various liquids, rigorously placing them under the same conditions. He has always observed that margarine forms an emulsion with greater difficulty than butter, and that the globules of the butter are smaller and do not separate so readily as the globules of grease. (Pages 464, 465.)

The mode of absorption of fatty bodies has been discussed for a long time. There is accord now in admitting that they must be emulsified in order to be absorbed. Therefore, if margarine forms an emulsion with difficulty, if the globules formed have not the extreme fineness of the globules of butter, if these globules rapidly resolve themselves into oil, the margarine is found in a condition for absorption very inferior to that of butter, and it would be regrettable to see it substituted for this, especially for the sick, because it is to be feared that the absorption of the fats, which are of all substances digested those of which the absorption is the most limited, would only be performed with difficulty (page 465). (Bulletin de l'Académie de Médecine, Séance du 11 Mai, 1880.)

This report simply confirms an observation of every-day experience known to every housewife in the country, viz, that many articles of food are made more delicate and digestible by substituting butter for lard or tallow in their composition, or by cooking them in butter instead of in these other fats. This is a matter of great concern to a nation which is said to be rapidly becoming a nation of dyspeptics, and above all it concerns the part of our population who must consume butter bought in the open market—I mean the people who live in cities and towns, whose occupation is more or less sedentary, and whose greatest dangers are indigestion, imperfect assimilation of food, and the diseases favored by an improperly-nourished body.

Fatty substances which are easily assimilated have a very great food value, as we see in the case of cod-liver oil, which often builds up a frail body and enables it to throw off disease when all other measures fail. The effect of cod-liver oil is not the effect of a drug, but of a food, and it is of more value than other oils because it is more easily absorbed.

Fats and oils from different sources are consequently not necessarily of the same food value. Some of these are only absorbed with great difficulty and in small quantities; some retard the digestion of the other constituents of the food and derange the functions of the alimentary canal; still others are cathartics and cause the contents of the bowels to be voided so soon that there is not an opportunity for digestion and assimilation. While some fats have an intrinsic food value, therefore,

others are without such value, and still others are a detriment, hindering the digestion of other foods and deranging the functions of the digestive organs.

It is reasonable to conclude from these facts that butter has an intrinsic value for food beyond that of lard, tallow, or cotton-seed oil, which might not be suspected from its chemical composition. As I understand the process of manufacturing oleomargarine there is nothing about it which increases the food value of the constituents from which it is made; the object of the different processes is simply to secure a product which in appearance and consistency resembles butter as closely as possible. And this imitation is carried so far that the best grades of oleomargarine deceive the sight and taste, and require an expert to distinguish them from good butter. In other words, it has become more difficult to distinguish between oleomargarine and butter than between good butter and poor butter.

It may be admitted that there is a difference in food value between poor butter and good butter. The high price of the best butter is not, as some suppose, entirely a fancy price—it is based to a large extent upon intrinsic value. To explain this: Butter fat as it exists in an emulsion in milk is in its most digestible form; it needs little digestion and is readily assimilated. The best butter is granular, made at a low temperature and worked but little. In this the butter globules do not coalesce and form a homogeneous fat, but they are held separate as granules, and they easily go back to the condition of an emulsion. The more butter is worked and the granules broken up and forced together the farther is it carried from the emulsified condition, and the more difficulty would we expect in its digestion and assimilation.

The exact difference in food value of these different grades of butter has never been determined; but that there is a difference I consider just as incontestable as that there is a difference in food value between oleomargarine and butter. There is this difference in the two cases, however: the oleomargarine manufacturer, by bringing into use the latest discoveries of modern science, and an expensive plant, can produce an article which deceives the eye and palate of the consumer; but poor butter bears its own brand, and no consumer takes it into his stomach under the impression that it is the first quality and made by the granular process.

PARASITES.

That the fat of animals slaughtered for food may contain objectionable parasites is a fact which admits of no doubt whatever. In eating meats or fats which are raised to a high temperature, either in cooking or in rendering, we are generally protected from these parasites; but when we take into our stomachs the tissues of animals which have not been raised to a sufficient temperature to destroy these inferior organisms, we confront a serious danger, which it would be folly to conceal. And this danger is the greater in our country because we have no systematic and skilled inspection of animals and carcasses intended for food.

The *Sclerostoma pinguicola* is a round worm from 1 to 2 inches long, which as its name indicates lives in the fat. It is a very common parasite of hogs in this section and south of here, but I am unable to speak of its prevalence in the States farther north. It bores channels through the fat about the kidneys and lives and multiplies there in considerable numbers. It is a very difficult matter to remove all of these worms from the fat even when we carefully dissect and follow up the channels in

which they live. Fortunately this worm is not known to inhabit the human body or to cause any injurious effects with the consumer.

The so called *measles* of hogs and cattle are caused by the larval form of two distinct species of tape-worms, the *Tenia solium* in the hog and the *Tenia mediocanellata* of cattle. If this larval form of tape-worm, which is called the cysticercus form, is taken with the food by man, it develops in the alimentary canal and forms the adult tape-worm.

Senator BLAIR. Is there any reason to believe that those worms are unhealthy, if well cooked?

Professor SALMON. No, sir; not if they are well cooked.

Senator BLAIR. They are made from the substances which we eat without danger?

Professor SALMON. They are dangerous to man not because poisonous, but because created in the flesh of the animal. If boiled sufficiently they are killed, but it requires a temperature of 145 to 150 degrees.

The CHAIRMAN. They are not very good for food taken alive, but would not seriously injure the human system if dead?

Professor SALMON. No, sir.

Senator JONES. Are these parasites found in the main in larger quantities in the muscles and tissues, or in the fat?

Professor SALMON. They are found in the connective tissues between the fats in larger numbers than elsewhere.

Senator JONES. And a man who eats the flesh of the animal is more likely to get harmed than when he eats the fat?

Professor SALMON. Yes, sir; but when he eats the flesh of the animal he eats it cooked, and in this case it is only heated to a low temperature.

It is sometimes asserted that the cysticercus is a muscle parasite, and does not live in other parts of the body. This statement is not correct. The cysticercus is found in the connective tissue, very often between the muscular fibers, it is true, but very often also in the connective tissue beneath the skin, and in the liver, spleen, and fat of the abdominal cavity.

The following authorities are quoted to confirm this statement:

Cobbold says:

The cysticerci may develop themselves in almost any situation in the human body, but they occur most commonly in the subcutaneous, areolar, and intermuscular connective tissue; next most commonly in the brain and eye, and lastly in the substance of the heart, and other viscera of the trunk. (Parasites, page 91.)

Schmidt Mülheim says:

Cysticerci are also found in the subcutaneous tissue, in the lungs, spleen, liver, and spinal cord; in the eyes, the kidneys and other organs, as well as in the serous cavities of the body (page 109). The cysticerci appear in the pig at times sparingly; at times in enormous numbers; not infrequently many thousands are found in the connective tissue of the muscles. More than a hundred have been found in the brain alone. Even in the fat they are met with. (P. 110 Handbuch der Fleischkunde, 1834.)

In the same work, we find in regard to the cysticercus bovis, page 118:

This cysticercus, like that of the pig, inhabits by preference the connective tissue between the muscle fibers and the heart; it is also met with in the liver, lungs, brain, and other organs (page 119).

Perroncito fed two calves:

On slaughtering them, in one, heart, lungs, liver and spleen contained none, the mesentery only a few cysticerci. At the autopsy of the second calf two large cysticerci were found in the mesentery and omentum, two beneath Glisson's capsule of the liver, and about twenty in the heart. Beneath the peritoneum of the abdominal walls a considerable number of scattered cysticerci in the form of broad, pale cysts 12 millimeters long and 3-4 millimeters broad could be seen.

It is generally supposed that the trichina is exclusively a muscle parasite, but this is probably largely due to the fact that it is more difficult to discover them in the lard. Chatin, who wrote a volume on trichina a few years ago, asserts that they may be found in the fat of parts not connected with the muscles. I have made the following translation from a passage in his work :

a. Fragments of lard taken from a piece of American salted meat were, after hardening, examined in thin sections under a magnification of 120 diameters. Several preparations showed no trace of the parasite, but with a few the trichinæ appeared clearly characterized. Among these nematodes, some not encysted presented the same aspect as those found in animals which die at the beginning of tissue trichinosis. Others normally encysted were identical with those which were found in the muscular parts of the same piece of meat.

b. Pieces of lard chosen far from all contractile masses were treated by ether and bisulphide of carbon ; the residue examined under the magnification indicated above showed several trichinæ, of which several were encysted.

These researches were undertaken with meats seized at Paris and Lyons. Several microscopists (MM. Delavan, Fourmont, &c.) soon confirmed from their side the presence of the trichinæ in the fatty tissue. The fact soon became generalized by numerous observations of the Laboratoire de Micrographie de l'École des Hautes Études, and I was able later to collect more trichinæ encysted in the fat. (La trichine et la trichinose, par Joannes Chatin. Paris, 1883, page 88.)

I see no reason to doubt these statements, judging from the life history of the parasite. We all know that the adult worm gives birth to the embryos in the alimentary canal of the host, and that then the embryos bore through the intestinal walls and other tissues until they find a place where they are satisfied to coil themselves up and become encysted. The psoas muscles are among those most infested, and to reach these the embryos must pass through the leaf lard. It is not surprising that some of them conclude to stop there and make it their permanent dwelling-place.

When we consider that on an average about 2 per cent. of the hogs killed in this country are trichinous, making for the twelve or fifteen million hogs annually packed in our large cities 250,000 to 300,000 inspected animals, we cannot shut our eyes to the fact that there is danger in consuming the expressed fat from hogs which have not been inspected. It is true we might not get very many of the parasites in this way, but as every adult female worm produces about 1,500 young, a very few of them would be as large a dose as most of us would care to take.

That there is reason to believe in the dissemination of both the forms of tape-worm referred to above through oleomargarine I cannot doubt, but the danger of obtaining trichinæ from this source is very much greater. It is not probable, of course, that a sufficient number of trichinæ would be consumed at one time with this new article of food to produce violent sickness, but a few worms might cause irritation of the stomach and bowels and pains and soreness of the muscles as the embryos bored their way through these organs. Such symptoms would also without doubt be considered as due to malaria or rheumatism, and the trouble probably would not be serious ; but it is an open question if it would not soon become a serious question for us to continue to take these parasites into our system for an indefinite time and until our muscles became loaded with them.

There is little reason to doubt, therefore, that the danger connected with the use of oleomargarine, from the liability of the presence of such worms, which are parasites in man as well as in animals, is one that is deserving of thoughtful consideration.

HOG CHOLERA AND TUBERCULOSIS.

Of the parasites which are liable to contaminate the fats used in the production of butter substitutes, by far the most dangerous to the human subject, in my estimation, are those minute organisms which belong to the class of bacteria. It is well known that there is a disease called hog cholera, which prevails to an enormous extent among the swine of this country. Having been engaged in the study of that plague for nearly eight years, microscopically, by inoculation experiments, and in almost every other imaginable way, my statements in regard to it are based upon considerable personal experience. I do not regard the germ of this disease as in itself particularly dangerous to the human subject, although cases are on record where it is claimed that people have died from infection with it. Still, I would greatly prefer not to take it in a living form with my food.

A greater danger arises from the complications of this disease. I can explain this in a few words. In hog cholera, large ulcers form in the intestines, through which septic germs, some of them having great virulence, penetrate into the abdominal cavity and there multiply in a liquid thrown out by the irritated serous membranes. These germs multiply upon and penetrate to a certain extent the membrane which covers and forms a part of the leaf lard. Now, there are all degrees of sickness in hog cholera. There is a chronic form, in which these ulcers and this septic infection may exist and in which the animal does not show any plain symptoms of sickness. It is certainly conceivable that the fat of some such animals may find its way into the oleomargarine vats.

But the greatest danger of all, and one to which I shall allude very briefly, is connected with the disease now known as tuberculosis. There is no disease to which the human flesh is heir which deserves more careful consideration than this. In the census of 1880, 91,000 of the deaths recorded were attributed to one form of this disease, viz, consumption; of the deaths from all causes were reported, so that we are obliged to but it was acknowledged by the statistician that not more than five-sixths increase this number by one-fifth, or 18,000, to get the correct total. In other words, in 1880, with a population of 50,000,000, we lost 109,000 people from consumption, that is, from tuberculosis of the lungs. But tuberculosis of the bowels or *tabes mesenterica* and tuberculos of the brain or tubercular meningitis are also very common diseases, but the deaths from these causes are not reported. Taking a population of 60,000,000, which we shall soon have, and I doubt if we will be much out of the way in estimating our death rate from all forms of tuberculosis at 175,000. That is an enormous number of human lives to be destroyed in one year and in one country by a preventable disease, and it demands that such measures shall be adopted speedily as shall limit the distribution of its cause.

We know to-day that tuberculosis is a contagious disease, and that it may develop from tubercular matter being taken into the stomach with the food. It was formerly considered to be an hereditary disease, but with the recent advances of science that view is being forced into the background, and the most that is claimed in that direction now by our scientific physicians is that a predisposition to it is inherited. In other words, if a person has tuberculosis that shows that he was susceptible to that contagion, and it indicates that the members of his family, having a similar constitution, are also susceptible to it, and will contract it if they are exposed to the germs which produce it; but these germs, the

contagion of the disease, must enter the body in some way before a person can develop tuberculosis.

Now, tuberculosis is a very common disease of cattle—and the bovine form is believed to be identical with that which affects man—it is a disease which also affects the hog. The tubercles often form in these animals upon the serous membranes and in the glands of the abdominal cavity in situations where they would necessarily contaminate those portions of the fat which are used in the manufacture of oleomargarine. We do not know what proportion of our beef cattle are tuberculous, but in Europe, where careful statistics have been recorded for a series of years, and with large numbers of cattle, it is found that among the animals which come to the slaughter houses for beef there are all the way from two to thirty in every thousand. In this country we have no such inspection, and it is very seldom that an animal affected with tuberculosis is ever condemned. It is not difficult to imagine what follows when the contaminated fat of a steer or a hog affected with this disease is transformed into oleomargarine or butterine, or any of these compounds. It may be mixed with a thousand or with thousands of pounds of other fat and contaminate it. I am unable to say how much fat is mixed together for this purpose, but I presume it varies with the capacity of the factory. If we say a thousand pounds, then it may go to a thousand families, and be eaten by five thousand persons.

These figures are of course only conjectural, and they are simply used to show what a remarkable effect upon the public health is possible by a new invention like this, which introduces a radical change into the manufacture of an article of food which goes upon the table of every family in the land. It is not my desire to make any sensational statements before this committee. I do not know, nor can any one tell at this time, what the exact effect of an extensive use of oleomargarine will be upon the health of our people. There have been scientists here who have asserted positively that oleomargarine is just as wholesome, just as valuable, just as free from danger to health as pure butter. With this conclusion I cannot concur, and I believe that it should be made and sold under such restrictions as will enable every consumer to know that he is not eating oleomargarine when he thinks he is eating genuine butter.

The CHAIRMAN. The authorities which you have cited, and your own experience as a scientific man, lead you to make the statement that parasites of various kinds are found in the fats of animals, I understand you?

Professor SALMON. Yes, sir.

The CHAIRMAN. And the authorities you have cited are acknowledged scientific men, and you cite them to prove that fact?

Professor SALMON. Yes, sir. There is no contest between scientific men in regard to this point—scientists who have made a special study of parasites. I do not think any one would contest the statement from a scientific point of view.

Senator JONES. I believe you stated you were not an expert chemist, but a physiologist. Do your conclusions as a physiologist lead you to believe that oleomargarine is an unhealthful product?

Professor SALMON. To the extent and degree which I have indicated in my paper.

Senator JONES. As to being a little more indigestible?

Professor SALMON. As to being a little more indigestible and the fact that it may contain dangerous parasites. Of course that depends largely

on the way it is manufactured, how carefully the animals are inspected from which the fat is taken.

Senator JONES. Those are the two points on which you consider it unhealthy?

Professor SALMON. Yes, sir.

Senator JONES. If in the manufacture of oleomargarine the product is heated to a temperature verging closely upon the temperature of boiling water you would think there would be no danger from parasites?

Professor SALMON. No, sir; I would not say that. The most important point, I think, is in regard to the germs of tuberculosis, a germ which withstands the boiling point for a certain length of time and which may be induced by tubercles in the serous membranes which cover the fat of hogs and cattle.

Senator JONES. Supposing tubercles were found in the fat of animals, would they be likely to be found in the other parts of the animal as well?

Professor SALMON. Yes, sir.

Senator JONES. In larger quantities than in the fat?

Professor SALMON. No, sir.

Senator JONES. Where would they be found besides in the fat?

Professor SALMON. In the lung tissues of the serous membranes which cover the lungs, or growing on the serous membranes which line the abdominal cavities.

Senator JONES. You think it is possible to have in the same animal tubercles in the fat and in the flesh?

Professor SALMON. Yes, sir.

Senator JONES. Have you ever known, in your observation as a physiologist, of a man or animal being affected in that way?

Professor SALMON. It is very difficult to get positive evidence. I know of many cases where it is suspected they were affected in that way, but these parasites are very small.

Senator JONES. Affected, you mean, by the use of oleomargarine?

Professor SALMON. By the use of products of cattle that were infected with tubercles; by eating perhaps a very raw steak or something of that kind.

Senator JONES. That would come, then, from the muscles and not from the fat?

Professor SALMON. Yes, sir.

Senator JONES. I understood you to say there was no danger of its coming from the muscles. You may have misunderstood me, but I understood you to say just now that the tubercles would never be found in the muscles, but only in the lungs, the fat, or some other part of the body.

Professor SALMON. No, sir; I did not intend to state that. You asked me if they would not be found in larger quantities. They are sometimes found in all parts of the body. I have seen cattle killed where they were only beginning to show these tubercles.

Senator JONES. There would be danger in consuming the animal in any way in the beginning of this disease?

Professor SALMON. Yes, sir; unless thoroughly cooked.

Senator JONES. Would there be any danger of its being communicated in the milk?

Professor SALMON. A little danger, but I will state that it is generally recognized by scientific men that it is not communicated through

milk unless there are tubercles in the udder, and that is the last organ in which tubercles are found.

Senator GEORGE. Would it be possible then to convey these things in butter?

Professor SALMON. I suppose it would be possible, but as a fact by the time the tubercles appeared in the udder, the animal is so far advanced in the disease that it does not give milk. They appear first on the serous membranes, and when in that condition the animal is often used for food.

Senator JONES. I would like to ask if you rely on the scientific information solely, attained by this investigation in Paris, as to the propriety of using oleomargarine as a food in hospitals, as the only scientific proof you have outside of your own opinion that this thing is deleterious, or has it been asserted by other scientific investigations to be so?

Professor SALMON. You refer to the digestibility? Well, I base that almost entirely on the Paris report.

Senator JONES. That was in 1880?

Professor SALMON. Yes, sir.

Senator JONES. Six years have elapsed since then, and there have been no other investigations of a scientific nature tending to establish that theory?

Professor SALMON. I do not know of any other.

Senator JONES. That was in the early history of this production, and that has not been affirmed or denied since that time?

Professor SALMON. I do not know that it has, but it is one of those things which in itself bears the stamp that it is of scientific value.

Senator JONES. I suppose, from the fact that you have produced it, that is now about the best evidence that can be produced in support of the theory?

Professor SALMON. I do not know about that; I have not been paying so very much attention to the literature of this subject; my attention has been in another line. But when I was asked only a day or two ago in regard to this matter, I naturally turned to this.

Senator JONES. The digestibility, I understand, was the chief point of objection at that time on this subject?

Professor SALMON. Yes, sir.

Senator JONES. I want to ask if, in your opinion as a physiologist, there is any greater difference in the digestibility between oleomargarine and butter than between beef and mutton?

Professor SALMON. Yes, sir; there is.

Senator JONES. Is there any more difference between the digestibility of oleomargarine and butter than there is between beef and pork?

Professor SALMON. I could not say the exact degree of difference. I simply wanted to say that there was a difference.

Senator JONES. And I wanted to get some approximate idea of what the difference was.

Professor SALMON. The details of this matter have never been worked out thoroughly; it simply stands in the position where we can say there is a difference.

Senator JONES. I understand that in a hospital nobody would ever think of feeding a patient on pork, because it would be less digestible than some other meats; still it would not be proper for that reason to pass a law that nobody should eat pork.

Professor SALMON. I certainly am very far from recommending the passage of a law which would prevent anybody eating oleomargarine if he wanted to.

Senator JONES. Your idea is to have this article so guarded by laws that people shall not be imposed upon, and so that anybody who wants to use it can be allowed to use it?

Professor SALMON. Yes, sir.

Senator JONES. You think there is nothing in the constituent elements of the product that a man should be defended from it as from an enemy?

Professor SALMON. No, sir; I think we should give every man a chance to take it or let it alone. That is all that anybody can reasonably ask?

STATEMENT OF WALTER BROWN.

Mr. WALTER BROWN, of Washington, D. C., came before the committee.

The CHAIRMAN. Please state to the committee your occupation.

Mr. BROWN. I am a butcher here in the District. I do not know anything about the manufacture of oleomargarine or butter, but I know something about the fat that goes into it.

The CHAIRMAN. Tell the committee, briefly, what you do know, if anything.

Mr. BROWN. We sell our fat to men here. There is a first and a second grade of fat, and the majority of the beef fat all goes into the oil that is shipped off to the manufacturers of oleomargarine. When it leaves our slaughter houses in the summer time it is fly-blown, and upon the fat that is left from market the fly-blows are hatched, and I have sent it away with them crawling in the fat.

Senator JONES. Where did this go when you sold it?

Mr. BROWN. We sold it in Georgetown, on Water street. Weaver & Kengla have a soap factory there, and the mutton fat goes into the soap and the rest is steamed; I believe they steam the oil out and press it, and the oil is then put in barrels and sent to Baltimore. I do not know whether this firm sends to Baltimore or not, but the firm we used to sell to used to send to Baltimore.

The CHAIRMAN. How do you know that?

Mr. BROWN. I know they shipped it there; I have seen it go—the oil.

The CHAIRMAN. How do you know?

Mr. BROWN. I saw the oil shipped away. I do not know whether it is put in oleomargarine.

The CHAIRMAN. You said first it was put into oleomargarine. How do you know that?

Mr. BROWN. I never followed the oil. I know this, that the agents of these oleomargarine companies came here about four years ago and induced us to stop selling our fat to these fat men. We were then getting 5½ cents for our fat, and they said they would give us 6 cents and 6½ cents if we would sell our fat to them.

Senator JONES. Who do you mean by "them"?

Mr. BROWN. I do not know his name—it was one man, an agent. Mr. Stinchcomb is the name of the agent here who bought for this firm. We sold it at 6½ cents a pound. We all went in and sold our fat to them, and the soap man was broken up, and they have been bringing the price of it down until we are only getting 2½ cents for the best, and 2 cents for what they call the rough mutton fat with little pieces of meat attached. This agent at the time proposed to me that I should send over there and get the refuse, as he called it; it is chopped up fine and

goes through this process. I sent over and got some barrels of it to feed my hogs on, and paid 25 cents a barrellful, a barrel about the whisky barrel size. I sent over and got three barrels of it, but neither my hogs, dogs, chickens or anything else on the place would touch it. Tobacco and the refuse of oleomargarine are the only things I know that a hog will not eat.

Senator JONES. Where is that factory that you got the refuse from ?

Mr. BROWN. It was shipped from Baltimore.

Senator JONES. Who did you buy that from ?

Mr. BROWN. From Mr. Stinchcomb, the agent of this fat that was shipped away to the oleomargarine companies.

Senator JONES. What oleomargarine company manufactured the product ?

Mr. BROWN. I do not know that. If I had known that the gentlemen wanted me to come up here I would have had my books with me.

Senator JONES. Where is that factory established ?

Mr. BROWN. It was over in Georgetown. That was about four years ago.

Senator JONES. The oleomargarine factory was in Georgetown ?

Mr. BROWN. No, sir ; not the factory, but the agent. It was shipped to Baltimore and this stuff was shipped back.

Senator JONES. The oleomargarine manufactory was in Baltimore.

Mr. BROWN. I suppose so.

Senator JONES. What makes you suppose so ?

Mr. BROWN. Mr. Stinchcomb told me what he was doing with the fat, that he was shipping it to the companies, but I do not know to what companies. If I had known I was coming up here I could have brought my books.

Senator JONES. Will you furnish the name of this firm and their location from your books, and hand it to the stenographer and let it go into your statement ?

Mr. BROWN. Yes ; I cannot to-day, but I will to-morrow. I know it is impossible for us to keep our fat clean in the summer time ; the flies will blow it. We commence to kill in the morning of a hot day, for instance, and it may be 10 or 12 o'clock before we get through, and the fat lies there until my wagon comes home from market.

Senator JONES. Then what do you do with it ?

Mr. BROWN. We have a hide and fat association of our own, the District butchers, and we send it there ; then Weaver and Kengla send there later in the evening and get it and take it to their place up on Water street, at the soap factory. It is there selected out, the best of it (it is six weeks now since they have stopped), and it is washed and chopped up in pieces to put into soap, and the rest they steam and get the oil, and that was sent to Baltimore, I suppose. I can furnish the name of the place where the oil was sent to.

Senator JONES. These people in Georgetown made oleomargarine oil up to six weeks ago ?

Mr. BROWN. Yes, sir.

Senator SAWYER. Did you see it ; were you there, and did you see them make it ?

Mr. BROWN. No, sir ; I did not see it.

Senator SAWYER. Somebody told you about it ?

Mr. BROWN. Yes, sir.

Senator SAWYER. That is what I supposed ; you heard so by rumor on the street ?

Mr. BROWN. Well, we are all connected together, only I have no interest in that part at all. They got the fat from the association.

The CHAIRMAN. You were told by the people who bought the fat that they used it for making oleo oil?

Mr. BROWN. Yes, sir.

The CHAIRMAN. That is not a rumor on the street.

Mr. BROWN. Oh, I saw a letter from the company last summer. The clerk showed it to me. It said, "The last oil you shipped to us was musty. Please be careful and keep this sweet." I can get the name of the person who sent that letter. I saw that letter myself, and he asked me right there to see that my fat was kept sweet.

The CHAIRMAN. You say you got two or three barrels of the refuse?

Mr. BROWN. I got three barrels.

The CHAIRMAN. To feed to your hogs?

Mr. BROWN. Yes, sir.

The CHAIRMAN. But they would not eat it?

Mr. BROWN. No, sir; nor the chickens nor the dog.

The CHAIRMAN. Did you examine that material to see what it was?

Mr. BROWN. It looked to me like sausage or pudding-meat chopped up fine, just in a kind of loblolly.

The CHAIRMAN. Had it been pressed?

Mr. BROWN. It had been pressed, and on top the maggots had gathered that thick [indicating] on the top of the barrel, and the maggots were pressed as flat as that piece of paper. My own opinion is the oil was pressed out of that; that is all I can say.

The CHAIRMAN. Where did this come from?

Mr. BROWN. From Baltimore. I bought it from Mr. Stinchcomb, who was the agent here who was buying the fat.

Senator JONES. Did he send the fat to Baltimore?

Mr. BROWN. He shipped the fat then to Baltimore, but since then they have been steaming it here and getting the oil out.

Senator JONES. He bought all kinds of fat?

Mr. BROWN. Yes, sir.

Senator JONES. He made oleomargarine out of all sorts?

Mr. BROWN. No, sir; the oleomargarine fat did not go in. We had to keep our beef fat as clean as we could, but in hanging up a bullock in a slaughtering house the floor is not very clean; the entrails fall out on the floor, the fat is wiped all over the floor, and it is impossible to keep it clean the way we work there.

Senator JONES. Does this establishment at Georgetown make any imitation butter?

Mr. BROWN. No, sir.

Senator JONES. They do not make the oleomargarine as a product, or imitation butter?

Mr. BROWN. No, sir; but they make the oil and ship it away in barrels.

Senator JONES. And that is made into butter?

Mr. BROWN. Yes; I suppose it is made into butter. I know they ship it to these oleomargarine firms, because I saw the letter over there that the clerk showed me last summer.

Senator JONES. That was from the oleomargarine firm?

Mr. BROWN. Yes, sir.

Senator JONES. And he said that he was using that oil for the purpose of manufacturing oleomargarine?

Mr. BROWN. He said this: "Please be more careful, and tell your men to keep their fat sweeter; the last oil we could scarcely use; it was mighty moldy," or something of the kind. I know that fat, if it lies over night, gets very moldy, and of course the oil must smell so; musty and close.

Senator JONES. You do not know whether fat could be used after it is in that condition to make oleomargarine or not?

Mr. BROWN. No, sir; I do not know anything about it, only I know I would not like to eat the oil that is taken out of our fat. The fat that we cut in the market there at our stalls, when trimming meat, we throw in the baskets under the stalls, and after market is over we find it is all covered with green flies. I have seen the fly-blows as thick as the end of my finger in bunches.

The CHAIRMAN. Mr. Webster wants to make a short statement in addition to what he has already said.

ADDITIONAL STATEMENT OF GEORGE H. WEBSTER.

Mr. WEBSTER said: I desire simply, Mr. Chairman, to explain to the committee why tallow has ruled so exceptionally low during the last few years, as I understood the question was asked yesterday and was not satisfactorily answered. The fact that the price of tallow has ruled especially low during the past few years is due to natural causes well known to the trade, and is not in any way attributable to the manufacture of oleo oil. The markets of Great Britain and France, which are the principal consuming markets for tallow, have been oversupplied with Russian tallow and that from South America, and when we remember that in South America cattle are often killed for their hides and tallow alone, the reason for the low price is obvious.

In addition to this, tallow has to compete with other illuminating and soap-making products, tending to depreciate its value. The light from petroleum has almost superseded the old-fashioned tallow candle, while the products of petroleum furnish various materials for making candles which are far cleaner, brighter, and nearly or quite as cheap as tallow candles.

Tallow has still another formidable competitor in cotton-seed oil, which is so largely used for soap-making in this country and in Europe, and which sells at from 1 to 2 cents a pound less than tallow. We have marketed the most of our production of tallow in this country for several years past, for the reason that the price has been higher in Chicago than anywhere else, often actually higher than in New York, and relatively higher than the foreign markets. We sometimes get an occasional foreign order, which we are able to fill by a reduction of freight, and perhaps a clipping in exchange, a brokerage, or something of that kind. But the exports of tallow have been remarkably light for several years past for the reasons I have submitted. The export of tallow for the ten months of the fiscal year of 1885 ending April 30 were 2,800,000 pounds, and for the ten months of the fiscal year ending April 30, 1886, they were only a little over 1,000,000 pounds. We have made sales as large as that, at one time, to J. S. Kirk & Co., of Chicago. So that the exports of tallow have been a mere bagatelle for several years past, and the reason is because the markets of Europe have been oversupplied, and because it has these formidable competitors to contend against.

The CHAIRMAN. Just one question. Suppose American tallow had continued to be made, and as of good quality as it used to be before

oleo oil was extracted, would not the price of American tallow remain higher than it is now and maintain its hold on the foreign markets to a certain extent?

Mr. WEBSTER. I am glad you asked me that question. I do not think it would. I think our tallow would bring just as much money for the purposes for which tallow is used as it would have brought at any time within the past few years. Yesterday I was unable to be present, but I understand the question was brought up about stearine, whether the stearine ought to be figured as enhancing the value of cattle, when it would be in tallow anyhow. Of course it would. But there is a difference in the value of stearine. As oleo oil is of high grade, and higher in value than common tallow, so is stearine from oleo oil of a better quality, and consequently higher in value than stearine from common tallow. We press considerable common tallow to obtain tallow oil for lubricating purposes, and we get the stearine which we sell for soap-making. But we always get from 2 to 3 cents a pound more for our oleo stearine than for this tallow stearine.

The CHAIRMAN. Is not stearine used very largely for soap and candle making?

Mr. WEBSTER. Yes, we sell a great deal to soap and candle manufacturers in Milwaukee and around Chicago. I have a couple of affidavits that I would like to offer in connection with the testimony we have submitted, and also the following memorandum:

Estimates submitted by Mr. Webster.

| | |
|---|--------------------------|
| Pounds of oleomargarine and butterine made in Chicago and vicinity during year ending June 1, 1886..... | 18,000,000 to 20,000,000 |
| The same product made in the whole United States during the same time..... | 32,000,000 to 35,000,000 |

In the West the manufacture of butterine predominates, while in the East the reverse is the case; so that I believe the aggregate out-turn of each product is about equally divided.

The manufacture of butterine is only carried on during nine months of the year, or from September 1 to June 1.

The following affidavits were also submitted by Mr. Webster as a part of his statement:

STATE OF ILLINOIS, *Cook County, ss.:*

Philip D. Aimour, being first duly sworn, deposes and says that he is a resident of the city of Chicago, in the State of Illinois, and that he is a member of the firm of Armour & Co.

Deponent further says that said firm of Armour & Co. in the course of their business makes and sells oleomargarine and butterine, and that this deponent knows of his own knowledge the materials and the methods used by said firm in the making of said products. They are as follows:

METHODS OF MANUFACTURE.

The fat is taken from the cattle in the process of slaughtering, and after thorough washing is placed in a bath of clean, cold water, and surrounded with ice, where it is allowed to remain until all animal heat has been removed. It is then cut into small pieces by machinery and cooked at a temperature of about 150 degrees, until the fat, in liquid form, has separated from the fibrine or tissue, then settled until it is perfectly clear. Then it is drawn into graining vats and allowed to stand a day, when it is ready for the presses. The pressing extracts the stearine, leaving the remaining product, which is commercially known as oleo oil, which, when churned with cream or milk, or both, and with usually a proportion of creamery butter, the whole being properly salted, gives the new food product oleomargarine.

In making butterine we use neutral lard, which is made from selected leaf lard, in a very similar manner to oleo oil, excepting that no stearine is extracted. This neutral

lard is cured in salt brine for forty-eight to seventy hours, at an ice-water temperature. It is then taken, and, with the desired proportion of oleo oil and fine butter, is churned with cream and milk, producing an article, which, when properly salted and packed, is ready for market.

In both cases coloring matter is used, which is the same as that used by dairymen to color their butter. At certain seasons of the year, viz, in cold weather, a small quantity of salad oil made from cotton-seed is used to soften the texture of the product, but this is not generally used by us.

Deponent further says that no other material or substance, except as above stated, is used by Armour & Co. in making oleomargarine or butterine.

Deponent further says that he has read the statement made in a report of the Committee on Agriculture to the House of Representatives, purporting to give the materials used in making oleomargarine and butterine, and he says that none of the materials or substances therein enumerated are used by Armour & Co. in making said products or either of them, except as herein stated.

Deponent further says that he has read a letter dated May 19, 1886, signed Armour & Co., Swift & Co., George H. Hammond & Co., N. K. Fairbank & Co., and Samuel W. Allerton, a copy of which is hereto attached, and he says that the same is the letter of the parties whose names are attached thereto, and that the statements therein made so far as the same relate to Armour & Co. are true, and so far as they relate to the other parties signing said letters, he, upon information, believes them to be true.

And this deponent further deposes and says that no ingredient is or ever has been used by said firm of Armour & Co. in the manufacture of said oleomargarine and butterine which is in any way injurious to health.

PHILIP D. ARMOUR.

Subscribed and sworn to before me this 22d day of May, 1886.

[SEAL.]

EVERETT WILSON,
Notary Public.

STATE OF ILLINOIS, *Cook County, ss:*

Gustavus F. Swift, being first duly sworn, deposes and says that he is a resident of the town of Lake, in the State of Illinois, and that he is a member of the firm of Swift & Co.

Deponent further says that said firm of Swift & Co. in the course of their business makes and sells oleomargarine and butterine, and that this deponent knows of his own knowledge the materials and the methods used by said firm in the making of said products. They are as follows:

METHODS OF MANUFACTURE.

The fat is taken from the cattle in the process of slaughtering, and after thorough washing is placed in a bath of clean, cold water and surrounded with ice, where it is allowed to remain until all animal heat has been removed. It is then cut into small pieces by machinery and cooked at a temperature of about 150° until the fat in liquid form has separated from the fibrine or tissue; then settled until it is perfectly clear. Then it is drawn into draining vats and allowed to stand a day, when it is ready for the presses. The pressing extracts the stearine, leaving the remaining product, which is commercially known as oleo oil, which, when churned with cream or milk, or both, and with usually a proportion of creamery butter, the whole being properly salted, gives the new food product, oleomargarine.

In making butterine we use neutral lard, which is made from selected leaf lard in a very similar manner to oleo oil, excepting that no stearine is extracted. This neutral lard is cured in salt brine for forty-eight to seventy hours at an ice-water temperature. It is then taken and, with the desired proportion of oleo oil and fine butter, is churned with cream and milk, producing an article which when properly salted and packed is ready for market.

In both cases coloring matter is used, which is the same as that used by dairymen to color their butter. At certain seasons of the year, viz, in cold weather, a small quantity of sesame oil or salad oil, made from cotton seed, is used to soften the texture of the product.

Deponent further says that no other material or substance except as above stated is used by Swift & Co. in making oleomargarine or butterine.

Deponent further says that he has read the statement made in a report of the Committee on Agriculture to the House of Representatives, purporting to give the materials used in making oleomargarine and butterine, and he says that none of the materials or substances therein enumerated are used by Swift & Co. in making said products, or either of them, except as herein stated.

Deponent further says that he has read a letter, dated May 19, 1886, signed Armour & Co., Swift & Co., Geo. H. Hammond & Co., N. K. Fairbank & Co., and Samuel W. Allerton, a copy of which is hereto attached, and he says that the same is the letter of the parties whose names are attached thereto, and that the statement therein made, so far as the same relate to Swift & Co., are true, and so far as they relate to the other parties signing said letters, he, upon information, believes them to be true.

And this deponent further deposes and says that no ingredient is or ever has been used by said firm of Swift & Co. in the manufacture of said oleomargarine and butterine which is in any way injurious to health.

GUSTAVUS F. SWIFT.

Subscribed and sworn to before me this 22d day of May, 1886.

[SEAL.]

D. E. HARTWELL,
Notary Public.

CHICAGO, May 19, 1886.

So much misapprehension seems to exist in the public mind regarding the component parts and process of manufacture of oleomargarine and butterine that, in view of the false and exaggerated statements and "reports" engendered and promulgated by the so-called "dairy interest," the undersigned, being among the largest manufacturers in the country of these new "food products," consider the present an opportune time for laying the matter frankly before the people, and before Congress, where prohibitory legislation is now being sought, in the hope that a full statement of the actual facts concerning these much abused articles may insure a fair hearing and tend to remove the false impressions which may have been created by the misstatements of interested persons.

Physicians, chemists, and health officers in various parts of the country have pronounced them wholesome articles of food, in no way deleterious to health; and the daily increasing demand for them shows their hold upon popular favor, not as imitations of butter, but as new food products and most desirable substitutes for the medium grades of butter.

The report of the Committee on Agriculture to the House of Representatives accompanying the bill reported by it is so manifestly unfair that we are sure that its effect will be destroyed by its own absurdity. Of the fifty alleged ingredients mentioned in the report only three are ever used, and those so changed and improved in character from what the report would lead the public to believe that they practically make the whole list a falsehood. The component parts of oleomargarine and butterine are oleo oil, neutral lard, fresh cream, and milk—some makers use buttermilk—choice creamery butter, fine dairy salt, and clear cold water. The coloring matter used is precisely the same as that universally used by all dairymen and butter-makers. At certain seasons of the year a very small quantity of fine salad oil, which is produced from selected cotton seed, is occasionally, but not generally, used to soften the texture of the product. The oleo oil above mentioned is made from the choicest fats of beef-cattle, rendered at an approximate temperature of 150 degrees. The neutral is made from selected leaf lard only, and rendered in a similar way and at about the same temperature, producing a clear and odorless product, which is put into a bath of clean, cold brine, containing nothing but salt and water, for forty-eight hours; after which, with the proper proportions of oleo oil and the finest creamery butter, the product is churned with cream and milk, salted and colored, and packed for market. We use nothing else.

This is all there is concerning the manufacture of these products, and about which political dairymen have published so many falsehoods. We unhesitatingly affirm that these products are not made by any secret process, nor under any "patent" whatever. While it is true that several patents for making butterine were obtained a few years ago, in order to secure Government protection against the French Mege patent prior to its expiration, we do not, nor do we know of any manufacturer who does, make use of any of the processes covered by those patents. Our factories are always open for public inspection, as hundreds of people can testify, and we consider such visitations as marks of special favor. We are ready and willing to furnish to members of Congress, or to any committee they may appoint, all detailed information which they may desire, both as to the materials used and the whole process of making these products. The manufacture of these articles is practically an open industry in Europe, and it is a positive fact that in this country it increases the value of beef-cattle fully \$3 per head, by the utilization of the oleo oil above described; and in addition to all these points in favor of the articles themselves, their manufacture is a legitimate industry which benefits both the consumer and the farmer, and deserving of positive protection rather than attempted destruction. We are very willing that these products shall stand on their own merits, and we do not oppose measures honestly intended to bring about that result, but we do protest against legislation

by Congress prohibitory in its character and intended to crush out one industry in favor of another.

In corroboration of our statements we append copies of letters written by competent authorities who have recently examined these products and the method of working them, and hope that they may assist in carrying conviction to all minds, aside from the assurances we have herewith respectfully submitted.

ARMOUR & CO.
SWIFT & CO.
GEO. H. HAMMOND & CO.
N. K. FAIRBANK & CO.
SAM'L W. ALLERTON.

STATEMENT OF JOHN A. M'BRIDE.

Mr. JOHN A. McBRIDE, of Sussex County, New Jersey, next addressed the committee.

I am a farmer by occupation. I do not intend to detain the committee long, because I understand the time is limited. I have not come here with any prepared speech, but I have come in the interest of the farmers—not only those of the county in which I live, but in behalf of the farmers of this nation. It is a fact that I think none of you will dispute, that it is seldom, if ever, that the farmers of the United States come to Congress and appeal for help. They remain at home, attend to their work, pay their proportion of the taxes, and trust to you to look after their interests, and it is only on an occasion like this that there is any exception to this rule. Why is it? It is because an industry—not an honest, honorable industry—has grown up which threatens to supplant an honest and honorable industry.

One thing connected with this matter appears to me very significant, and that is that while the advocates of oleomargarine object to any law restricting the traffic in it, and claim that it is a healthful product, that it is an honest competitor with butter and the dairy interests, yet at the same time not one of them will eat it. Now if oleomargarine is healthful as an article of food, as they say it is, if it is better than this poor butter, if it can be bought so much cheaper, why not eat it instead of eating butter? I had a little experience in the New Jersey legislature this last winter, and had to combat some of the arguments then put forward. An oleomargarine bill was introduced there and passed, and the same arguments were heard then that we hear now; that oleomargarine was a healthful article of food; that it was an honest competitor with the dairy interests; and yet at the same time none of them eat it. The trouble is, Senators, that this article is not sold upon its merits; I make that assertion. The dairy commissioner of the State of New Jersey, for the past two months, has been making examinations at different places in the State, and finds that the dealers have not been selling oleomargarine as oleomargarine, but they have been selling it as first-class dairy butter.

Now I wish to answer the arguments of the gentlemen in reference to beef cattle. While the price of beef cattle may have advanced in the West, it has decreased in the East proportionately. While milch cows may be in demand in the West, their value has decreased proportionately in the East. While land may have, as they say it has, advanced in the West, land in my own county of Sussex and in the county of Orange, which Mr. Richardson represented here yesterday, and other as fertile counties as exist in the civilized world, that a year ago brought \$100 an acre, to-day will not average \$50 an acre under the hammer, or at their cash value. And I think the chairman of this committee will

bear out my assertion that it has decreased in value in the counties of Saint Lawrence and Herkimer in his own State. I wish to say that the gentlemen who appeared before the committee and said that the farmers in Saint Lawrence and Herkimer Counties could not to-day make a thousand pounds of butter, and that the reason why butter had so depreciated in price was the fact that the farmers there had forgotten how to make butter, were using an argument I listened to last winter and which has been repeated here to-day. In other words, they would have you believe that the farmers of this country have forgotten everything they ever knew, and the reason why butter is low and farm products depressed is because the farmers of this nation have not common sense.

Another point which to me is significant. If it is of such importance to the farmers of the West that this bill should not become a law, why have they not petitioned Congress against it? Has a single petition come from the farmers of the West asking for the defeat of this bill? Are not those here who are advocating it either directly or indirectly interested in the manufacture and sale of oleomargarine itself? While on the other hand petitions by the thousand have come from the farmers of the East asking for the passage of this bill. I say that fact of itself certainly is significant. However, as you have but little time to listen to further argument, I will not detain you longer.

The CHAIRMAN. If you can give us any facts in regard to the sale of oleomargarine in your own State, we will give you the time to state them and the committee will be glad to hear you.

Mr. McBRIDE. The facts are simply as I get them from the dairy commissioner. We had a law passed in our State last winter and under it a dairy commissioner was appointed to see that the law was properly and thoroughly executed. As I have stated, the opponents of the bill claimed that oleomargarine could be sold upon its merits, and that if sold upon its merits it would be bought equally with butter; that they were selling it on its merits. Now the facts are to the contrary. One of the deputies made an investigation of the matter at Perth Amboy and he found that nearly every individual who was selling oleomargarine was selling it, not as oleomargarine, but as prime dairy butter.

Senator JONES. Is that since the law went into effect?

Mr. McBRIDE. Yes, sir. It only went into effect this spring. I presume they thought they would go on as long as they could without branding their goods, as the law prescribes.

Senator JONES. What does your commissioner report as the effect of his efforts to have oleomargarine sold for what it is?

Mr. McBRIDE. His report is that when it is sold for what it is, people are not very apt to buy it.

Senator SAWYER. If we can put this bill in such a shape that oleomargarine will be sold, as it ought to be, for what it is, would not that remedy the trouble?

Mr. McBRIDE. Individually I never have objected to that at all; in fact, the law which we passed this winter provided that it should be sold for what it was, and with a certain brand. But what we do complain of is, that it is not sold for what it is, but for prime dairy butter.

Senator JONES. But since the passage of the law you refer to can you and do you enforce the law in New Jersey; does your commissioner enforce it?

Mr. McBRIDE. Yes, so far as I am informed.

Senator JONES. And it accomplishes all that you wish?

Mr. McBRIDE. But, as I say, previous to that they had been selling it, not for what it was, but for prime dairy butter.

Senator JONES. But the people are complying with the law, and he finds no difficulty in enforcing it?

Mr. McBRIDE. So far as I am informed, people are complying with the law.

Senator JONES. Have you a copy of the law?

Mr. McBRIDE. No, sir; I have not.

Senator JONES. Could you furnish us with a copy of it?

Mr. McBRIDE. I could, but I would have to ride 300 miles to get it.

Senator JONES. I would be glad if you would send us a copy of it, or perhaps we can find a copy here somewhere.

Mr. McBRIDE. Mr. Hires, the Representative from our district in Congress, informs me that he has a copy with him.

Senator JONES. Then I understand you to say there is no difficulty in enforcing the State law, which requires that this article shall be sold in New Jersey for what it is?

Mr. McBRIDE. I will answer to that that I have not seen the dairy commissioner since the passage of the law. The only information I get is this: That in the investigation he has made he has found that they have been selling this oleomargarine, as I said before, for prime dairy butter, and he has arrested these parties. Just what steps he has taken I am unable to answer you correctly now.

Senator JONES. Is the American Dairyman, published in New York, a reputable paper?

Mr. McBRIDE. I cannot say.

Senator JONES. I have received a copy of that paper with a marked article reporting what Dr. W. K. Newton said on the subject.

Mr. McBRIDE. That is the name of our commissioner.

Senator JONES. He reports that the manufacturers, wholesale dealers, and jobbers sell these products for just what they are, and brand them as the law requires, and that they show their willingness to aid him in enforcing the law. In speaking of the retail dealers, he found that previous to that they had been selling this product for butter, but he says, it only being about two months since the law passed, many of the retail dealers have already fallen into line, and are selling oleomargarine and butterine under its proper name and labeling each parcel according to law. And then this paper goes on to say that the law is being effectually enforced. So that I suppose there is no difficulty in regulating this matter when the States choose to do so.

Mr. McBRIDE. It occurs to me that while we may have a State law, it would not do any harm if we had a general law also on the subject.

Senator JONES. Would it do any good if the State law accomplishes the purpose?

Mr. McBRIDE. Undoubtedly. I think the more penalties you place upon the improper manufacture and sale of it the better; that is my theory, and I think if you had witnessed what I have witnessed in the dairy districts you would be of the same opinion.

Senator BLAIR. I do not understand that you claim that there has been any fair time allowed to test the law?

Mr. McBRIDE. No, sir; I say the law only went into effect about two months ago, and I do not think there has been time enough to make a fair test of it.

Senator JONES. Do you think it will be a failure?

Mr. McBRIDE. I could not answer that except in this way: That the man who has charge of it in the State of New Jersey will make a

success of it if it can be made a success by anybody. That is as far as I can go, for the experiment has not been tried; it may be a failure or a success.

Senator JONES. One of its effects, you think, would be the suppression of the manufacture of butterine or oleomargarine?

Mr. McBRIDE. That has not been my idea; my idea is, that if it is sold under proper restrictions, if people want to buy it and eat it, with the evidence that has been given before us this morning, I am perfectly willing they should do it, but I do not want it on my plate.

The CHAIRMAN. How long has this law in New Jersey been in force?

Mr. McBRIDE. Only about two months.

The CHAIRMAN. There is not very much known then about its effects I imagine, as yet?

Mr. McBRIDE. As I have said, I cannot speak positively at all about it. It is an experiment; it may or may not be a success. But State laws so far have proved very ineffectual.

Senator JONES. You do not mean in New Jersey?

Mr. McBRIDE. Yes, sir. We had a prohibitory law in New Jersey, and the more they prohibited it the more they sold of it.

Senator JONES. So you have tried another one?

Mr. McBRIDE. Yes, sir; we have tried another one, and it may turn out in just the same way the first one did.

The CHAIRMAN. Two or three gentlemen want to submit statements in writing, and may wish to make oral statements first. Those gentlemen we have not heard will be permitted in a day or two to submit anything that is proper, and it will go in to the testimony as their statements.

Senator BLAIR. It ought to be understood that it will take a little time to get it into print, and they should not delay presenting their statements.

The CHAIRMAN. I understand; they will have to be put in by to-morrow.

ADDITIONAL STATEMENT OF W. S. TRUESDELL.

Mr. W. S. TRUESDELL, of Saint Louis, vice-president of the Mississippi Valley Dairy and Cream Association said:

I trust the committee will pardon me for inflicting myself upon them a second time. But I do it so that you may properly understand the general methods of the manufacture of butter in the West, in explanation of the remarks that have been made by the manufacturer from Boston who is so largely engaged in the creamery business in Iowa. Those of you who have studied the development of the dairy interest in the Western States perhaps are acquainted with the fact that the system of creameries in general use in the Western States is not the system that the gentleman himself has adopted and which he has found so satisfactory and so successful. You are all aware that the system of creameries and dairying is the successor of grain raising in all our Western States. In other words, as the competition resulting from the development of new and fresh agricultural sections in the West has enlarged the production of grain in those sections, it has depreciated the value of the grain product to that extent that the older settled States have found it necessary to turn from that branch of agriculture to another; in other words, to so condense the product of their lands that by the reduction of the cost of transportation they can find it more profitable.

By reason of the freshness, newness, and undeveloped condition of the dairying and creamery interests in these Northwestern States, aside

from the limited section of Iowa in which the gentleman is interested, a gathered cream system is followed by the creamery, which system is not that the farmer should bring his milk to the factory, involving no expense to the factory man, but that the factory man should send his teams into the country to the farmer, in many cases traveling a distance of 20 or 30 miles, getting the cream, bringing it back to his factory in the shape of cream skimmed from the milk, and then manufacturing that cream into his product of butter. And in order that you may understand the distinction between the two methods, I will say that while the gentleman has truthfully said to you this morning that they can manufacture their product at a cost to them of 3 cents a pound to put it in a marketable condition, the average cost of putting the cream from the hands of the farmer into a marketable shape in the form of butter under the gathered cream system of the Northwestern States is not less than 8 cents a pound. This I know from actual experience in the management of two creameries, one for several years the largest run in the State of Iowa, manufacturing at one time as much as 2,200 pounds of butter a day, and the other in the northern part of the State of Illinois.

The point I want to make is this, that while the gentleman is able to pay the farmer 50 cents a hundred for his milk, the average farmer in the States of Iowa, Missouri, Kansas, Nebraska, and those sections of Minnesota, Wisconsin, and Illinois that are working under the gathered-cream system does not receive but 8 or 10 cents per pound for his butter, even under the improved creamery system, whereas statistics will show that on the average produced in the past two years he has received from 15 to 16 cents a pound for his butter in the shape of cream taken from his own cows at his own home, involving no trouble or expense to him.

I want to say just an additional word. While the remarks of the gentleman from Boston would indicate from his successful experience in Northeastern Iowa that the creamery business is to-day a successful one in that State, I want to say to you and to him that if he has money in his pocket and wants to enlarge his experience in the creamery business I can invest that money for him to-day at 50 cents on the dollar on the cost of those creameries in perfected creamery buildings, fully and properly equipped for the manufacture of creamery butter, and I would buy buildings and plants that have been closed through the operations of oleomargarine manufactories. Those are facts. These men may laugh at them if they choose, but they are facts, and I know they are fair facts because I am intimately associated with the parties I speak of and know all about them.

There is another point I wish to emphasize, which was stated by the gentleman who addressed the committee a short time ago in regard to the source from which emanates the opposition to the measure we have presented to your consideration. There does not come before you, gentlemen, from any section of the country in which the agricultural industry is the leading industry a single remonstrance against the passage of this bill. The resolutions that have been tendered to you are from Boards of Trade representing cities in which the manufacture of the oleo product has become a leading industry. The facts which have been presented to you have been presented by men directly connected with those industries and those depending upon them, by the bankers who handle the money, by the cattlemen who sell the cattle to the oleo manufacturers, and not by the representative business elements of those cities. I venture to say, without fear of contradiction, that I can go into Kansas City to-day, and can get the signatures of nine out of every ten men

who handle dairy products against the petition that was sent up to you by the Live Stock Exchange of Kansas City. I have in my valise at the hotel the protest of the Chicago Produce Exchange and the assurance from an individual member of the Chicago Board of Trade that the action of the directors of those bodies is not the action of the bodies themselves, nor does it represent their sentiments. I have to say to you that the Board of Trade of the city of Saint Louis unanimously voted down the resolution presented to them by the gentlemen represented before you to-day, disapproving of the act now before you for your consideration. They unanimously voted down a petition to disapprove the bill. We were able to make them understand that the constituency which they represented, the grand agricultural interest of the Northwest were not prime movers against the bill nor the prime opponents of it.

But it does not seem to me necessary to use any arguments to convince gentlemen of your intelligence and knowledge about the agricultural development of this country, especially the great Northwest, or to show that there is no necessity for this new, man-devised, and man-discovered interest. The food that a wise Creator has provided for the use of man in the form of butter is certainly as good as, perhaps no better than, the product which the ingenuity of even these wise men has been able to discover. They tell us that were it not for the fact that oleo had been introduced in the market, butter would have been 50 or 60 cents a pound. Now, I want to say to you this: That the reason creamery butter sold in Boston last winter at 38 cents a pound, was that the manufacturer of oleomargarine and butterine made the price. I know it to be a fact—and I will state it under oath now if you choose or prove it by the records—that on the day butter advanced in Elgin 5 cents a pound last winter, it was freely and abundantly offered at 35 cents a pound, and that the agents of the Chicago butterine manufacturers said to these men who were offering butter at 35 cents, “you are fools; we will take all your product at 40 cents.” And I, as a purchaser of butter on the Elgin market under contract, was compelled to pay 40 cents when the manufacturer wrote me, under his own hand, that he had expected to sell and had billed me that butter at 35 cents. It was not the scarcity of butter; it was the effort of the butterine men to falsify the market report in order to appreciate the value of their own product and bring it under the appreciated price of butter.

In regard to the productive capacity of this country. Is there a necessity for this new element and new industry which has been introduced? What is the design of it? Is it to meet a want that the country has found in a deficiency of the butter supply? Is it to provide a channel of industry for unemployed labor? Is it to strengthen the hands of the honest dealers of this country? I claim, Mr. Chairman and honorable gentlemen, that there is no such occasion as this. It is purely and simply a money-making project on the part of those engaged in it. Why, sirs, will you tell me what the productive capacity of these grand prairies of the Northwest is to be? Is it possible to arrive at the possibilities of those acres now undeveloped as they would have developed under the natural impulse of the dairy interest previous to the introduction of this new element? In the State of Missouri ten years ago we had not one creamery in operation. Three years ago we built sixty creameries and within the past two years we have not built three. While our State is prolific of minerals and a grand State for the production of grain, our farmers, in the limited experience in the past few years, have discovered that, without this unfair competition which they have received from this new compound, it is the in-

terest for them to engage in. Look at the State of Iowa and see what the past ten years has done in the development of her interests.

The CHAIRMAN. Do you think Missouri is well adapted to dairying purposes?

Mr. TRUESDELL. There is no question at all about it. Why, in the State of Mississippi they are running creameries successfully, and when the gentlemen tell you that the dairy belt does not extend below the Ohio River they make a mistake—that is an exploded notion. The State of Tennessee is just as well adapted to good dairying as the State of Illinois.

The CHAIRMAN. And I suppose that is the case wherever the proper grasses are found?

Mr. TRUESDELL. Yes, sir. Missouri, particularly the upper half of it, is capable of being so developed, and we are developing it more than in the southern part, but we have creameries located all through the State. The best butter I am handling to-day comes from the city of Saint Charles, in the State of Missouri.

The CHAIRMAN. You are familiar with the creamery business in all its aspects?

Mr. TRUESDELL. Yes, sir; I am.

The CHAIRMAN. Mrs. Smith, the president of the Woman's Labor League, asks me to inquire of you whether any women are employed in the creameries in making butter, and if so, what proportion are women.

Mr. TRUESDELL. Well, the number is not very large. In a great many of the creameries no women are employed.

The CHAIRMAN. How many people are usually employed in a creamery?

Mr. TRUESDELL. From two to five men, depending upon its productive capacity. A small creamery can be run by two butter-makers and a helper; a large one employs five.

The CHAIRMAN. Are some women employed as butter-makers in the creameries?

Mr. TRUESDELL. Yes, but very few. Some employ women as helpers. Where a man is married, his wife is employed as a helper; but men are usually employed as butter-makers, while women are employed advantageously in the dairy, milking the cows and caring for the milk. We still employ women, but instead of putting her at the hard labor of handling the dasher of the churn we simply ask her to milk the gentle and docile cow and relieve her of the more burdensome part of the work.

The CHAIRMAN. The machinery does the work?

Mr. TRUESDELL. Yes, the machinery does the work which women had to do in years gone by.

STATEMENT OF GEORGE M. HARRIS.

Mr. GEORGE M. HARRIS, of Salem, Mass., then addressed the committee:

I have heard a good deal said in the past two days about the retail dealer, to the effect that the manufacturer of oleomargarine sells it honestly to the jobber and the jobber sells it honestly to the retailer, but that the retailer sells it dishonestly to the consumer. I am, gentlemen, one of those retailers. Until within the last fifteen months I was very much prejudiced against this article, but I found that I was losing trade, and it seemed that the demand of the people was for this fresh-made and fresh-flavored article. Accordingly I put it on my counter, and I

am selling it strictly in conformity with the Massachusetts State law, which requires that the wrapper shall be stamped like this [exhibiting a piece of paper with the word "butterine" printed on it], and I have here some photographs of my ice chest, which show you how the article is displayed there and just how it is sold.

The CHAIRMAN. How much of it do you sell?

Mr. HARRIS. I suppose from twenty to twenty-five packages a week, varying from 10 to 30 pounds each.

The CHAIRMAN. Do you sell creamery butter also?

Mr. HARRIS. Yes, sir, a great deal more of that.

The CHAIRMAN. How much more of it?

Mr. HARRIS. I suppose we sell half again as much perhaps.

The CHAIRMAN. What price do you get for the butterine?

Mr. HARRIS. Where we cut it out we get 17 cents, and 15 cents by the package.

The CHAIRMAN. What do you pay for it at wholesale?

Mr. HARRIS. From 10½ to 11 cents—less than I have been paying.

The CHAIRMAN. What do you get for butter?

Mr. HARRIS. We are getting now from 22 to 32 cents a pound. I have one class of butter made at a little creamery at Ipswich a dozen miles from my city which the farmers have contributed to and built. I buy butter from them during the months of June, July, and August. at 28 cents a pound and I retail at 32 cents.

The CHAIRMAN. An increase in price of 4 cents a pound?

Mr. HARRIS. Yes, sir.

The CHAIRMAN. You make a larger profit than that on your oleomargarine?

Mr. HARRIS. Yes, sir.

The CHAIRMAN. Why not sell the oleomargarine for an advance of 1½ cents a pound, and give the poor man the benefit of the difference?

Mr. HARRIS. I could not afford to do that. There is at least a loss of a cent a pound in cutting out the butter and the butterine. It is my belief, based upon the figures from my own books, that dairy products have suffered less in the reduction of price in the last five years than almost any other prominent article of food we handle. I have a few figures here, retail prices taken from my books in 1881 and in 1886, each at about the middle of May, I think. We were retailing the best grade of flour at \$9 a barrel five years ago; in 1886 it was \$6 a barrel. Five years ago potatoes sold at \$1.20 a bushel; this year at 90 cents a bushel. Pork lard was selling at 13 or 14 cents five years ago; now it is 9 to 10 cents. Granulated sugar was selling then for 10 and 11 cents a pound; this year it is 7 cents. Pea beans per peck, 70 cents, five years ago; now they are 50 cents. Diamond creamery butter sold then for 33 cents; now it is 30 cents, or was when these figures were taken. Five years ago cheese was selling for 17 cents; this year it sells for 14 cents. And it seems to me that butter has suffered less really than many of these other articles, and that the depreciation is due, not to the competition of oleo, but to the natural shrinkage of value that has come to almost every article of merchandise.

The CHAIRMAN. What is the necessity of the retailer charging twice as much for the products; what makes the difference in the wholesale and the retail price; you say you sell cheese at 14 cents?

Mr. HARRIS. Yes, sir; when I left home it was 12 cents; it was then 14 cents.

The CHAIRMAN. The wholesale price for fine cheese has been at 6 to 7 cents a pound.

Mr. HARRIS. I have been able to buy nothing that is good, nothing that would suit my trade, at less than 9 cents.

The CHAIRMAN. The best cheese made in America has been sold at from 6½ to 7 cents at Utica and Little Falls in boxes.

Mr. HARRIS. I have to buy for my retail trade in small quantities, and have to pay 9 cents in Boston.

The CHAIRMAN. Do you think all the retail dealers in your vicinity sell oleomargarine for what it is?

Mr. HARRIS. No, sir, I do not; within the past six weeks there have been two prosecutions; one of the parties was fined \$100 for selling butterine as butter, and the other one the same amount, because he did not stamp the wrapper in which he put his butterine as it should have been stamped, but wrote on it with a pencil.

The CHAIRMAN. Do you believe it is generally sold for what it is throughout the State; have you any knowledge on that subject?

Mr. HARRIS. I have no knowledge on that subject.

The CHAIRMAN. These cases you speak of you knew about?

Mr. HARRIS. I knew of them through the papers.

Senator JONES. According to your observation is the law of Massachusetts successfully enforced by the inspector?

Mr. HARRIS. I think so. I have great confidence in the inspector at our place. I recollect one instance where a lady who had traded with me for many years returned some butter to me that she had paid 25 cents a pound for and said she could not use it. I asked her if she had ever tried butterine. She said no; that she was prejudiced against it; but she bought 2 pounds of it and took it home to try it. Since that time I have sold her every two weeks a 20-pound package of it. She uses it for cooking, but not on the table.

Senator BLAIR. You have shown us a photograph of your refrigerator. Is that a glass inclosure at the front of it?

Mr. HARRIS. Yes, sir.

Senator BLAIR. If I should go there and look at the different articles of butterine and good butter through that glass inclosure could I tell the difference between the articles?

Mr. HARRIS. I think not.

Senator BLAIR. If by any chance it should so happen that the contents of the butterine inclosure should get into the dairy inclosure, and the markings should remain the same, if you should reverse the contents, I would buy my butterine at 25 cents a pound and my good dairy butter at 17 cents a pound?

Mr. HARRIS. If such an accident should happen you would be likely to.

Senator BLAIR. That is so far as my observation or capacity to detect the butter is concerned?

Mr. HARRIS. Yes, sir.

Senator BLAIR. In other words, I could not tell the difference between the products?

Mr. HARRIS. I don't know how your taste may be.

Senator BLAIR. Suppose that both inclosures contained butter, and that I was dealing with a dishonest man, is there any way in which I could protect myself, in the effort to get the good dairy butter, from an actual purchase of butterine?

Mr. HARRIS. I think not if you were dealing with dishonest men.

Senator BLAIR. Then all these contrivances which the law has provided thus far in the way of labeling goods of that character are really no protection to the purchaser as against a dishonest dealer?

Mr. HARRIS. I think not, sir.

Senator BLAIR. But if butter was one color and butterine another color, I could tell them apart just as well as you could?

Mr. HARRIS. Yes, sir; very well indeed. But no man would buy that article, if it was some foreign color, to put on his table. Would not that discriminate unjustly against the poor man, who would otherwise buy this article at a low price, but who would not buy it if it was colored?

Senator BLAIR. That is a matter of argument. I should not think it would be any injury to the poor man; both products are healthful, as the evidence proves. There was some question raised upon that point, but we will assume they are both healthful, one as much so as the other, the one costing 30 cents and the other 15 cents. We eat articles of food of different hues; we eat pink ice cream and other substances. I imagine in time the prejudice would disappear.

Mr. HARRIS. I think not against the color.

Senator BLAIR. You think that would remain a permanent objection?

Mr. HARRIS. It seems to me it would. Why, they object to pale butter; unless the butter is properly colored to come up to their idea, they object to it.

The CHAIRMAN. The consumer, then, under your law has not much protection against the dishonesty of the retail dealer?

Mr. HARRIS. I do not know that there is.

The CHAIRMAN. There is nothing in the world to prevent you, if you are so disposed, between the visits of the inspector, from taking the good dairy butter out of the butter tub and putting it in the place of the butterine, and the reverse, without anybody's knowing it except yourself?

Mr. HARRIS. No, sir; I think not. But there is nothing to prevent a dealer from adulterating his coffee if he chooses to, except as a matter of conscience.

Senator BLAIR. There are laws against obtaining money by false pretenses, and there is no doubt a performance of this kind could be punished criminally. But the evil seems to be one of the incapacity of the consumer to know what he is buying, and if anything could be done to enlighten him upon that point, it might be worthy of consideration.

Mr. HARRIS. But if there is an article that a poor man wishes to buy—and they do come to my place and call for it—it does not seem fair for the law to say that it shall be colored, so that when he puts it on his table everybody who sees it there will say it is butterine or oleomargarine.

Senator BLAIR. Perhaps it is unfair to legislate at all upon the subject.

The following letter from Mr. Harris is explanatory of his testimony :

[Office of I. P. Harris & Co., wholesale and retail grocers.]

SALEM, MASS., June 19, 1886.

DEAR SIR: With your kind permission, I desire to correct an impression which I fear the committee received from my statement before them on the 18th instant (at the hearing on the oleo bill), in regard to the amount of butterine which we are handling.

I stated that we were selling from twenty to twenty-five packages of butterine weekly, and about half as many again of genuine butter.

These figures are substantially correct in regard to the number of packages, but the butterine is chiefly in 10-pound tubs, while the real butter is chiefly in 50-pound tubs. This, of course, would show that our sales of genuine butter are very largely in excess of our sales of butterine.

Hoping that this may be added to or included in my statement,

I am, very respectfully, yours,

GEO. M. HARRIS,
Of I. P. Harris & Co.

Hon. WARNER MILLER,
Chairman Senate Committee on Agriculture.

STATEMENT OF F. K. MORELAND.

Mr. F. K. MORELAND, of Ogdensburg, N. Y., counsel of the American Agricultural and Dairy Association, then addressed the committee:

Mr. Chairman and gentlemen of the committee: I just wish to take a few moments to answer an objection which has been urged against this measure that it is unconstitutional. I have prepared a paper which I will leave with the committee, in which I have cited some authorities, and I wish to take the position that the national Government has the power to regulate interstate commerce, foreign commerce, and that the State cannot; that they have the power to tax an objectionable manufacture in order to regulate it and give other industries a fair chance. In my prepared argument I take the following ground:

It is rare in the history of this or any other country that there has been such a demand for any particular legislation as the demand during the present Congress for legislation to prevent the total destruction of the dairy industry. This demand at first but a "still, small voice," has grown to a clarion tone—at first, but like the murmuring of a summer breeze, has become the irresistible power of the tempest. This demand from the people of the country, the whole country, to their representatives in Congress assembled has been most emphatically manifested, and has found expression in divers ways, and Congress has done well indeed to take heed and devote to this matter the consideration it deserves.

It was thought at one time, and this belief held sway for many years, that the different States had ample power in the premises. It was believed that the States had ample power to legislate satisfactorily on all questions pertaining to the interests of the farmers. The farmers have hitherto manifested an agreeable quiescence equaled only by the ready willingness of the different States to furnish any legislation that might be required. I do not believe that the dairymen of the country have any rights which the different States are unable to protect, but the protection of the dairymen of the country in the enjoyment of the rights and privileges they are in justice and good government and under the Constitution of the country entitled to, is one thing, and the prevention of a great national calamity is quite another matter. The protection of a languishing industry is one thing, the protection of the health of the entire people is quite another matter, and yet they are very closely related.

The dairy industry of the country is seeking relief and the health of the people demanding protection both in the same way and through the same medium, viz, the passage of a law regulating and restricting the sale of an imitation article made and sold fraudulently as and for butter. The dairymen of the country have suffered from a diminishing foreign trade, due to the well-grounded suspicion existing in the countries to which we have exported our dairy products that our butter was not an honest article; that it was guiltless of the refining associations of the churn, the dairymaid, the cow, and sweet-scented pastures, nay, more, that it was the product of offal fat purified by nameless chemicals—a patented poison.

The exports of butter and imitations of butter do not to-day equal the amount of butter which we should export had it not been for the fact, well known in all our foreign markets, that we are making and exporting vast quantities of oleomargarine.

The home consumption of butter has also suffered to an alarming extent from the knowledge that much of the butter retailed over counters is not an honest article, and is an undesirable article of food.

The States may be able to secure to the dairymen within the States the rights they are entitled to, although they have hitherto failed to do so; but they certainly are unable to protect the health of the entire people and the honor of our commerce abroad. So far as the States have power, within the limits of their State constitutions, to legislate for the rights of dairymen, no State has yet gone too far to suit me. Let not the jealous defenders of State rights confound the protection of the dairy industry with the regulating of a great and wide-spread evil.

The States have a perfect right to legislate for the protection of their own citizens; but when the different States attempt in different ways to regulate or control a thoroughly organized piracy, then the ineffective legislation we have had in a dozen different States is the only natural result. When the black flag of organized piracy floating in the breeze above soap factories that manufacture an article to be used as food, and which is so manufactured that it cannot be distinguished from butter, and is liable to be insidious poison, bears upon its sable folds the legend "legitimate industry," the evil becomes too much for any State legislation.

It is in proof on the statute books of all the States which have meddled with this growing evil, in the decisions of courts which have been compelled to declare such laws in many cases unconstitutional, in flourishing oleomargarine factories, a depressed dairy industry, and impoverished farmers, that no State legislation has as yet been able to meet this great question. At the national convention of the American Agricultural and Dairy Association, held in New York City February 16, 17, and 18, 1886, the one all-absorbing topic for discussion was the possibility of protecting the consumers of butter from the fraud practiced upon them by manufacturers of and dealers in imitations of butter. At this convention every State in the Union to any extent interested in dairying was represented by accredited delegates. The gentlemen who had come from distant States to take part in the deliberations of the convention which was destined to formulate a policy which would redeem the country from the citizens within the country were men not only largely acquainted with public affairs, but also intimate with the interest and welfare of their several States. Strong resolutions were adopted urging immediate effective action by Congress as the only possible means of protecting consumers in their right to pure food and rescuing an imperiled industry.

Of all the delegates at this convention no delegate from the oldest dairy State in the Union was more emphatic in condemning in unmeasured terms the gross injustice to honest industry, in selling oleomargarine for what it is not, than the delegates from the South. None of the delegates at this convention were more emphatic in their condemnation of the detestable, iniquitous crime of tampering with human food than the delegates from the Southern States, and this is not to be wondered at, for when it comes to a question of pure food we are all human. The argument has been made against this measure that it seeks to destroy one industry and thus protect another industry. This is not the fact. This measure seeks only to prevent one industry—if the manufacture of oleomargarine is an industry—from destroying another.

It only seeks to lay the restraining hand of the law upon a business which is attempting to destroy a long established and important industry.

The opponents of this bill have treated the country to a dissertation upon the rank injustice of legislation against the poor man. Oleomargarine, they say, is "the poor man's butter." If this is the case it is either better or inferior to natural butter. If it is better than butter then it is a luxury, and the appetite of the rich crave it; if oleomargarine is inferior in quality to natural butter why should it be foisted on the poor man, for there is no man so poor in this country earning daily wages and supporting a family but who desires to provide good, wholesome food for his table. If there is one thing more than another which the poor man is jealous of, it is the butter he eats, and why should this not be so; he has the same faculties of taste and smell as his richer neighbor and the same good common sense, and I insist it is an insult to every laboring man in the country to say that oleomargarine is a poor man's food, when no poor man would purchase it if he knew it. If oleomargarine is the poor man's food, why all this care to make it resemble butter and sell it under the name of butter. To the delegates of the Southern States at the national dairy convention, much credit is due for shaping the policy of that convention and inaugurating the memorable contest which resulted so successfully in the House of Representatives. The opponents of this measure have occupied many untenable positions. They have argued strenuously that the bill seeks to protect one industry at the expense of another. That it protects the dairyman against the manufacturer of oleomargarine; that by burdening with taxation the legitimate industry of making oleomargarine the dairyman is unduly protected. This is necessary not for the purpose of destroying the manufacture of oleomargarine, but to prevent it destroying the manufacture of pure butter.

Another untenable position was the benefit to the poor man, the laboring class, from the manufacture of cheap butter. This claim is an outrage on common decency, for the product is never sold for what it is, and if it were sold under its proper name the laboring man is the last one who would buy it for food. It is true that the manufacture of oleomargarine has cheapened butter, but by indirection, by foisting upon the market 200,000,000 pounds a year of their products sold as butter, and thus creating an apparent overproduction, and an overproduction always reduces the market, no matter the means by which it has been brought about. All these objections to the bill and many other equally untenable have been answered, and our opponents hurl at us the Constitution of the United States, not by sections, but the entire Constitution, and expect to crush at one fell blow the bill and its friends. The Constitution is a terrible weapon to invoke against a popular measure. A weapon to be handled with care. I have a high regard for the Constitution of the United States, but a much higher regard for my own, and the Constitution will not suffer one-tenth as much by the passage of this bill as the public health will suffer if it is not passed.

This bill does not propose to tax one industry to protect another; it merely proposes to tax a fraud and swindle, that honest industry may survive unjust competition; and this taxation is not alone in the interest of the dairy farmer, but in the interest of the entire people of the country, in the interest of all consumers of butter. It is an insult to the framers of our glorious Constitution to say that the Constitution shall not be read in the light of reason, interpreted by the aid of common sense, and invoked by even-handed justice. I am, I confess, utterly unable to read the Constitution as it is read by the able opponents of this bill, who have invoked the Constitution to perpetuate a fraud.

The bill is constitutional for several reasons; it is unconstitutional for no reason whatever.

First. It is argued that this is a tax measure, and therefore unconstitutional. This argument of our opponents is opposed to an unbroken line of decisions.

Justice Story, who was one of our ablest expounders of the much-abused Constitution, says in his work on the Constitution, Book 1, pages 677-778:

It will not do to assume that the clause was intended solely for the purpose of raising revenue, and then argue that, being so, the power cannot be constitutionally applied to any other purposes. The very point in controversy is whether it is restricted to purposes of revenue. That must be proved and cannot be assumed as the basis of reasoning.

The language of the Constitution is, "Congress shall have power to lay and collect taxes, duties, imposts, and excises." If the clause had stopped here and remained in this absolute form, there could not have been the slightest doubt on the subject. The absolute power to lay taxes includes the power in every form in which it may be used, and for every purpose to which the legislature may choose to apply it. This results from the very nature of such an unrestricted power. *A fortiori*, it might be applied by Congress to purposes for which nations have been accustomed to apply it. Now, nothing is more clear, from the history of commercial nations, than the fact that the taxing power is often, very often, applied for other purposes than revenue.

It is often applied as a regulation of commerce. It is often applied as a virtual prohibition upon the importation of particular articles, for the encouragement and protection of domestic products and industry: for the support of agriculture, commerce, and manufactures; for retaliation upon foreign monopolies and injurious restrictions; for mere purposes of state policy and domestic economy; sometimes to banish a noxious article of consumption; sometimes as a bounty upon an infant manufacture or agricultural product; sometimes as a temporary restraint of trade; sometimes as a suppression of particular employments; sometimes as a prerogative power to destroy competition and secure a monopoly to the Government.

If, then, the power to lay taxes, being general, may embrace and in the practice of nations does embrace all these objects, either separately or in combination, upon what foundation does the argument rest which assumes one object only, to the exclusion of all the rest; which insists, in effect, that because revenues may be one object, therefore it is the sole object of the power; which assumes its own construction to be correct because it suits its own theory, and denies the same right to others entertaining a different theory?

Is not oleomargarine a noxious article of consumption? The original process of M. Mege was harmless indeed in the light of modern science. He simply discovered the fact that the fat of dogs, horses, and cattle could be used as a substitute for butter. The great American nation, ever in advance, has done much better or worse—invented the science of "making butter," and out of what? Go search the records of the Patent Office and learn the extent of American criminality, patented crime, for there are upwards of fifty different patents issued to make this stuff, and as usual in such patents the ingredients which enter into the articles are given. Here is the list, and although all these articles may not be in a single sample of oleomargarine, the fact that any such articles are used for the purpose is quite apt to make people of sensitive taste acquire a distaste for an article which may or may not be imitation butter. Nitric acid (commonly known as aquafortis), acetate of lead (better known as sugar of lead), sulphate of lime, benzoic acid, butyric acid, glycerine, capsic acid, commercial sulphuric acid, tallow, butyric ether, castor oil, caul, gastric juice, curcurium, chlorate of potash, peroxide of magnesia, nitrate of soda, dry blood, albumen, saltpeter, borax, orris root, bicarbonate of soda, capric acid, sulphite of soda, pepsin lard, caustic potash, chalk, oil of sesame or benne, turnip-seed oil, oil of sweet almonds, stomach of pigs, sheep, or calves, mustard-seed oil, bicarbonate of potash, boracic acid, cotton-seed oil, alum, cows' udders, sal-soda, farinaceous flour, carbolic acid, slippery elm bark, olive oil,

bromo-chloralum, oil of peanuts, sugar, caustic soda, and sea salt. Can any who reads this list of drug which enters into the composition, with sufficient intelligence to recognize the fact that some of them are deadly poisons, doubt for a moment that this is a noxious article of consumption?

Mr. Michaels, of New York City, a microscopist, and once, if not now, editor of a scientific journal, testifies that oleomargarine is simply uncooked raw fat, never subjected to sufficient heat to kill parasites that are liable to be in it. He states that he has found in it tissue and muscle and cells of a suspicious nature, and that Mr. Saylor has also found in it positively identified germs of disease.

The Rev. E. Huber, microscopist, of Richmond, Va., writes in the Southern Clinic of May, 1880, that oleomargarine differs in its microscopical appearance as well as in its nutritive and dietetic qualities from true butter; that the fats in it are not subjected to a heat sufficient to destroy the germs of septic and putrefactive organisms, and that there may also be introduced into the system by its means the eggs which develop tape-worms; and he states that he has frequently found in oleomargarine eggs resembling tape-worms.

Dr. George B. Harrison, a microscopist, of Boston, Mass., in the Boston Herald of January 8, 1881, says he has recently examined some twenty specimens of oleomargarine obtained from different dealers, and has found in every specimen more or less of foreign substances, a variety of animal and vegetable life; the blood corpuscles of sheep; the egg of a tape-worm; yeast was found sprouting in considerable quantities, and spores of fungi were very prevalent. He found a portion of a worm, dead hydra varidis, portions of muscular fibers, fatty cells, and eggs from some small parasites.

The English microscopist, W. H. Dallinger, said to be the greatest living authority on this subject, in a letter to the American Journal of Microscopy of October, 1878, shows that oleomargarine is not subjected to a heat sufficient to kill the living organisms which refuse fats are liable to contain.

Chief-Justice Marshall, of the United States Supreme Court (*McCulloch vs. Maryland*, reported in 4 Wheat., 428), says:

It is admitted that the power of taxing the people and their property is essential to the very existence of the Government, and may legitimately be exercised to the utmost extent to which the Government may choose to carry it.

The people give to their Government the right of taxing themselves and their property, and as the exigencies of the Government cannot be limited, they prescribe no limits to the exercise of this right, resting confidently on the interest of the legislators, and of the influence of the constituents over their representatives to guard them against abuse.

And again:

That the power to tax involves the power to destroy is a proposition not to be denied.

Is it not a case where it is perfectly safe to tax?

Hilliard on Taxation says:

SECTION 85. The taxing power is an essential attribute of sovereignty, and can only be abridged by positive enactment (*State vs. Newark*, 2 Dutcher, N. J., 519; *Debolt vs. Ohio*, Ohio St., 563).

And again, Justice Story, sec. 922, says:

A power to lay taxes for any purposes whatsoever is a general power; a power to lay taxes for certain specified purposes is a limited power; a power to lay taxes for the common defense and general welfare of the United States is not in common sense a general power. It is limited to those objects. It cannot constitutionally transcend

them. If the defense proposed by a tax be not the common defense of the United States, if the welfare be not general, but special or local, as contradistinguished from national, it is not within the scope of the Constitution. If the tax be not proposed for the common defense or general welfare, but for other objects, wholly extraneous (as, for instance, for propagating Mahometism among the Turks or giving aids and subsidies to a foreign nation to build palaces for its kings, or erect monuments to its heroes), it would be wholly indefensible upon constitutional principles.

Desty on Taxation says :

One purpose of taxation sometimes is to discourage a business and perhaps to put it out of existence, and it is taxed without any idea of protection attending the burden. This has been avowedly the case in some Federal taxes. (*Veazie Bank vs. Fenno*, 8 Wall., 533.) The taxes have nevertheless been sustained.

Suppose the friends of the dairy interest had manifested a desire to tax the manufacture of oleomargarine out of existence, which is not what they really wish, but rather to impose such a tax upon the imitation product as will make the competition of the cheaper product fair to dairy products, does any one doubt the constitutional power of Congress to legislate to that extent. Congress has an unlimited power to tax, and could tax, an undesirable industry out of existence; nay, more, it can so burden a desirable industry with unjust taxes so that such industry cannot survive the burden.

Second. Another reason to uphold the constitutionality of the measure now before the Senate. The National Government has ample and complete police powers on all matters of foreign or interstate commerce.

The court, in *Pierce et al. vs. New Hampshire* (5 Wheat., 608), per Woodbury, justice, says :

The police power of the States was reserved to the States, but such police power extends to articles only which do not belong to foreign commerce or commerce between the States.

Does not the honor of our foreign commerce demand that the police power of the National Government be exercised to the fullest extent? What right has Iowa to legislate in reference to oleomargarine exported from the port of New York? None whatever, but Congress has power "to regulate commerce with foreign nations and among the different States." No State has this power. It is true a State may protect its own citizens by prohibiting the importation of undesirable articles of commerce, as, for instance, articles that are deleterious to health. This is too sacred a right of the State itself to be taken away by the United States. The different States have an undoubted right to prevent the importation of oleomargarine on the ground that it is deleterious to public health. But to the National Government belongs the right to prohibit commerce in oleomargarine between the States and the exporting of it to a foreign country, for this comes so clearly within the purview of that clause of the Constitution, worded so plainly that it can mean nothing else than that Congress shall have power to regulate commerce with foreign nations and among the several States. The police power of the National Government sought to be embodied in this law is not unconstitutional, because it may perchance impair the property of manufactures, invested in a business they have hitherto been allowed to carry on without hindrance, for persons and property are subject to all kind of restraint and burdens in order to secure the general comfort, health, and prosperity of the State. Laws relating to the comfort, health, conveniences, and general welfare of the people are comprehensively styled police laws, and it is well settled that laws of this character, though they may disturb the enjoyment of individual rights, are not unconstitutional. Private interest must yield to public advantages.

The National Government is not sovereign without the power to regulate interstate and foreign commerce, and Congress can wield this sovereign power as it may deem best for the public weal; and it is indeed a bold and reckless assertion at this late day that there is any clause, section, or provision in the Constitution prescribing the limits of legislative discretion in directing how, when, or where a trade shall be conducted in articles intimately connected with public morals, public safety, or public welfare, or, indeed, to prohibit or suppress such traffic altogether if deemed essential to effect those great ends of good government.

What are the reasons why the police power of the State should be exercised in the manner asked for? It is not often that agriculture has knocked at the doors of Congress. Why is it doing so to-day? It is not because the prosperity of those engaged in this pursuit is threatened. It is more than this. It is a question of actual existence, and the existence of an industry as important as that of dairying in this country is no unimportant matter.

This threatened destruction brought to bear upon this measure the support of 7,500,000 of farmers, and their support was sufficient to carry the measure through the House of Representatives. What a keen satisfaction belongs to each one of the 177 who supported this measure in the House of Representatives. With the example of the lower House for a precedent I do not believe the farmers of the country will be disappointed in the deliberations of the Senate upon this measure. There are potent reasons for the passage of this bill, and serious evils will result to the country should it not pass. It is no infant industry that is asking for the nursing mother of protection.

It is or has been the great industry of the country and it is on the point of destruction. "Comparisons are odious," but it is only by comparisons that we can ascertain the enormous magnitude of dairying in this country. There are to-day in the United States about 16,000,000 cows, worth \$600,000,000, and the annual amount of butter product amounts to about 1,000,000,000 pounds, worth about \$250,000,000.

The annual value of the dairy products each year equals \$500,000,000. There are to-day 7,000,000 of our population engaged in dairying. There are 65,000,000 acres of land devoted to dairy farms, and this land with the plant used in the dairy, including implements, machinery, and buildings, especially devoted to this purpose, are worth, at a low estimate, \$20,000,000,000. Now to compare this industry with others that are well known to be important:

| | |
|--|-----------------|
| By the census of 1880 there was invested in manufactures | \$2,790,272,609 |
| Value of manufactural products..... | 5,369,579,191 |
| Production of gold and silver..... | 774,490,620 |
| Capital invested in railroads..... | 5,425,722,560 |
| | 13,660,064,977 |

This is less than the capital actually invested in agriculture. The prosperity of our country is largely due to our agricultural prosperity. If agriculture is profitable and our farmers prosperous, the entire country feels the beneficent effect of this prosperity. But agriculture is no longer profitable and our farmers are not prosperous. Many thousands of farmers are comparatively poor. The millions of dollars I have stated to be invested in agriculture is divided among a large portion of our population, and the farm with no source of income save that derived from the dairy must still support the farmer and his family, provide

many daily necessities with no hope or expectation of luxury, educate the sons and daughters, a pardonable ambition with every American citizen, and provide an insurance against want and penury for the farmer's declining years. The individual farmer is no longer prosperous. The farmer who incurred a debt in order to procure a farm cannot meet his obligations and is forced into bankruptcy, which means much suffering to himself and family and a loss to the State. If by unremitting toil and the deprivation of many of the actual necessities of life the farmer is able to struggle against the tide and meet his obligations, he only accomplishes this much of a barren success at a cost which should not be necessary in any industry in this country.

Let us look at the causes which have wrought this disaster. We have for years had an enormous export trade in the dairy products, which means a considerable increase in the wealth of the country; it means that dairy products, under the influence of this export trade, commanded a higher price than would be the case were there no export trade, and consequently more wealth and prosperity to individual farmers. In 1875 we exported butter to the amount of \$1,506,696, and this export trade rapidly increased, until 1880 we exported butter to the amount of \$6,690,687, and had this export trade continued to increase as it should have done for the next five years the export trade in butter in 1885 would at least have equaled \$10,000,000. In order to meet the export trade which we should have had in 1885, more farms would have been devoted to this industry, more of the national wealth would have been invested in the appliances of dairying, in buildings and dairy stocks, and individual farmers would have been at least prosperous. This is not the success which has attended this industry. In 1885 we exported butter to the amount of only \$3,643,646, and it is doubtful if the export trade during the present year will equal \$2,000,000. It is not hard to find the cause of the alarming depression in a leading industry.

In 1876 a new so-called industry was added to our national resources—the exportation of oleomargarine. That year we exported oleomargarine to the value of \$70,483. This industry, with so small a beginning, founded in fraud and nurtured in deceit, has attained a marvelous success. In 1885 there was exported from this country oleomargarine to the value of \$4,451,632. Compare the value of butter exported in 1885 with the value of the oleomargarine exported during the same time and the comparison is indeed a startling one—\$807,986 in favor of the fraud against the legitimate industry. The dairy has been worsted in competition with the oleomargarine factory, and when we consider that oleomargarine is a source of immense profit to a few capitalists, while the dairy is a source of small profit to an immense number of our citizens, the question becomes of the greatest importance to our leading statesmen. The decline in our export trade in dairy products produces a far reaching and inevitable result, and this result is fraught with serious disaster. The decline in the value of dairy products means a decline in the value of dairy farms, a reduction in the number and value of dairy cows, and a reduction in the value of labor on the farm.

During the three months ending March 31, 1886, we exported oleomargarine, including imitation butter and the oil, to the amount of \$618,622, and during the same three months we exported butter to the amount of only \$451,114. These are figures well worthy of examination; they can mean but one thing, that the dairy industry is imperiled; that if the dairy industry suffers loss, the loss is an important source of wealth, that dairy farms will have to be devoted to other branches of agriculture, which

mean an injury to those engaged in those industries; that dairy farms may yet be devoted to the rearing of live stock to the great detriment of those engaged in the production of beef. But there is no room in any other agricultural industry, and all classes of agricultural industry are interested in the preservation of the dairy industry. It has become no doubtful question that the method in which we are seeking to regulate this evil is the only method which promises success, is, indeed, the last resort. For ten years the different States have tried to regulate, so far as they have had jurisdiction, this fraud. They have made strenuous legislative efforts to have imitations of dairy products sold for what they are. Branding has been tried in some States and coloring in others, but with the lack of uniformity in the laws of the different States, and some States with no laws whatever, with oleomargarine manufacturers and venders with no decent regard for such State laws as we have, tempted by a love of gain to encourage the fraud, it seems to be the last resort to invoke the aid of the national Government.

It seems unfortunate that the United States, the one nation whose citizens have suffered from the manufacture, should be behind England, Holland, Denmark, and Germany in this matter. None of these countries are to the same extent dairy countries as the United States. None of these countries have suffered as has this country; and, indeed, if oleomargarine is the cheap and satisfactory substitute for butter that it is represented to be, the interest of England, a large importer of butter, would be against anti-oleomargarine legislation. We should protect our dairy farmers, interstate and foreign commerce, and consumers, both at home and abroad, who purchase our dairy products, from the further perpetuation of this gross swindle.

ADDITIONAL STATEMENT OF GARDINER B. CHAPIN.

Mr. CHAPIN said: I want to say one word more in regard to the processes of butter-making. The manner of doing these things has not been explained here. There is no reason to-day, if it was not for the cold storage places, why butter should not be selling at 10 cents a pound. The manner of doing business is that the dealers to-day are now buying their butter for next winter's stock; the farmers cannot keep it themselves. It must change hands at this time of the year when the product is manufactured and the dealers put it in cold storage for winter use.

I want to explain to you how we were served in 1883. These manufacturers of oleomargarine oil, as I understand, can continue manufacturing their oil all the summer when they cannot successfully make a good butterine or oleomargarine. Consequently we go and put in our stock for next winter's use. We help the farmer by paying him 5 or 6 cents a pound more for the butter than if he was obliged to put it on the market and have it consumed to-day. In 1883 the dealers of Boston made their estimate in regard to the stock, &c, and about the first of January the oleomargarine manufacturers went to work and loaded the market with their butterine and oleomargarine and the price of butter immediately fell so that there was but a short time for the consumer to be benefited, and it produced a loss to the butter dealers in Boston, according to my estimate, \$300,000. One of the Saint Albans papers, right in the butter district, estimated it at \$750,000.

My brother Simpson, from Boston, gave certain figures, but he did not tell what figures. He evades the question, and tells only his part of the story, for he was just as much in favor of having such a law

passed, or something similar to it, up to the time he became a manufacturer or was interested in the manufacture of oleomargarine. I say this law is not only to protect the farmer, but also the dealer.

Mr. Simpson states that he thinks the manufacturer of oleomargarine has compelled the dairy sections of Vermont, New Hampshire, and Maine to go into the creamery business. This is not so. The demand is for creamery or uniform butter, and that is the cause of it. He refers to the low prices of 1879. At that time the industries of our country were at a standstill, and half the manufacturing establishments in New England were closed, thousands of men were out of employment, and the number of milch cows was larger per capita than now. The population since 1879 has increased much faster than the capacity of producing dairy products, and he knows and has always admitted the reason why this is so, which is that the farmers could not compete with this great fraud.

Professors Morton, Chandler, and Babcock have stated that stale or tainted lard could not be used in this manufacture, but that it must be used within twenty-four hours after the animal is slaughtered. Testimony, however, has been given that kidney fat was used from ten to twenty days after the animal was killed. They meet that argument by saying that the animal heat must be taken out during that time. Professor Salmon, the physiologist of the Agricultural Department, who comes before you unpledged to either side, states the facts pro and con, and does not support them altogether in their statements. The very fact that oleomargarine will keep longer is proof that it lacks the rich or volatile oils of butter, which make it delicious and wholesome and at the same time easily digested.

The opponents of this bill claim that their product should be sold on its merits, but they fail to suggest any plan which will compel this to be done. They object to coloring it any other than the butter color, and yet admit that they aid the dealer in every way they can to deceive the public in color, flavor, style of packages, and brands, or the absence of brands, as the dealer may require, and even brand it "creamery" or "dairy," with any prefix that is desired.

ADDITIONAL STATEMENT OF J. H. CRANE.

Mr. JOHN H. CRANE, of Washington, said: Two of the gentlemen who have appeared before this committee have read tabular statements in reference to the average cost of articles of produce in different years. I am a wholesale produce dealer in this city, and all wholesale dealers in produce and persons at all connected with these articles know that these statements have no reference whatever to the price of butter. The potato crop is planted now and we do not know whether potatoes will be worth \$2 next fall or 50 cents; that is determined by the season. It is the same with flour and other articles. To bring in those articles as an excuse for this decline in butter is very unfair.

I wish to say a word in regard to the operation of the law in this District. Gentlemen have come all the way from Boston to tell you how the law is enforced there. I have been a resident here in Washington for twenty-five years, and am perfectly familiar with the workings of our government here under different systems. This oleomargarine law in the District of Columbia was passed seven years ago last January, and up to the present time there has never been one cent collected in the way of penalties for the violation of the law, although it imposes

a fine of \$100 for its violation, one-half to be given to the informer. The law requires all packages of imitation butter, or anything made in the semblance of butter, to be branded with the word "oleomargarine," in letters not less than half an inch square. Up to one year ago there was never a tub of imitation butter which came here that I ever heard of that had that brand upon it. For six years these men conducted this business and sent these goods here in violation of the laws of the District. Last year, after going to the police and health authorities, and calling the attention of members of the press to this matter, I finally wrote an article for the Evening Star setting forth the facts and quoting the law, which created quite a sensation. There were tons of this imitation butter arriving here every day previous to that time. After that article appeared not a package of it arrived here that I could learn of for two weeks. Why did they stop it? Because they knew they were violating the law. Gradually they began sending it here again.

I have made diligent inquiry and I cannot find any dealer in butter here who had any knowledge of these goods being marked until about one year ago last November, and then they commenced to mark them "butterine." But that does not conform to the law at all. I wish to show why this word butterine has been coined. There is the word [exhibiting], and you have only to erase the last three letters, and it reads "butter." "Oleomargarine" is an honest word. You may erase all the letters you please and you cannot make it resemble the word butter. But it is not so with the word butterine. This is the way they brand the article butterine [exhibiting an almost illegible inscription]. That is the brand sold by my next door neighbor. Can anybody make anything out of it? Is that an honest way of branding it? My next door neighbor told me this morning that his last lot of butterine came in marked in that way and that stands for butterine.

About six weeks ago the retail dealers in honest butter in the market went to the city authorities and asked if something could not be done to enforce this law. The matter was referred to the detectives, and they introduced a gentleman by the name of Sellhausen, a detective, who told them that if they would each contribute a dollar a week he would work up some of the cases of violations of this law. They contributed that amount for five or six weeks, and he would tell them from time to time that he had got so many samples of bogus butter and had sent them to Professor Taylor for analysis, but that Professor Taylor had no time to attend to them. He said that he had sent nine samples over there, but Professor Taylor tells me that he has never received a single sample; that the butter never came there. It looks suspicious. These men paid their money for six weeks to this man and then he skipped the town.

The CHAIRMAN. What are the provisions of the law in the District?

Mr. CRANE. It was passed January 25, 1879. It requires that the word oleomargarine shall be branded in plain Roman letters of not less than half an inch square to be placed in proper order, and in case the retail dealers in such articles or substances, or anybody else, sells them, they shall in all cases deliver to the purchaser a written or printed label bearing the plainly written or printed word "oleomargarine" in type letters, and every sale of such articles not marked or branded or labeled shall be void, and no cause of action shall be maintained for the price thereof. You may walk down among the dealers of Washington to-day and you will have hard work to find one tub of butterine or imitation butter marked with the word "oleomargarine," as the law requires, al-

though you will find plenty of it marked "butterine," and all the dealer has to do is to erase the last three letters and it reads "butter."

The CHAIRMAN. You state it is your understanding that the law is not enforced in the District?

Mr. CRANE. No, sir; it is not.

Senator BLAIR. I want to get at the facts. Mrs. Smith says that the Womans' League agitated the subject, and that one woman was arrested and fined for selling bogus butter.

Mr. CRANE. Yes, that is the fact; Mrs. Margaret Riley. I will state the facts. After I had published these articles the Market Company took hold of the matter, and determined to drive out all the dealers in imitation butter standing on the south side of the market, and their inspector found this unfortunate woman, Margaret Riley, selling bogus butter, and also an itinerant preacher from Virginia selling it. They swore out warrants against them, and they were arrested, taken to the police court, fined, and held for the grand jury. They have never paid their fines, and Margaret told me the day before yesterday that she never intended to pay a cent. There has never been one cent of fine collected in the District of Columbia under that law, and never has been one conviction made which was due to the efforts of the District authorities.

Senator JONES. You say large quantities of this article were brought here for the first six years without being branded?

Mr. CRANE. Yes; I made diligent search among the dealers, and watched it as it landed, and have seen it branded "creamery" and "extra dairy" and so forth, but never saw the word oleomargarine or butterine upon it.

Senator JONES. These packages that you saw branded "creamery" and so on, what did they have in them?

Mr. CRANE. Nothing but bogus butter.

Senator JONES. How do you know that?

Mr. CRANE. Because I examined them, and I know by what people tell me who deal in them.

Senator JONES. Did you report them to the authorities?

Mr. CRANE. I reported it through the press. I do not consider it my duty to act as a detective for the District of Columbia when Congress has taken the right of suffrage away and placed Commissioners over us. It is not my place to execute the law or see that it is executed.

Senator JONES. In the article which you wrote for the newspaper did you make the statement that oleomargarine and butterine were manufactured of carrion?

Mr. CRANE. No, sir; I did not.

Senator JONES. You never printed any such statement?

Mr. CRANE. No, sir; I made this statement in regard to the fat of animals: that formerly they buried their animals and now they paid money to get them. There are two boiling establishments, one on each side of the Potomac, about 3 miles down the river, where these animals are taken and boiled, the bones used for fertilizing, the skius sent away, and the fat sold and shipped away. I had a conversation with one of those gentlemen, Mr. P. Mann, and he informed me that he sold it for soap grease. He is a very honorable gentleman, and would not sell it for anything else. But what becomes of it afterwards? He says he cannot tell. He says in the winter time it smells well and looks well. He ships it to New York and sells it to a Jew.

Senator JONES. You did not intend to have it understood that it was used for butterine?

Mr. CRANE. I do not mean to say that the gentlemen here would use it; I do not believe they would. I do not think the firm of Armour & Co. have occasion to use anything of the kind; but I do say that there is great danger of its being used by men of no character or principle whatever. They get hold of some process of making butterine, and want to sell a cheap article, and may be tempted to buy this.

Senator JONES. You stated in regard to these packages branded butterine that there was no difficulty in scratching off the last letters so as to make it read butter. Did you ever know of any case where it was done?

Mr. CRANE. I do not see why it could not be done.

Senator JONES. But you never caught a man making that erasure?

Mr. CRANE. I never did.

Senator JONES. And never knew of its being done?

Mr. CRANE. But I have no doubt it would be; it has been done. I want to say a word in regard to the enforcement of the law. There is a gentleman in this room who tried for ten days to have something done about the enforcement of the law. He went from one official to another, and finally gave up the whole thing in disgust.

I listened with great attention to the chemists from New York who addressed this committee, and was astonished to hear them say that this was butter. If it is butter, it will digest like butter. But what does the other chemist from Boston say who came here? He stated yesterday that it would not digest as well as butter. I care not what they say or what investigations they make, they cannot prove that imitation butter, made of hog's lard, is like the butter that comes from the milk of the cow. It is an entirely different thing. I would give more for one fact and a little common sense than for the theories of all the chemists in the world.

Senator BLAIR. You deal in butter, I understand.

Mr. CRANE. Yes, sir.

Senator BLAIR. And this other article is sold in the District largely, not sold under its true name, but sold as butter, I understand you. Do you not find yourself obliged to sell it?

Mr. CRANE. I refuse to sell it, and I wish to say—

Senator BLAIR. How does the honest dealer get along and do business by the side of men who are not so honest?

Mr. CRANE. He has to let his customers go. I have a notice put up in my store which says, "No oleomargarine or butterine sold here; all goods warranted pure." I decline to sell any goods, vinegar, butter, or anything else, unless they are what I represent them to be. I have lost thousands of dollars in trade because I will not sell that article. I have had some of the most tempting offers made to me which I have declined, because I consider that a great crime has been perpetrated on the American people for the last ten or twelve years in the way of palming off on the country this bogus product and having it sold for genuine. It is bringing the farmers to the verge of ruin while these men are putting millions in their own pockets.

Senator BLAIR. You said you had the most tempting offers made to you to get you to deal in oleomargarine. I would like to get some of those facts.

Mr. CRANE. Well, I have had an oleomargarine house in Baltimore send to me several times and want me to take the agency—the house of Richards & Kennard. It is a very good business house, but I declined to have anything to do with it.

Senator BLAIR. You say this firm in Baltimore is a respectable firm?

Mr. CRANE. Yes, sir; it is a very respectable firm, doing a large business.

Senator BLAIR. They wanted you to become their agent?

Mr. CRANE. Yes, sir.

Senator BLAIR. There could be nothing improper in that, so far as you have stated it.

Mr. CRANE. I have a principle against selling it; I do not believe in selling adulterated goods. I would just as soon engage in selling counterfeit money.

Senator BLAIR. Do you mean to say that you would not sell oleomargarine if you told people what it was; or do you mean it was an offer to you to sell oleomargarine as butter?

Mr. CRANE. They did not say anything about that.

Senator BLAIR. Then, so far as it goes, it was a proposition made by a respectable firm to you to sell oleomargarine as oleomargarine?

Mr. CRANE. And the agent of another respectable firm in Baltimore wrote to me and urged me to take some of it, and said he would put on any fancy name I desired. He said I was very foolish to have it marked. He said they were selling it every day without having it marked.

Senator BLAIR. What firm was that?

Mr. CRANE. It was the agent of a business house in Baltimore.

Senator BLAIR. What was the name?

Mr. CRANE. The name of the house he represents was Oudesluys & Richardson. I do not know that they had any arrangement with him; this was a drummer who was very anxious to sell goods. I do not wish to injure the house by my statement.

Senator BLAIR. As you left it, it would leave the dealers of the whole country—those who deal in oleomargarine—under the suspicion that they were parties to a fraud and an imposition, and were trying to put their product on the country as a fraud.

Mr. CRANE. Well, I think they are.

Senator BLAIR. But when I ask you minutely about it, it seems some irresponsible drummer made the proposition, and you do not care yourself to charge it to the firm.

Mr. CRANE. I do not wish to do anything to injure any man's business; I have no right to do it. I wish to be square, honorable, and aboveboard in all this business. I have nothing to do with oleomargarine. I do not know all the gentlemen making it personally. I know nothing against them, and wish to have no trouble with them. But I think the business, in the way it is carried on here, should be stopped, and that the dealers should be made to put a mark on the goods and pay some respect to the law. There would be no other way for them but to respect the law if the United States would take the matter into its hands, as this bill provides.

STATEMENT OF L. M. OHLY.

Mr. L. M. OHLY, of New York City, then addressed the committee:

I used to deal in oleomargarine, but have not sold any for several years. Within two or three days I have eaten oleomargarine in a restaurant, and the woman told me it was sold to her for butter, and the tub was branded in such a manner that you could not tell what the letters were. The letters were probably an inch and a half long, but they were only a quarter of an inch wide, and it is almost impossible to tell

what they are. I know, also, that stores buy it and sell it for butter. My wife has bought it and I have taken it back to them. I know that manufacturers for whom I have worked have asked me to scrape off the brand "oleomargarine" after the customers bought it, and to be sure and wait until the customer had made the purchase, so that the law could not affect him.

The CHAIRMAN. You were instructed to scratch off the brand if the customer wanted it off?

Mr. OHLY. Yes, sir.

The CHAIRMAN. Did you ever do it; did any of the customers ever ask you to have it taken off?

Mr. OHLY. Yes, but I didn't do it myself; I have seen our men doing it.

Senator BLAIR. Who do you mean by "our men?"

Mr. OHLY. The other employés of the particular manufacturer.

The CHAIRMAN. Do you say that you dealt in oleomargarine?

Mr. OHLY. Yes, sir.

The CHAIRMAN. When was that?

Mr. OHLY. Two years ago the first of May.

The CHAIRMAN. What did you sell it for, oleomargarine or butter?

Mr. OHLY. I sold it for oleomargarine; I never sold it for anything else but oleomargarine.

The CHAIRMAN. The customers knew what they were getting then?

Mr. OHLY. Yes, sir.

Senator BLAIR. Where do you live?

Mr. OHLY. In Brooklyn. I am a produce commission merchant.

The CHAIRMAN. You are not a retailer?

Mr. OHLY. No, sir.

Senator BLAIR. Your customers are retailers, as a rule?

Mr. OHLY. Yes, sir.

Senator BLAIR. You sell to the retailer oleomargarine?

Mr. OHLY. No, sir; we have not for over two years.

Senator BLAIR. When you did deal in it you sold it as oleomargarine?

Mr. OHLY. Yes, sir.

Senator BLAIR. You said "our men" scraped off the last letters?

Mr. OHLY. By that I meant the employés.

Senator BLAIR. Of your firm?

Mr. OHLY. Yes, sir.

Senator BLAIR. Of your own commission house?

Mr. OHLY. No, sir; the employés of the manufacturers. I was not then a commission merchant, or employed by a commission merchant.

Senator BLAIR. How long ago was that, and in whose employ were you then?

Mr. OHLY. I would not like to mix in the names.

Senator BLAIR. You ought to understand that you are not at liberty to come here and tell a thing and stop just where you want to. You come and make a charge here.

Mr. OHLY. It was Mr. Schwarzschild, of the firm of Schwarzschild & Sulzberger.

Senator BLAIR. Were they dealers or manufacturers?

Mr. OHLY. Large manufacturers.

Senator BLAIR. How long ago was that?

Mr. OHLY. Two or three years ago.

Senator BLAIR. How long did you work for them?

Mr. OHLY. I do not know exactly; a few months.

Senator BLAIR. Five or six months?

Mr. OHLY. Probably.

Senator BLAIR. In what capacity?

Mr. OHLY. As assistant to my brother, who was their representative.

Senator BLAIR. As their general manager?

Mr. OHLY. Yes, sir.

Senator BLAIR. Was he a member of the firm?

Mr. OHLY. No, sir.

Senator BLAIR. He was working upon a salary?

Mr. OHLY. Upon commission.

Senator BLAIR. You said they were very large dealers. Have you any idea of the amount they produced annually?

Mr. OHLY. No, sir; I have not, but it is very large. They have gone out of the business.

Senator BLAIR. One of the largest firms of manufacturers?

Mr. OHLY. Yes, sir.

Senator BLAIR. You say they have gone out of the business?

Mr. OHLY. They have gone out of the business of making oleomargarine butter, but they are still making oleomargarine oil.

Senator BLAIR. You cannot give an idea of the extent of their manufacture?

Mr. OHLY. I think 300 or 400 pounds a day, sometimes more.

Senator BLAIR. And tubs contain 50 pounds?

Mr. OHLY. They contain 28, 40, and 56 pounds.

Senator BLAIR. Where did they sell their manufacture?

Mr. OHLY. All over the country, as far west as Michigan, and through New York State, Connecticut, and Rhode Island.

Senator BLAIR. What did they sell it as being?

Mr. OHLY. They sold it for oleomargarine.

Senator BLAIR. Were their tubs labeled in the way required by law, as a rule?

Mr. OHLY. I believe they were.

Senator BLAIR. They sold it then as oleomargarine?

Mr. OHLY. They did.

Senator BLAIR. It was never marked as butterine?

Mr. OHLY. Yes, sir; some.

Senator BLAIR. What proportion of butterine did they manufacture of the entire manufacture?

Mr. OHLY. They made oleomargarine first, and then the Chicago firms began to make butterine, and butterine being made from lard was more soft and pliable than the oleomargarine, which, in cold weather, was brittle, and people began to ask for butterine, and consequently they manufactured after that mostly butterine.

Senator BLAIR. I understand you that in some cases customers, that is, commission men or retail dealers, came to that establishment and desired that the mark on the tub, "butterine," should be erased?

Mr. OHLY. Yes, sir.

Senator BLAIR. And that was done, under the direction of the firm, by the workmen of the firm?

Mr. OHLY. Yes, sir.

Senator BLAIR. That was for the immediate consumption of that vicinity, or was it to be sent off to a distance?

Mr. OHLY. That was for immediate consumption in that vicinity. Many ordered their packages put up in bags—out of town parties.

Senator BLAIR. How would those be marked?

Mr. OHLY. The tubs inside would probably be marked all right, but the coverings would not be marked, except with some stencil probably.

Senator BLAIR. Would that cover necessarily be removed in the retailer's shop?

Mr. OHLY. Yes, sir.

Senator BLAIR. So that in the retailer's shop the mark would be visible?

Mr. OHLY. Yes, unless they took some measure to remove it.

The CHAIRMAN. What is your business now?

Mr. OHLY. I am in the butter business.

The CHAIRMAN. What is the name of the firm?

Mr. OHLY. Ohly Brothers with Henry Hanson & Company.

STATEMENT OF GEORGE M. STERNE.

Mr. GEORGE M. STERNE, of Chicago, Ill., then addressed the committee.

The CHAIRMAN. What is your business?

Mr. STERNE. I am a manufacturer of oleomargarine and butterine and have been connected with the details of the production of those articles since 1879. I have been closely connected with the manufacture of lard, lard oil, and the cooking of animal fats for nineteen years, and have expert knowledge as to their characteristics.

The CHAIRMAN. What is this neutral that we hear about?

Mr. STERNE. Neutral is made of the leaf lard of the hog.

The CHAIRMAN. The proper title would be neutral lard?

Mr. STERNE. Yes, it is used that way. In speaking of it commercially we call oleomargarine oleo, but it has come to be a commercial term to speak of the manufactured product or oil as oleo. Neutral lard is an article of commerce and is known now as such.

The CHAIRMAN. Are you familiar with the details of the manufacture, the actual process?

Mr. STERNE. Yes, sir; entirely.

The CHAIRMAN. Describe briefly the process of making neutral.

Mr. STERNE. I have prepared a paper which describes the process used in the manufacture of oleomargarine and butterine, which I will read. In this paper I say that I know that the following is the universal process used in the manufacture of oleomargarine and butterine, and that no fats of a deleterious or uncleanly character can be used or are used, and that any poor fats would make the product unsalable.

The fat for the manufacture of oleomargarine is taken from the animal during the slaughtering process to vats of running water and thoroughly washed, and thence to vats of ice water and immersed, remaining several hours, thus removing all animal heat. It is then hung up in the refrigerating-room until taken to the grinding-room or hasher. This time is usually not greater than twenty-four or thirty-six hours from the time of slaughter.

The hasher is located above the cooking vats, into which it falls, and they are so constructed that the cooking is uniform, and all of the fat is melted from the fiber and tissue, and when this is accomplished the fiber and tissue are carried to the bottom by the liberal use of salt, to which these particles attach themselves as it falls through the liquid fat. When well settled the clear liquid fat is drawn into another vat and the heat again applied and raised to a much higher temperature

than that at which the first melting was done. We cook it the second time because the first process of cooking is for the distinct purpose of separating the fat from the fiber. If during the first cooking we were to raise the temperature we would roast the fiber, and thus give the fat a roasted flavor, while by first removing the fiber we can have nothing to impair the flavor by further cooking. Up to this point the work is identical in both lard and beef fat. From the cooking vat the lard goes into brine made of water, salt, ice, and nothing else, where it remains forty-eight to seventy-two hours, and is then ready for the churn.

The beef fat without admixture of anything is drawn into graining vats and taken to a room where the temperature is between 90° and 100° and remains until the oil and stearine have in a measure separated; being then put in cloths and under heavy pressure the oil yields and flows readily, leaving the stearine in the cloth. From the press the oil flows into vats, from which it is drawn either into tierces for shipment or into the brine made of water, salt, and ice, and nothing else, to be cured for the churning.

Taking the oleo oil to the churning-room the required proportion of milk and cream, and in extreme cold weather a proportion of cottonseed oil or salad oil to soften, are added, and after churning the product is ready for working and packing as oleomargarine.

Beside the oleomargarine grade there is made a dairy grade butterine and a creamery grade butterine. These grades are made with a percentage of finest dairy or creamery butter. In the dairy grade from 15 to 25 per cent. is used, and in the creamery or best grade 35 to 50, and sometimes as high as 65 per cent. of the choicest creamery butter is used.

We use also the neutral lard in making the higher grades to give greater smoothness or bread-spreading property to it. In coloring we use the same as that universally employed by the butter-makers of the country. In and after the churning process the work is identical with butter-making.

Supplementing the statements made to this committee by Professors Morton and Chandler that the fat must be used within twenty-four hours after being taken from the cattle, it is well to say that they meant that the animal heat must be removed within that time, and not that it must be made into the manufactured product, for it could be kept for several weeks if necessary in the refrigerator without its quality being affected.

An exhibition by several manufacturers of oleomargarine was made at the fat stock and dairy show held under the auspices of the Illinois State board of agriculture at Chicago during the month of November, 1885, and the result of that exhibit was, that thousands of people visited it and expressed surprise at the quality of the product, as they had read and heard it was unfit for food; when in fact, it was superior to any butter they could buy at a reasonable price. Many members of the butter association stated they never had received correct information concerning the product, and should not speak again of it in a derogatory manner.

The Illinois State board of agriculture have placed oleomargarine and butterine in their catalogue of exhibits for the State fair to be held in September, 1886, and their fat stock show to be held in November, 1886, immediately following dairy products, and under the title of "butter substitutes," recognizing the production of these articles as clearly and legitimately those of the farm as are butter or cheese.

Now, gentlemen of the committee, I ask if these results of an exhibit of oleomargarine and butterine do not mean that they can stand on their

merits, and that they are unjustly assailed, through lack of knowledge on the one hand and malice on the other. It is clear that the intention of this bill is to injure, cripple, or destroy a legitimate industry, to prove which you need only refer to the manner in which the bill is worded, and to the admissions of its friends that they think "it will have the effect of curtailing its production." The coloring of butter or oleomargarine is in itself harmless and done to meet the desire of the consumer's taste. But to pass a measure through Congress to suppress a legitimate industry, and to avoid suspicion that this is the object of the bill, color it with revenue, is a great injustice.

The CHAIRMAN. You use cotton-seed oil only in the winter time?

Mr. STERNE. Yes; it is too soft to use in the summer time.

The CHAIRMAN. When you do, what percentage do you use?

Mr. STERNE. Five or six per cent. sometimes; it depends on whether it goes North or South. In the winter we use it always with the fat to get the right bread-spreading properties.

The CHAIRMAN. Do you or does anybody make a product which is simply neutral and dairy butter mixed, or do you in all cases use the three compounds of neutral, oleo, and the creamery butter or milk?

Mr. STERNE. I think the compounds are universally used for making oleomargarine. In the butterine and creamery grades I think there is no cotton-seed oil used.

The CHAIRMAN. Then the amount of cotton seed used would be very small?

Mr. STERNE. Yes, sir.

The CHAIRMAN. How do you get entirely rid of the flavor or odor of the lard?

Mr. STERNE. It never has any. Leaf lard is perfectly and absolutely tasteless. The lard of commerce is frequently cut up into chunks, and each chunk must necessarily contain a great deal of fibrine, and in the cooking the outside will have melted away a long time before you get to the inside, and after the fat is melted off on the outside the tissue or fiber, or what is there, roasts with the heat and gives that roasted flavor acquired by all commercial lard from the kettle or steam.

The CHAIRMAN. In the manufacture of ordinary lard for cooking purposes, do you in any way deodorize it to get rid of the peculiar flavor or odor?

Mr. STERNE. No, sir.

The CHAIRMAN. What is the process of deodorizing oils or fats?

Mr. STERNE. There is none.

The CHAIRMAN. How is cotton-seed oil purified and made tasteless?

Mr. STERNE. I do not think it can be done; I never saw any cotton-seed oil that was tasteless.

The CHAIRMAN. There is no way of purifying this oil, then?

Mr. STERNE. I think not.

The CHAIRMAN. A gentleman yesterday told us it was deodorized and rendered entirely tasteless, so as to avoid any smell or taste. I may be laboring under a misapprehension, but I think he said these oils were purified and rendered substantially tasteless and odorless. I supposed there was such a chemical process as that known.

Mr. STERNE. No, sir; there is not. It has been a study with a great many people to find out how an oil like lard oil could be made into a better grade by taking out the color and smell, but it never has been done.

The CHAIRMAN. We are told that cotton-seed oil is purified and deodorized and then used as a substitute for olive oil. The natural flavor

of cotton-seed oil would hardly be palatable as a table oil unless purified in some way, and I suppose it is done.

Mr. STERNE. I can explain that. The salad oil of commerce is made from cotton seed, and when first pressed from the crude seed it is a deep red color. That color is entirely formed by an inside fiber of the hull which attaches itself on the hull, and gives it a color. That color is eliminated, and it leaves a bright yellow oil, and it is sold as salad oil. It must be made from prime seed, or it cannot be used for such a purpose.

The CHAIRMAN. How is the color taken out, by filtering?

Mr. STERNE. Yes, sir.

The CHAIRMAN. Is it filtered through charcoal?

Mr. STERNE. Through bone dust and charcoal. It is put at a very high heat, the presses are charged with superheated steam all the time, and the stearine from it is made into cakes and sold.

The CHAIRMAN. The common impression that fats can be deodorized is not correct, then, according to your statement?

Mr. STERNE. No, sir. I would say in regard to the oleo oil that there is a flavor in the beef suet which we take great care to preserve, and any one who has been able to get it in its perfection has the best market for his oleo oil.

The CHAIRMAN. Mrs. Smith asked me to inquire whether you employ in this manufacture female labor.

Mr. STERNE. We have none.

STATEMENT OF H. W. HENSHAW.

Mr. H. W. HENSHAW, of Chicago, then addressed the committee.

Mr. Chairman and gentlemen of the committee: I am a member of the firm of Roos, Henshaw & Co., Chicago, exporters and wholesale dealers in butter and cheese; also manufacturers of butterine. I have been engaged in the butter trade since the year 1871, and commenced to manufacture butterine in the year 1882.

In all our manufacture of butterine we have used only the finest grade of oleo oil, leaf lard, and butter to be found in the market. The process of manufacturing butterine is substantially the same in all the factories, and has been clearly described by Mr. George M. Sterne. It is simply impossible for any one to successfully make and get even cost out of it unless they use the utmost care and cleanliness and secure the most perfect materials to be had. Competition is so keen and the margin of profit so small that all manufacturers are forced to exercise this care.

All our goods are plainly branded and sold for just what they are. I herewith attach copies of our invoices, letter heads, &c., for the committee's inspection.

We color our goods to conform with what each market requires; some desire a light color, while others want the goods much higher in color. I deny that the butter men have or ever had the exclusive use of yellow color for their butter. A large proportion of butter comes to our western markets, even at the present time, uncolored and very white.

Up to the year 1879 more than two-thirds of the butter came into the Chicago market in stone jars, soap and candle boxes, tobacco and candy pails, besides barrels of various sizes, and but very little of it was colored.

It is only since the manufacture of butterine commenced that the large color manufacturers have started in business throughout the West, and I claim that the making of butterine of a good uniform color has forced the greater portion of butter-makers to follow us in using a color. We now find them going to State legislatures and asking them to prohibit us from using the very article that we have forced into such general use among them.

The butterine manufacturers should, in all justice, be the ones who ought to ask for a law to prohibit the butter men from using any color, or if they did, it should be one different from what we have brought into general use.

It is claimed by the butter men that the manufacture of butterine has not only reduced the price of butter to such an extent that many are already hopelessly bankrupt and driven out of butter-making, but that it has ruined our export trade to Great Britain and other countries.

As they concede that all this great trouble has taken place with them in the last three years, I will submit figures taken from the Chicago Board of Trade annual reports and the United States statistics showing the receipts of butter in Chicago, as follows:

| | Pounds. |
|------------------------|------------|
| For the year 1882..... | 66,954,045 |
| For the year 1883..... | 75,333,012 |
| For the year 1884..... | 83,410,144 |
| For the year 1885..... | 92,474,784 |

This shows an increase in the receipts of 25,520,739 pounds in three years, and it certainly does not look as if butter-making in the West was declining as rapidly as they claim.

Although this increase has been so large the prices have ruled nearly the same.

The average price for fine butter in Chicago was as follows:

| | Cents per pound. |
|-----------|------------------|
| 1882..... | 28½ to 32 |
| 1883..... | 25 to 28 |
| 1884..... | 25 to 27 |
| 1885..... | 25 to 26 |

I herewith submit the annual report of the secretary of the Elgin Board of Trade for the years 1884 and 1885.

The average prices received during the six summer and autumn months of 1884 was 23½ cents per pound, and for the balance of the season 33 cents per pound. For the six summer and autumn months of 1885 the average price was 21 cents per pound, and 32½ cents for the balance of the year.

Certain it is that these figures do not lead us to believe that there is such a wonderful shrinkage in the prices of butter as the speakers for the butter men claim, nor would it appear that with these prices which they have been receiving they are compelled to put blanket-mortgages on their farms, as Mr. Hopkins, of the fifth Illinois district, which includes the Elgin section, claimed in his speech delivered on this bill in the House of Representatives.

| | Pounds. |
|--|------------|
| During the year of 1882 the exports of butter to Great Britain and Germany were..... | 9,947,498 |
| 1883..... | 5,687,345 |
| 1884..... | 12,438,094 |
| 1885..... | 12,297,629 |

The total exportation of butter to all foreign countries from the United States was as follows:

| | Pounds. |
|------------|--------------|
| 1882 | 14, 794, 305 |
| 1883 | 12, 348, 641 |
| 1884 | 20, 621, 010 |
| 1885 | 21, 683, 148 |

Showing a gain in these three years of 6,888,843 pounds.

While our exports of wheat fell off 50 per cent. from 1884 to 1885 and flour 25 per cent., we find the exports of butter increased 10 per cent. during the same period.

In the Producers' Price Current, of New York City, under date of June 12, 1886, we find that there had been received during the week in that city 51,782 packages of butter and 733 packages of butterine; for the corresponding week of 1885 the receipts of butter in that city were 41,348 packages, an increase of 10,434 packages in one week.

We also find that the total receipts of butter in New York City from May 1, 1886, to June 12, 1886, was 246,907 packages, and for the same time in 1885 197,334 packages, an increase of 49,573 packages in a trifle more than six weeks of the present year.

This certainly appears, and is, conclusive evidence that the dairymen are not being driven out of the making of butter by the manufacture of butterine and oleomargarine.

The prices paid to the farmers for milk by the Chicago milk dealers in the winter months of 1884 was \$1.40 per can of 8 gallons; during the summer months of the same year \$1.10 per can. For the winter months of 1885 \$1.25 per can, and \$1 for the summer months.

At the present time the New York milk dealers are paying the farmers from \$1.20 to \$1.30 per can of 10 gallons each.

The passage of the bill now before your honorable committee, or even in a modified form, which would compel the manufacturers to stamp their goods with an internal-revenue stamp, be it great or small, would work serious injury to us.

Strive as hard as we could to bring the merits of the goods before the people, there would yet remain in the minds of many the belief that if the Congress of the United States had placed a tax on it, it must certainly be injurious or unhealthy in some manner.

But why put a tax on an article which even the speakers in the dairy interest before your committee have so unanimously agreed was pure and healthy.

There is not a manufacturer of butterine in this country who does not sell the goods for just what they are, and if the men who for three years past have filled the press in both the city and country with abusive and outrageous falsehoods regarding butterine cease this mode of warfare, which has been carried to an extent far beyond the limit of patience, then and then only will the goods be in every case sold to the consumer for just what they are.

I can safely say that all manufacturers of butterine will be glad to see that day come, for I am confident just so soon as this vile misrepresentation and frightful stories of what is used in its manufacture is stopped, just so soon will the demand be greater than we have at the present time.

From personal knowledge I know this has been the case in England, where to-day butterine is sold in large quantities entirely on its merits, coloring matter included.

The CHAIRMAN. If any other gentleman desires to be heard the committee will give him an opportunity. If not, the committee will stand adjourned until called, and the record of the hearing will be prepared. I desire to say that papers have come in to me from various parties in the form of statements, and those I will have incorporated with the hearing and printed, so that the committee will have the use of them—letters from dairymen, &c. If gentlemen desire to make any other statements which are material—we do not want to encumber the record—as to facts and figures, not arguments and theories, if they are sent in in time they will be printed.

The following communications upon the subject under consideration were presented to the committee and are made part of the record:

STATEMENT BY THOMAS TAYLOR, M. D.

[Microscopist, United States Department of Agriculture, Washington, D. C.]

IS OLEOMARGARINE HEALTHFUL AS COMPARED WITH PURE BUTTER ?

This question, involving the consideration of the liquefaction, saponification, and absorption of the various fats used as food in the animal economy, can only be satisfactorily answered by the physiological chemist.

In speaking of fats in general we are too apt to consider that the solid fats of all animals are alike, whereas it is well known that the composite fats of some animals differ very much from those of other animals, and in some cases fats of a different composition exist in the same animal, as in the oil of milk as compared with that of the solid fats of the tissues.

The fats of milk consist of palmitine and oleine with a little stearine, while the fats of the adipose vesicles are composed of palmitine, oleine, and a large proportion of stearine.

Baumont does not say much with regard to the changes which fatty substances undergo in the stomach, except that they are “digested with great difficulty.”

All the recent observations on this subject show that these principles, when taken in the condition of oil, pass out at the pylorus unchanged. Most of the fatty constituents of the food are liquefied at the temperature of the body; and when taken in the form of adipose tissue, the little vesicles in which the oleaginous matter is contained are dissolved, the fat set free and melted, and floats in the form of great drops of oil on the alimentary mass. The action of the stomach, then, seems to be to prepare the fats for digestion, chiefly by dissolving the adipose vesicles for the complete digestion which takes place in the small intestine. (Flint.)

The melting point of the solid fats is therefore all important in this inquiry, because a fat that melts at a temperature comparatively low in the human stomach is more quickly passed to the small intestine, where it is combined with the pancreatic juice and emulsified preparatory to its absorption by the tissues.

The chemists of the United States who have indorsed the statement that oleomargarine when purely made is equal, if not superior, to butter as an article of diet, if we may judge from their indorsements, have given no consideration to its physiological relations. They say that oleomargarine cannot be harmful because no evil arises from the fat of an animal used as food, if slaughtered in a healthy condition. But this statement is not wholly correct, for it is well known that the fat of mut-

ton, in which stearine largely predominates, causes severe indigestion in some persons.

It is further affirmed that oleomargarine will resist the high temperatures of the summer months better than will butter. This agrees with my own experience, and the fact demonstrates that oleomargarine is inferior to butter in point of digestibility, because its power to withstand the higher temperature is owing to the large amount of stearine it contains; therefore, so far as the higher melting point of oleomargarine is concerned, it is not a point in its favor since the easy solution of the solid fats at a comparatively low temperature in the animal economy is necessary to their speedy passage from the stomach as an oil to the small intestine where they are further prepared for absorption. This fact may be considered immaterial by some persons, and so it may be in the case of its use in robust health, but in cases of dyspepsia oleomargarine cannot take the place of butter, which is essentially an oil, and melts at a lower temperature in the stomach than would any other compound of the solid fats.

According to physiological chemists, butter is digested in three hours while the fat of beef takes five hours, and this is readily accounted for from the fact that palmitine, one of the fats of butter, melts at a temperature of 118° F., and oleine is liquid at 32° F. The oil in this case causes the combined fats of butter (palmitine and oleine) to melt at a still lower temperature than that of stearine, even when the latter is combined with cotton seed oil; because stearine requires a temperature of about 114 degrees to liquefy, while butter melts at about 90° F.

Professor Morton, of the School of Technology, New Jersey, is represented as saying that "it (oleomargarine) contains nothing whatever which is injurious as an article of diet; but, on the contrary, is essentially identical with the best fresh butter." This is certainly a strong statement from an able scientist. If strictly correct, no harm will result from a review of the methods employed in the manufacture of oleomargarine.

Several years ago, by invitation, I visited an oleomargarine factory on Cross street, Baltimore, Md. It presented every appearance of cleanliness. The leaf fat used seemed in perfect condition and in large quantity. The vessels used were bright and shining, and over the churn a large, cup-shaped disk of metal was placed to prevent so much as a drop of oil falling into the churn from the gearing. The workmen were cleanly and suitably clothed for their work. In a large vat the leaf fat was sliced up by means of revolving cutters. Water flowed in while the fat was being thus cut into small fragments, soon becoming red with blood from the vascular tissues which surround all fat cells, without which there could be no fat deposited in the adipose tissue. The cutters continued to slice up the fat, and fresh water was supplied until all color disappeared, when it is supposed that the fat has become perfectly pure.

This preliminary process of cleansing to the general observer would seem all that could be desired; it seemed so to me at the time, having been informed that the fat was that of healthy animals. But this is a superficial view of the case. Let us look deeper into the subject, as, for instance, were unwholesome beef fat subjected to the treatment.

Caul and other fats in the crude state, as sold by the butcher, are combinations of fat and tissue. "The adipose vesicles are collected into little globules, from the one twenty-fifth to the one-fourth of an inch in diameter, which are surrounded by a rather wide net-work of capillary blood-vessels. Close examination of these vessels shows that they

frequently surround individual fat-cells, in the form of single loops" (see Flint on Human Physiology), whence the blood that dyes the water that flows through the vats in the process of mincing and cleansing. With these facts in view, how is it possible, in the case of an animal that has died of a contagious disease, the fat coming in contact with the broken-down nitrogenous tissues, oxidized by high temperatures of fever, for any application of cold water to prevent the contamination consequent upon the impregnation of the minced fat with the disease germs floating in the blood and water, as in the process of cleansing, and in which they cannot be destroyed unless subjected to a higher temperature than is used in the manufacture of oleomargarine?

We read in Hassal, "Adulteration of Foods," 1876, that butter may be adulterated with as much as from 15 to 50 per cent. of water. The absorption of water is readily effected by mechanical combination in the churn. Now, since the fat of beef will absorb and retain within its particles the same amount of water as will butter, more or less, it follows that the very means employed for the purposes of cleansing may convey the poisonous germs to the fat.

There is ample proof that large quantities of diseased fat and tissues are used in the manufacture of oleomargarine, independent of the proof derived from patents relating to the chemicals used in the purification.

Within the last two months one of the Western agents of the statistical division of the United States Department of Agriculture states by letter that he knew of \$30,000 having been paid recently for a large number of hogs that had died of cholera. The fat was said to be the object of the purchase.

I have further evidence that, within the past six weeks, the fat from the putrid carcasses of a large number of sheep that had drowned in a river in the State of Missouri had been carted, in view of our correspondent, to an oleomargarine factory, doubtless to be converted into that "boon for the poor," pure oleomargarine.

In reviewing 84 patents issued by the United States Government, up to March 23, 1886, in the interest of butter substitutes, I find the following substances used for purifying fats that have been purchased in a condition unfit for human food, viz:

Nitric acid, sugar of lead, sulphate of lime, benzoic acid, butyric acid, glycerine, capsic acid, commercial sulphuric acid, tallow, butyric ether, castor oil, caul, gastric juice, curcumine, chlorate of potash, peroxide of magnesia, nitrate of soda, dry-blood albumen, saltpeter, borax, orris root, bicarbonate of soda, caparic acid, sulphite of soda, pepsin, lard, caustic potash, chalk, oil of sesame (or benne), turnip-seed oil, oil of sweet almonds, stomach of pigs, sheep, or calves, mustard-seed oil, bicarbonate of potash, boracic acid, salicylic acid, cotton-seed oil, alum, cows' udders, sal-soda, farinaceous flour, carbolic acid, slippery-elm bark, olive oil, bromo-chloralum, oil of peanuts, sugar, caustic soda.

The following extracts from patents issued by the United States Patent Office will serve to show the general character of oleomargarine as manufactured in the United States:

Letters patent to J. R. Brown, December 23, 1873, No. 145840, purifying and bleaching lard, tallow, and other fatty matter. Sulphuric acid, alum, and atmospheric air.

Letters patent to F. J. Kraft, July 21, 1874, for separating the stearine from the oleine of fat by heating the rendered fat in a tub preferably lined with lead to about 135° F., and subjecting it successively to the action of solutions of sugar of lead, alum, bi-carbonate of potash, and nitrate of soda, and to mechanical pressure.

Letters patent to John Hobbs, August 22, 1882, for the manufacture of artificial butter by mixing cotton-seed oil, benne oil, or mustard-seed oil, with animal oleomargarine, and emulsifying the mixture with milk, cream, or other watery fluid.

Letters patent to Nathan I. Nathan, August 22, 1882, No. 263199. Artificial butter. Oleomargarine and leaf lard, the latter cleaned, fused, and strained and washed in a solution of water, borax, and nitric acid, and then churned with milk and dissolved sugar and coloring matter.

Prof. W. H. Brewer, of Yale College, is represented as saying that "the idea that oleomargarine is more dangerous than butter because heated to only 120° is simply nonsense." There is no date to the certificate and it may have been written ten years ago, when the life history of bacteria was not as well understood as at the present time. Late experiments demonstrate that the spores of some species of bacillus are not destroyed by a temperature as high as 212° F., and to make sure of their destruction, substances containing them are subjected to 230° F. for a period of thirty minutes. At a temperature of 130° F. some of the poison germs just begin to propagate in a lively manner. (Salmon.)

Prof. J. S. Arnold, medical department, University of New York, is said to be the author of the statement that "oleomargarine is a blessing to the poor, and in every way a perfectly pure, wholesome, and palatable article of food." I am certain that no reliance can be placed upon the statement that oleomargarine is made of pure fat. The manufacturer himself, however honest, cannot vouch for its purity. The fat is bought in open market, and may have passed through several hands before reaching his. The trader's consideration is money, not purity.

As for oleomargarine being palatable, that is a question of taste; my experience is that the butter substitute has neither the smell nor the taste of butter.

Professor Averill, of Yale College, is made to say:

Nor has trichinæ been observed in the fat or flesh, except when embryos have been purposely fed to the animals before killing them for experiments.

This the professor surely did not say, for he must be well aware of the history of the discovery of trichinæ in swine and in the human body long before any experiments or investigations had been made relating to their propagation in living animals. There is no record that any one of the hundreds of human beings who have lost their lives by trichinosis had been the subject of experiment.

P. H. Van der Weyde, M. D., editor Practical American, and professor of chemistry, United States Medical College, is quoted:

Any injurious ingredients which the cow may eat or which may linger in the system, as the result of any ailment or disease, are thrown out by the secretory glands, of which the principal are the kidneys and the milk-secreting organs.

Had this indorsement begun as follows: "*Sometimes* injurious ingredients, &c.," a person of ordinary intellect would be able to comprehend it; but to say that *any* injurious ingredients which a cow may eat are thrown out by the kidneys or the milk-secreting organs is certainly not in accordance with any treatises on modern physiology. But it is improbable that Professor Van der Weyde gave the indorsement in the precise language quoted. It is difficult to believe that the above and many other certificates given to the public of late, in this city, represent correctly the views of the scientific gentlemen whose names they bear, indorsing oleomargarine as manufactured at the present time.

STATEMENT OF G. P. LORD.

ELGIN, ILL., June 15, 1886.

DEAR SIR: From a communication just at hand I learn that the artificial butter interests are to be presented before your committee for its consideration and I am invited to visit Washington and present the interests of honesty in butter-making before your honorable committee.

As it is impossible for me to visit Washington at this time, I may

be permitted to present some points that should not be overlooked by your committee in considering this important question.

In considering any question affecting our agricultural affairs we should not overlook the fact that agricultural pursuits are important factors in American affairs; that our financial, manufacturing, and commercial prosperity is dependent upon the prosperity and success of those engaged in cultivating our farms.

I am aware that in England farmers have come to be considered as being of little or no account; that England would sacrifice her entire agricultural industry if thereby she could secure cheap food for her half-paid and half-starved employés.

Thanks to a kind Providence our beloved America has not yet been brought down to that low level where the "bloated" capitalists and their half-paid laborers are the only important factors that are worthy of the consideration of those charged with the responsibility of Government.

That the dairy industry is an important branch in our agricultural pursuits all will admit.

That this department of agriculture has been greatly injured, if not brought to the verge of ruin, by the introduction of a counterfeit of its product is too well known to require any argument to prove it.

And just here I want to call the attention of your honorable committee to the fact that the whole business of making counterfeit butter was inaugurated, and has been and is being carried on under and by virtue of rights which have been granted, by the Government.

The Patent Office has issued, as I am informed, about sixty different patents, and still the work goes on.

The Government has no right to grant any person or persons rights (patent or others) for the counterfeiting of any agricultural product.

Congress might as well pass a law granting to certain parties the right to make and vend counterfeit money as to allow the Patent Office to grant parties the right to counterfeit butter.

If this be true, then it follows that the Government has been a party (inadvertently, I admit) to this gigantic fraud.

I am aware that parties will try to break the force of this argument by claiming that theirs is not a patented process.

These parties will tell you what ingredients they use, and how they treat their animal fats.

They will probably say, at least they have so advertised, that they immerse their fats in clear, cold brine, &c.

Now, if your honorable committee will look at patent 266,568, issued to George H. Webster, of Chicago, October 24, 1882, you will notice that he claims the "hereinbefore described process of making artificial butter, which consists in minutely dividing leaf lard, rendering and straining it, mixing a butter coloring matter with it, and immersing it in cold brine for thirty-six hours."

John Hobbs, of Boston, obtained patent No. 280,822, July 10, 1883. He, too, claims the right to use the cold-brine bath in his process.

Now, the point is this: that Government has given patentees the right to manufacture counterfeit butter by the (almost) indetical processes which these (Chicago) parties claim to use in making oleomargarine, and there is in the very nature of things *prima facie* evidence that their product is manufactured under and by virtue of rights which the Government has granted to those who patented these processes.

It is possible that manufacturers of counterfeit butter pay no more re-

spect to patentees' rights than they do to the rights of dairymen, but they will hardly claim that there is any special virtue in so doing.

It is interesting to note the reasons why animal fats are rendered at a low temperature instead of rendering them by heat, as was formerly done. It seems to be conceded by all the patentees that the rendering of animal fats at a high temperature imparts to such fats animal odors, which it is impossible to extract, and, as Mr. Mége says, the rendering of such fats at a low temperature imparts to them the taste of molten butter.

All patentees (and I think all who give this subject any consideration will agree with them) regard it as of the highest importance to separate the animal tissue from the animal fat, and various devices and compounds are resorted to to accomplish that object, and yet no man of sense will claim that all of the tissue or membrane is or can be separated from the fat by any or all of the processes yet invented.

And at this point I want to call attention to some statements that have been made in regard to artificial butter being healthful. In a manifesto published in the *Inter-Ocean* May 19, 1886, by five of those who claim to manufacture oleomargarine, they state that physicians, chemists, and health officers have pronounced these compounds healthful.

Now, I venture to say that there is not an intelligent physician in the United States of well-known reputation who will say that uncooked animal food is a safe article of diet.

I do not believe any intelligent man who has given this subject any proper attention will claim that uncooked animal flesh is safe food.

Those who issued that manifesto would probably say that trichinæ and other parasites are not found in the fat, but in the tissue or membrane of the animal. This is granted; but we must bear in mind the fact that the fat does not hang down from the animal as apples hang from the trees, but that the fat is permeated through and through with the tissue or membrane, and that so long as any membrane remains and is incorporated in the artificial product that product is a dangerous class of food. And here it should be stated that we are not dealing with the product of any one firm, but with this whole class of food as found in our markets. True, when one of the best samples of one of the best manufacturing companies was subjected to microscopic investigation, it contained a whole menagerie of parasites. (See Exhibit Nos. 1 and 2.)

Dr. George B. Harrison, a microscopist, of Boston, procured twenty specimens of bogus butter, and subjected them to a microscopic investigation, and he states that in every specimen he found loathsome and disgusting objects and living parasites.

These and other facts were brought out by the committee of the House on epidemic diseases, and incorporated in their Report 199, to accompany House bill 7005, submitted February 4, 1881, and in that report the committee say "that the adulteration of articles used in the every-day diet of vast numbers of people has grown to and is now practiced to such an extent as to endanger the public health."

In considering this question the public health is of first importance, and is entitled to the benefit of any doubt that may be used against any scientific or adulterated food.

And here I desire to make two statements:

(1) Butter made from milk or cream by churning is a healthful food, for "it is an easily-digested form of fat."

It is one thing to get an article of food into the stomach, but quite another thing to remove the effects of such food from the system.

(2) Butter made from milk or cream by churning is the *finest* and *cheapest* extract for flavoring food that can be obtained in the market. I am aware that people talk about rancid butter, and sometimes people are inclined to think that rancid butter is a dairy product. To correct any such impression it is only necessary to say that rancid butter is butter that has been kept until it has spoiled.

And at this point I want to answer an objection that has been raised by the manufacturers of artificial butter. They are reported to have stated that there were not cows enough in the United States to furnish the people with butter. If that were true there would be no such thing as rancid or spoiled butter in the market.

When the demand equals the supply, butter will be consumed as fast as it is produced, and then rancid butter will disappear from our now overstocked markets.

Nor should we overlook the fact that the day is passed when a dairyman will make poor butter, not for the reason claimed by those engaged in making bogus butter—that they have compelled farmers to make good butter—but for the reason that the people are willing to pay a fair price for good butter, and farmers, like other men, desire to obtain a good price for their product.

I am aware that manufacturers of fraudulent butter have endeavored to divert public attention from the question at issue and to array one class of farmers against another by statements that if dishonest butter is not sustained cattle will be reduced in price "\$3 per head." In answer to such wild statements it is sufficient to say that dairy farmers depend largely upon stock-growers for their dairy stock, and that as a result stock-growers have received 25 to 50 per cent. more for their cows than they would have realized for them had they sent them to the shambles in like condition.

Then, again, the question may be asked, where do you find these cattle and those cattle dealers for whom the bowels of sympathy of the fraudulent-butter men are so widely extended?

I am not familiar with the statistics of other States, but in Illinois "which occupies a proud position in cattle breeding," as will be seen from Exhibit No. 3, one will find the greater portion of the cattle in the dairy district.

Nor are our grain-growers indifferent to the success of the dairymen.

Not less than from \$200,000 to \$500,000 are annually paid out in Elgin by our dairy farmers for feed that is raised outside of the dairy region.

What would hay, oats, corn, or bran be worth should dairying fail and our dairy farmers throw all the product of their farms and all the feed they buy upon an already overstocked market?

This question has two sides to it, and it is possible that the recoil of this gun may lay all the bogus-butter makers in the ditch.

Nor should we overlook the fact that the "labor question" is intimately connected with this subject.

Cows cannot be milked with the most improved harvesting machines.

Milking is hand work, and the care of a dairy farm requires intelligence.

No other industry gives employment to so large a number of earnest, intelligent men (in proportion to its product) as the dairy industry, and every one of this mighty host of intelligent men is watching with intense earnestness to see if Congress will wash its hands and the Government cease to be a party to the continuation of this wicked fraud.

No honest industry can compete with legalized counterfeiting and legalized fraud.

It requires no prophetic vision to see that this country cannot exist half butter and the other half grease.

Very respectfully, your obedient servant,

G. P. LORD.

The CHAIRMAN SENATE COMMITTEE ON AGRICULTURE.

STATEMENT OF HENRY E. ALVORD.

HOUGHTON FARM,
Mountainville, Orange County, New York, June 7, 1886.

Hon. WARNER MILLER,
United States Senate :

SIR: In connection with "the oleomargarine bill," about to be considered in the Senate, permit me to ask your attention to the following statement.

As senior vice-president of the New York State Dairymen's Association, I feel at liberty to address the Senator from New York on this subject, and I venture to refer to my long and active connection with the dairy interests of the country, my practical work in introducing the co-operative system of butter-making in Maine, Massachusetts, and Connecticut, and my share in the dairy statistics of the tenth census, as an excuse and justification for addressing the Senate committee of which you are chairman.

At present I am a practical dairyman, largely interested in making dairy butter, in maintaining a high quality, and securing a good price. But I fail to see how any good can come to our dairy interests by unfair dealing and undue excitement in meeting a formidable competition in the general butter market.

It is hardly necessary to observe that the present clamor and apparent excitement in connection with this proposed oleo legislation, and which now centers at Washington, is not spontaneous, but is manufactured for the occasion, the result of laborious efforts by men who have personal and pecuniary interests involved. Aside from the general worthlessness of petitions secured by organization and solicitation, many of those you have in this instance received have been signed as the result of the most extravagant statements and actual misrepresentation. This same extravagance and disregard or ignorance of the facts has characterized the statements and arguments submitted to Congress in support of the proposed anti-oleo legislation.

The double and contradictory assertion has been made, that there are 15,000,000 milch cows in the United States, producing 1,600,000,000 pounds of butter and 400,000,000 pounds of cheese, and that the number of dairy cows is rapidly diminishing, with consequent reduced dairy production.

Neither statement is correct. There have never been 13,000,000 dairy cows in the country, and the product of butter and cheese is little, if any, more than half what is claimed. (The milk of from five to six million cows is consumed as food, unmanufactured.) In fact, the number, quality, and value of our dairy cows are steadily increasing.

This increase has been as rapid since the advent of butter imitations and substitutes as ever before. In the United States as a whole more

butter was made and more consumed per capita, and that of a higher quality, in the year 1885 than in any previous year.

Moreover, prices have not declined materially, in spite of the oleomargarine and butterine competition, substitution, and adulteration. I have compiled from standard sources a table of the quotations, weekly, in the New York market of Western creamery butter and New York dairy butter for the last ten years, and find that, on comparison, no food product has in the last few years better held its price. During the four years 1876-'79, inclusive, the average price of creamery butter was 30 cents, and of New York dairy, 26.875 cents. During the four years 1882-'85, inclusive, the same averages were 31 cents and 26.625 cents. These figures cannot be controverted. There never was a time when good butter was more in demand, at a comparatively good price, than this year 1886, and this fact is known to every good butter-maker who knows his own market.

During the last two years I have taken much pains to obtain the candid opinion of great numbers of fair-minded progressive dairymen, and find they substantially agree that the only annoyance and injury, if any, from imitation and adulterated butter is in its very general fraudulent substitution and sale, in the retail trade, as genuine butter.

Hence there is one thing, and one thing only, which the best butter-makers of the country desire, as an aid and protection in their business, and that is *identification* of all butter substitutes and imitations, this to be secured, if possible, all the way from manufacture to actual consumption. Practical difficulties are here encountered which have led many people to approve the *very questionable method* of legislation under a mere pretense of a revenue measure to secure the identification desired. Admitting that this is the *easiest* way of reaching the desired end, the *amount of tax* (or rate) is immaterial. Just enough to cover the cost of inspecting, identifying, and stamping the goods is better than more.

Many honest and enterprising dairymen, including, to my own knowledge, several of the largest butter makers in the world, fail to see how their business can be possibly benefited by a direct onerous (if not positively prohibitory) tax upon a competing but equally legitimate business. Yet they do desire freedom from the unfair *advantage* which dealers, and especially small dealers, are enabled to practice by fraudulent substitution and sale.

This one point secured, *identification*, and no good butter-maker has any reason to fear serious competition from *known* substitutes and imitations of his pure butter.

I find most good butter-makers agree that we can make an article at least fifty weeks in the year which will successfully compete on its merits with the best-known substitute, even although the latter be offered as butter. In spite of the many claims to the contrary, few good judges of butter fail to identify the spurious imitations by the ordinary methods of examination. Many consumers are, however, poor judges, and their servants or purchasing agents still poorer, so that the need of some characteristic feature or mark, which shall at once distinguish pure butter from any adulteration, imitation, or substitute, is mainly in the interest of the consumer.

The competition of the so-called "bogus butters" is felt almost exclusively by butter of the lowest grades. The great bulk of butterine and its kindred products is as wholesome, cleaner, and in many respects better than the low grades of butter, of which so much reaches market. It is certainly true, however, that the average quality of American butter

is fast improving, and if oleomargarine and butterine spur the poorer butter-makers to greater effort, better methods, and a product of higher grade, the inventions which so many regard as a calamity may prove to be blessings in disguise to the dairying and diarymen of the country.

The best butter-makers are to-day not afraid of the competition as it stands. Secure identification and prevent frauds and consumers and producers alike will be safe. If a stamp-tax is the best method, one cent a pound, or even less, will be all sufficient.

Very respectfully, your obedient servant,

HENRY E. ALVORD.

STATEMENT OF JAMES HEWES.

BALTIMORE, June 18, 1886.

HON. WARNER MILLER,

Chairman Senate Committee on Agriculture and Forestry:

MY DEAR SIR: In reply to a telegram this day from Mr. J. H. Loh, requesting me to send my testimony to you, I can but feebly respond, as I am suffering severe nervous headache, caused by being badgered in the criminal court for two days in my efforts to aid the State as expert in oleomargarine cases; and I will here state that my experience for eight years in these prosecutions is that we witnesses suffer more than the prisoners, and endure the reproach of butter friend and oleo foe alike, because we have a hand and voice in the prosecutions. We are forever being told that we should attend to our own business and let the State attend to theirs.

My dear sir, herein lies the inefficiency of State laws to cope with this oleo evil—not a single arrest has ever been made here by the State officers unaided, or voluntarily, and they are incompetent to judge oleomargarine. The laws would never have been enacted but for the zeal of a few individuals, and certainly no prosecutions would ever have occurred but for warrants sworn out upon my “ipse dixit” that the suspected article was in point of fact oleomargarine. I have thus been the means of causing about fifty arrests during the last four or five years, and have been boycotted by the retailers in consequence of my acts in the interest of honest trade in pure butter. But, sir, sweet as life is, I am wasting it rapidly, for the strain on my sensitive nerves is great, and is telling on my constitution; and though I once took up arms in defense of the lost cause when in the heyday of youth, now that I am a man of family, and a happy man, I cannot say “*dulce et decorum est pro patria mori*” and mean it to apply to my decease, and I pray a national law that will supersede our weak efforts to correct the morals of the people in this regard.

As I mentioned briefly before your committee some time since, more stress should be laid upon the moral aspect of this momentous question. I cannot exaggerate the demoralization wrought by this one agent. Men who years back would have been accepted as credible witnesses, now to shield one another do not scruple to go upon the stand in court and prevaricate under oath, if not actually lie. Woman, lovely woman, is prostituted to the nefarious traffic, and innocent children are taught to cry out in the market-places, “Here is your choice country primary butter,” when, from the very character of their instructors and instructions, they know that the composition is as innocent of country and butter as they were once of crime. Man, woman, and child have heard the specious arguments of oleo vendors so frequently that the fact of selling oleo

surreptitiously rises to heroism in their sight, and they laugh to scorn the thought that there can be any harm in resisting the encroachments of such an obviously unjust law by every force at their command, and a part of their creed is to damage any business the proprietor of which is engaged in bringing them to count.

Sir, in this city they have a society organized to defend one another if arrested and to boycott me. Thank God, they lack the power or they would take the bread out of my mouth and the mouths of my wife and children and banish us the town, so splenetic and spiteful are they. You have doubtless many times heard persons, otherwise considered honest, say that they would "beat a railroad company out of a fare if they could." I have many and many a time. Well, sir, the defects in the morals there harmonize with the defective morals of the oleomargarine vendor. I will not sell oleo because I know that sooner or later, in the course of any I might sell, before it reached the stomachs of mankind, a fraud would be perpetrated to which I would be accessory before the act; and I cannot account for any other view to be entertained except on the grounds of obliquity of vision.

When the tiny influence of Mege's invention commenced its work in this country, would to God that some prophet had arisen to have forecasted the dire events to befall the butter world. I thought it another wooden nutmeg joke! If any one with human foresight had told of the blows to be dealt by this hydra-headed enemy to the dairies throughout the land, he would have been ridiculed. The United States Government, instead of granting patents then and now to the issuers of counterfeit butter, should have granted freedom to any one and everywhere to counterfeit everything, including money, or then and there the very law we beg for now, and which these dairy pirates have the audacity to oppose, should have been enacted to throw around the farmer that protection which the general invitation to immigrants to till our broad lands has carried as a natural presumption would be afforded them. No parallel to the audacity of oleomargarine puddlers appears in the world's history, makers of a counterfeit as cunning as ever appeared, openly fighting for protection in the manufacture and sale of the fraudulent article. When they read in the fair phraseology of the desired law that if they only manufacture the article and do not imitate butter in color, that no tax will be placed upon the stuff, they produce it as a confession of guilty to the charge of knowing that none of it can be sold except to deceive. It would not please the eye, and the stomach would rebel, and every one of the unscrupulous fellows knows it.

I know an oleo vendor who would have been an honest man but for the advent of oleo, and he used to taste the stuff to get customers to think that it wouldn't "bite like an adder and sting like a serpent," until about a week's experience and the qualms of conscience combined to make him lose his breakfast after the fact one morning, and now he doesn't eat it or taste it even to induce customers to buy. The stuff is nauseating to the average man, and I contend cannot be wholesome. I every ounce was of the sweetest and cleanest the process of deodorization done by acids renders a suspicion reasonable that some free acid will remain imbedded in the fat. Chemists and microscopists can disagree in proportion to their fees, but when disinterested scientists tell you that field mice are full of trichina and hogs all delight in eating the mice and the trichina are found in all parts of the hog, it opens a wild field of speculation as to how broad an avenue oleo presents for an incursion of these parasites upon the human system. Cats have trichina

in their meat from eating mice it is suspected. I have seen a large trichina perfectly formed in a piece of a cat's tongue.

Now, sir, as all the fats used in the manufacture of oleomargarine (and by that generic term I wish to be understood as embracing oleomargarine, suine, butterine, "bosh," and every imitation of butter) are pressed out at a low temperature—108 to 110 the maximum—I contend that the germs of disease remain as potent of evil as they were before the pressing and the animal life unharmed; thus myriads of trichina and miles of tapeworm are insinuated daily into unsuspecting humanity, and for what?—to enrich a few and to impoverish over 7,500,000 directly and the whole nation indirectly.

I would like to continue this letter, but am admonished by my aching head that yours may ache too, reading all the scribbling directed to you in this fight. The subject is so serious that I conscientiously think it menaces the nation's solvency; if the farmer cannot live, who is the only producer of consequence, we all cannot live, because indirectly we all live on him. Stop the issue of the farmer's currency, butter, and such a panic will ensue in 1887 that will dwarf into insignificance any previous experience in our national life, if it does not lead to bloody and more serious consequences.

By what right, equitable or just, do a few men establish a crooked industry, that with less than \$2,000,000 capital will deal ruin to over 30,000,000 people, and depreciate over \$1,000,000,000 worth of property directly? Look to it, sir, that no further hurt shall result from this vilest of foreign inventions that has been sent to plague our people and disrupt our natural relations. I must stop, although I could find material in this subject with which to fill a book.

Yours, truly,

JAMES HEWES.

STATEMENT OF JAMES H. LOH.

Mr. Chairman and gentlemen of the committee, I am a farmer, and reside in Pennsylvania. In the winter of 1877-'78 I went to Harrisburg, and after much labor succeeded in having a bill passed by the legislature to prevent the sale of oleomargarine as butter. That was one of the first State laws in regard to this matter which was enacted. Since the law was passed a few cases have been tested in our State, and in all those cases the claim has been made that the law was unconstitutional.

There are at present, I believe, such laws in twenty-one States of the Union, but in one respect or another they all seem to be defective. As a matter of fact cases under the laws are appealed from one court to another, and finally are allowed to expire for the want of time, and because of the individual expense attending their prosecution, in this way leaving the dairy interests of the country without proper protection.

There has been so much said in regard to this matter that I need only add that the farmers of the country are looking to the Senate for relief, and you have it in your power to frame a law upon this subject to aid this great portion of our people. I do not make this appeal in the interest of any association or corporation, but appeal to you as an individual farmer. Lengthy arguments have been submitted on the other side of the question, claiming that these artificial compounds are healthful. From an experience of thirty years, directly and indirectly engaged in the handling of pure butter, I cannot indorse any such statement. In my own town during the past winter oleomargarine first made

its appearance and was sold for butter. The question is, What should be done to protect the consumer? I say, give us a tax, and place the matter under the control of the General Government.

There have been arguments attempting to show the great loss that will be experienced if this law should be passed. All I can say is I reside in the valley of the Cumberland; our section is growing rapidly, and we can buy milch cows there for \$15 to \$18 a head, and if this bill will so greatly affect the cattle industry, as they claim, people in our country would have to give their stock away. But this will not be the effect of it. I will simply say in conclusion that the farmers of the country are looking to you, gentlemen, for relief, and believe you will give it to them.

STATEMENTS OF B. F. VAN VALKENBURGH.

Hon. WARNER MILLER,
Senate Chamber, Washington, D. C.:

DEAR SIR: The arguments used by Messrs. Armour & Co. and other dealers in butterine and oleomargarine butter, that the bill before the Senate to tax oleomargarine will, if passed, injure the stock-raising interests, have no foundation in fact, for the reason that the so-called oleomargarine manufactured in the United States is mostly composed of neutral lard, very little oleomargarine oil entering into the compound. During the winter months, when a very large share of the goods are made, only 5 to 10 per cent. is used, and during the summer season, when a very small quantity of the goods can be sold, from 10 to 20 per cent.

The bill does not tax oleomargarine oil manufactured for export, and no doubt seven-eighths of the oil produced in the United States is exported to other countries.

It is estimated that there are 350,000 less cows in the United States, kept for dairy purposes, than there were five years ago, while the increase of population would have called for an increase of not less than 350,000; consequently the passage of this bill would give such an impetus to the now nearly ruined dairy interests that there would be an immediate demand for 500,000 cows to make butter to take the place of the lard and other mixtures sold for butter, and there would be a demand every year for several hundred thousand cows to supply the increasing dairy interests.

But if this bill is defeated the result will undoubtedly be to cause not less than 1,000,000 cows to be sold for beef within the next five years. For it is a settled fact that the dairy interests of the United States cannot compete with the uncontrolled manufacture of lard, sesame oil, and other oils into fraudulent butter.

The cattlemen of the Great West, as well as the dairymen of the Eastern and Middle States, cannot allow this fraudulent butter to continue to be sold as and for butter.

According to the opinion of those who have given the matter careful study, if the tax of 10 cents is restored and becomes law there will be a demand in the immediate future for 1,000,000 cows for dairy purposes; if it is defeated there will be not less than 1,000,000 cows sold for beef within the next five years. It is for the Senators of the stock-raising and dairy States to decide which will be best for the country. I earnestly hope that you will favor the bill.

Respectfully, yours,

B. F. VAN VALKENBURGH,
Assistant New York State Dairy Commissioner.

ADDITIONAL STATEMENT OF B. F. VAN VALKENBURGH.

NEW YORK, *June 21, 1886.*

HON. WARNER MILLER,

Chairman Senate Committee on Agriculture :

DEAR SIR: In order to successfully enforce any State law regulating the manufacture and sale of oleomargarine, the article must be put under the control of the Internal Revenue Department of the United States, for the reason that these goods are manufactured in such close imitation of butter and packed in butter tubs, marked and shipped as butter, and so marketed that it cannot be detected while in transit from one State into another; but if it is put under the control of the Internal Revenue Department it will be marked and stamped in such manner that when shipped from the West into New York or any other city it will be recognized by the State officers, and can then be watched and kept under control, but when not marked it can be shipped and distributed in butter tubs as butter in all parts of the United States without detection.

Armour & Co., of Chicago, ship their oleomargarine and butterine in refrigerator cars, with their beef, to a large number of the towns and cities in this State, and being butter tubs, no suspicion is aroused of it being anything except butter. I have positive information of it having been shipped in this manner into Utica, and other smaller cities in the western part of this State, by said firm during the past winter, and I am informed that they distribute it wherever they run their refrigerator cars, which is into nearly every State in the Union.

The assertion of the manufacturers and dealers in oleomargarine that they are furnishing a cheap substitute for butter to the laboring classes is not true, for the reason that the retailer invariably sells the goods for butter at the ruling prices for good, sound, sweet dairy and creamery butter, he making the enormous profit of 15 to 20 cents per pound on his sales, while the consumer is not only defrauded by getting what he does not want and would not knowingly use at any price, but is paying 10 to 15 cents per pound more than he would have to pay for oleomargarine if he wanted it and bought it for what it is.

By taxing these goods 10 cents per pound it will simply reduce the profit of the retailer to about what it would be on pure butter; then there would be no inducement for the grocer to commit a fraud on his customer by selling it for butter.

The experts in the employ of the State dairy commission have purchased more than five hundred samples of these counterfeits as and for butter during the past eighteen months, and in not over five cases have they found the grocer selling it for what it was, and then only when they were suspicious that they were dealing with a State expert and liable to be arrested. The average price paid by the experts for five hundred samples was for oleomargarine twenty to twenty-five cents, and for butterine twenty-five to thirty-six cents per pound; the larger share of the samples were butterine. During the said period oleomargarine sold at wholesale from eight to thirteen cents per pound, and butterine at sixteen to twenty cents per pound. The present ruling price of oleomargarine is seven to nine cents and of butterine ten cents per pound at wholesale.

Respectfully, yours,

B. F. VAN VALKENBURGH,
Assistant Dairy Commissioner.

The committee then adjourned.

STATEMENT OF J. H. CRANE.

[Office of J. H. Crane, wholesale produce commission merchant, 936 Louisiana avenue, south side.]

WASHINGTON, D. C., *June 22, 1886.*

DEAR SIR: Mr. Walter Brown, of 212 Center Market, this city, who addressed your committee last Friday, requests me to send to you the name of A. A. Kennard & Co., corner of South street and Exchange Place, Baltimore, as the parties to whom the suet of the butchers in the Center Market was sold four years ago, in the returned refuse of which he found, in the hashed and pressed suet, pressed maggots. He also requests me to give you the name of Mr. P. H. Vanriper, of New York City, as the party to whom Messrs. Weaver & Klingly, of Georgetown, D. C., are now shipping their "oleo oil," this oil being extracted from suet bought of butchers in our Center Market.

You will remember that this information was called for by Senator Jones.

Yours, truly,

J. H. CRANE.

Hon. WARNER MILLER,

Chairman Committee Agriculture, &c., U. S. S.

ANALYSES OF SAMPLES OF OLEOMARGARINE.

U. S. DEPARTMENT OF AGRICULTURE,
Washington, D. C., June 22, 1886.

Hon. WARNER MILLER,

Chairman Senate Committee on Agriculture:

DEAR SIR: Herewith I respectfully submit an analysis of the ten samples of oleomargarine, so called, received June 12, 1886, from B. F. Van Valkenburgh, assistant New York State dairy commissioner, 350 Washington street, New York City, N. Y.

Sample No. 1 is an oleomargarine. Viewed under the microscope as received, this sample exhibits crystals of lard. On boiling it gives off fumes of a very disagreeable acid odor and also that of decomposing cheese (caseine), showing the presence of butter. It is unfit for human food, being in a highly decomposed state. The sample is marked L, Aarensburg, N. Y.

Sample No. 2.—This specimen is full of fungi, mycelium, and the spores of the same. Dark bodies, foreign to pure butter or oleomargarine, are also observed. On boiling a very sour odor is given off, and also that of decomposing cheese (caseine), indicating the presence of butter, although no odor of butter was perceived. This sample was too much decayed to detect in it the crystals of beef fat. Has a slight taste of butter. Is unfit for human food, being in a state of fermentation. The sample is marked H. & D., June 12, 1886. Probably Richards and Muny's goods.

Sample No. 3.—This sample is an oleomargarine. Viewed under the microscope, it exhibits crystals of lard. On boiling gives off a slight odor of butter; also a sour and cheesy odor. Is unfit for human food, being highly decomposed. This sample is marked P. H. Ripper, N. Y.; made by him in N. Y.; old goods.

Sample No. 4.—Viewed under the microscope, as received, no crystals of lard were observed. On boiling a slight odor of butter is perceived, and a sour smell of decomposed or putrid cheese (caseine). This sample is too highly decomposed to obtain definition of crystals, and is unfit for human food. It is marked N. Waterbury (probably Hammond's goods), 115 Warren street.

Sample No. 5.—This sample is an oleomargarine. Viewed under the microscope, crystals of lard are observed. On boiling, a strong odor of decomposing caseine and a strong acid odor is given off. The sample is in a state of fermentation. Is unfit for human food. Marked, P. McGaun; probably McGaun's goods, Brooklyn, N. Y.

Sample No. 6.—Viewed under the microscope, no crystals of lard are observed. On boiling, it has a slight odor of butter and also a strong odor of decomposing cheese (caseine), showing the presence of butter. It is highly charged with water. This specimen is unfit for human food, being in a state of fermentation. Marked G.

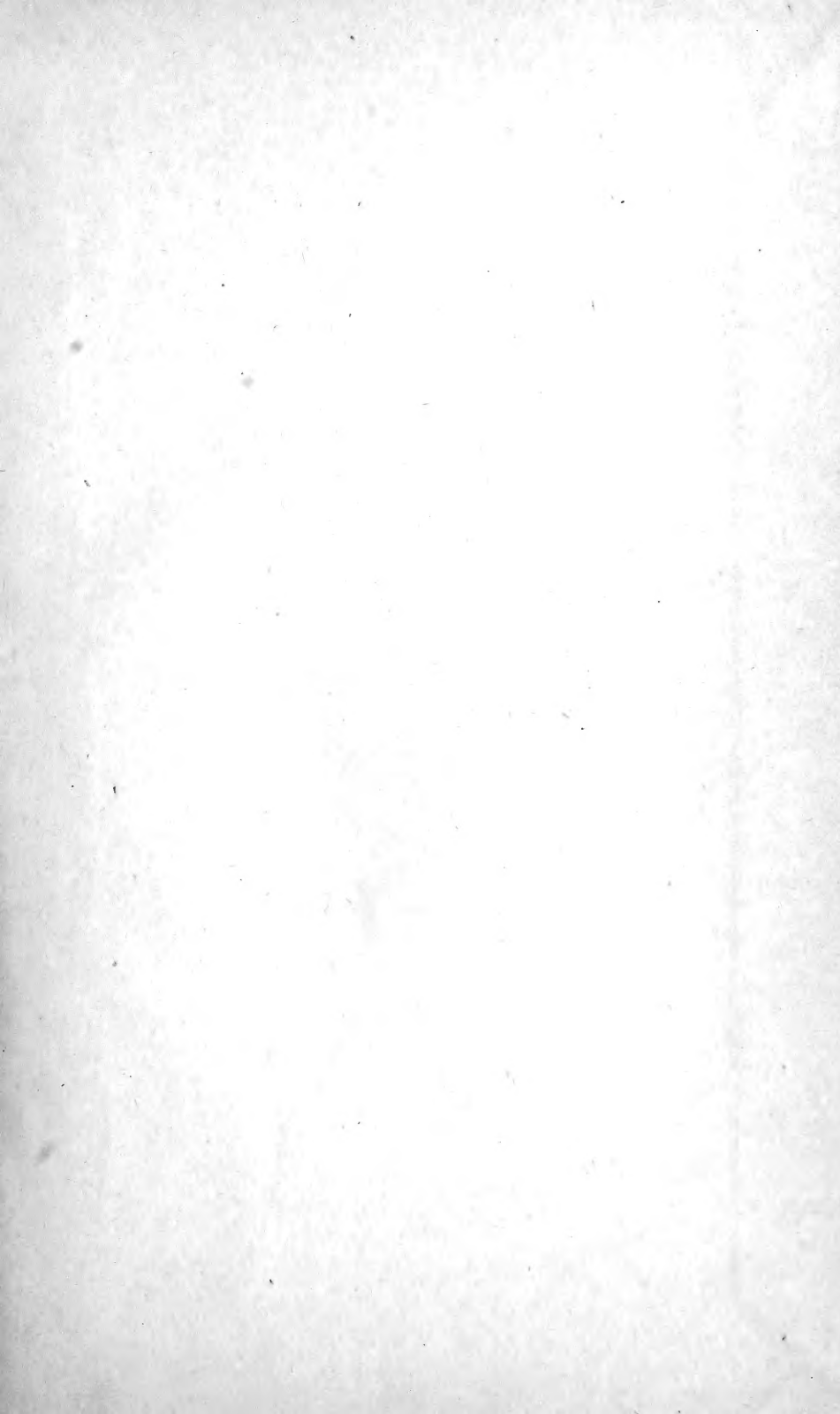
Sample No. 7.—This is an oleomargarine. Viewed under the microscope as received, crystals of lard in great numbers are seen. On boiling, beef crystals are observed, and also dark bodies, never seen in pure butter or oleomargarine. This sample is in a highly decomposed state and would be unfit for human food. It is marked Millman, probably L. Mendell's goods, New York.

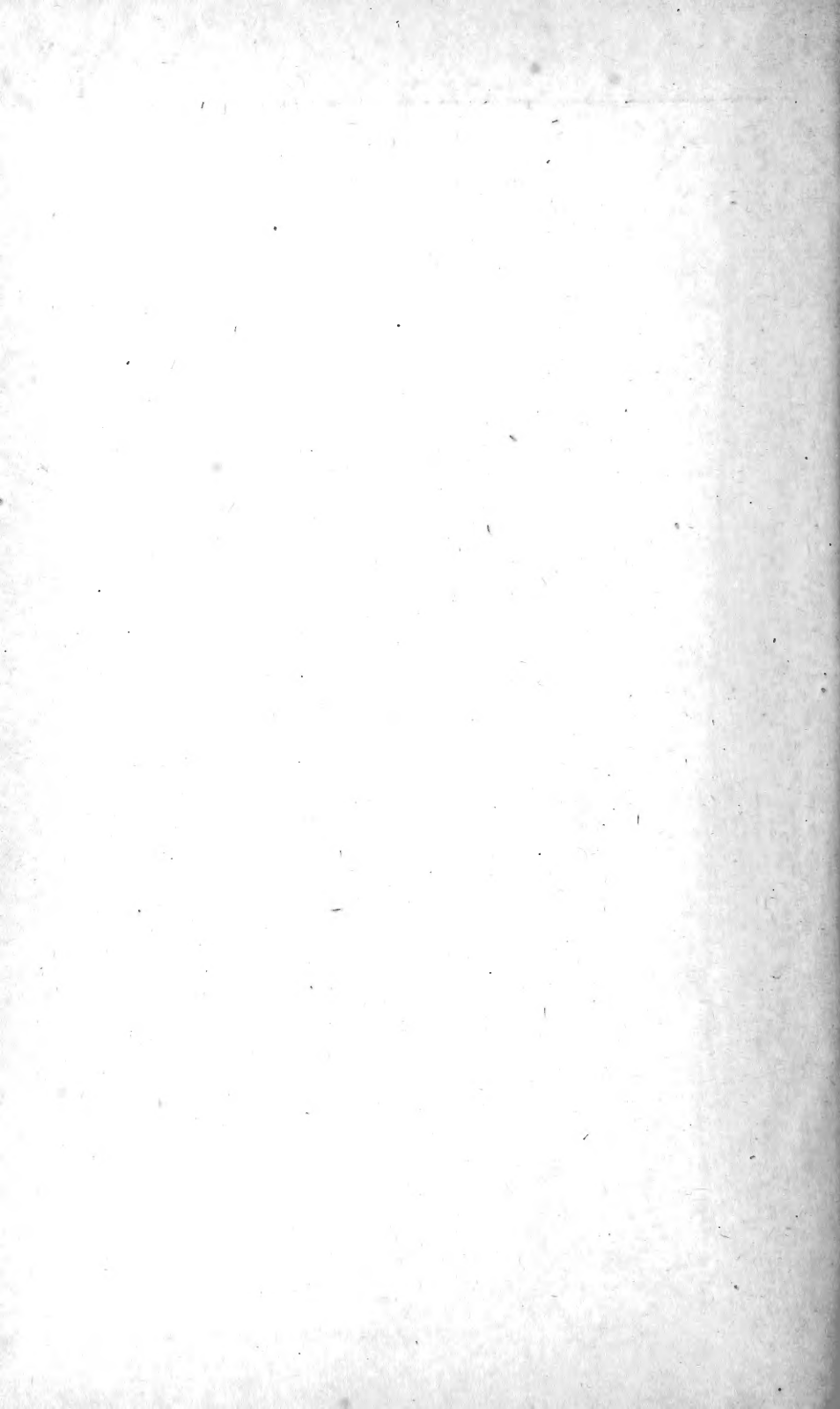
Sample No. 8.—This sample contains butter and lard, mycelium (roots) of fungi, and the spores of same. On boiling it gives off the odor of decomposing cheese (caseine of butter). Contains dark bodies foreign to butter or oleomargarine. No odor of butter is perceived when boiling. The sample is unfit for human food, being in a state of fermentation. Marked G. H. Hammond, June 12, 1886. From somewhere in Indiana it is supposed.

Sample No. 9.—This sample, under the microscope, viewed in the natural state, shows crystals of lard. It is an oleomargarine. The crystals of lard are well defined and in great numbers. On boiling gives off the odor of decomposed cheese (caseine of butter). The sample is highly charged with a blue mold, seen by the naked eye. It is in a high state of fermentation and is unfit for human food. Marked A. Manufacturer unknown.

Sample No. 10.—Few crystals of lard observed in this sample. When boiled has a slight odor of butter, also an odor of decomposing caseine, showing the presence of butter. Is unfit for human food, being in a state of fermentation. Marked P. H. Van Riper, New York.

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