

DEPARTMENT OF COMMERCE AND LABOR

BUREAU OF STANDARDS

S. W. STRATTON  DIRECTOR

Weights and Measures



FOURTH ANNUAL CONFERENCE
OF REPRESENTATIVES FROM VARIOUS STATES
HELD AT THE BUREAU OF STANDARDS
WASHINGTON, D. C., DECEMBER 17 AND 18, 1908



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LIST OF DELEGATES WHO ATTENDED THE CONFERENCE.



H. FOSTER BAIN,
Urbana, Ill.

ALFRED E. BENT,
State Treasurer,
Denver, Colo.

EDWARD E. BROWN,
University of Kansas,
Lawrence, Kans.

WESTON BRUNER,
Washington, D. C.
Representing

Hon. B. S. Bruner,
Secretary of State,
Frankfort, Ky.

HARRINGTON CLANAHAN,
Chief Clerk to Secretary of State,
Springfield, Ill.

L. A. FISCHER,
Chief of Division of Weights and Measures,
National Bureau of Standards,
Washington, D. C.

WILLIAM C. HASKELL,
Sealer of Weights and Measures of the
District of Columbia,
Washington, D. C.

P. F. HAZEN,
St. Johnsbury, Vt.

D. C. PALMER,
Commissioner of Weights and Measures,
Boston, Mass.

GEORGE H. PETTIS,
State Sealer of Weights and Measures,
Providence, R. I.

F. REICHMANN,
State Superintendent of Weights and Measures,
Albany, N. Y.

S. W. STRATTON,
Director National Bureau of Standards,
Washington, D. C.

B. F. THOMAS,
Professor of Physics, Ohio State University,
and State Sealer of Weights and Measures.
Columbus, Ohio.

J. SUTTON WALL,
Chief Draftsman, Department of Internal Affairs,
Harrisburg, Pa.

LAENAS G. WELD,
State Superintendent of Weights and Measures,
Iowa City, Iowa.

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REPORT OF THE FOURTH CONFERENCE OF WEIGHTS AND MEASURES

HELD AT THE BUREAU OF STANDARDS
WASHINGTON, DECEMBER 17 AND 18, 1908



FIRST SESSION (MORNING OF THURSDAY, DECEMBER 17, 1908).

The meeting was called to order at 11.30 o'clock a. m. by the chairman, Dr. S. W. Stratton, Director of the Bureau of Standards.

The CHAIRMAN. Gentlemen, we have heard from the delegates of several more States, who are in the city and will be here later.

I had hoped to present to you this morning the Assistant Secretary of Commerce and Labor; in fact, the Secretary had promised to come out, but he was called away the day before yesterday. The Assistant Secretary said he would come out and be with us most of the day, but this morning a Senate committee sent for him and he is to appear before that committee. However, it is expected he will be here to-morrow.

We are always glad to see our friends at the Bureau, and we count the members of this organization our best friends in all matters relating to weights and measures. One of the principal objects of the Bureau in encouraging this organization is to secure from its members the information which can be obtained only from men closely in touch with the everyday affairs pertaining to weights and measures. We want the Bureau to be of as much assistance as possible to the public in matters pertaining to weights and measures, and this can be accomplished only through efficient state organizations. It works both ways, at it were. We have a great deal to learn; and on the other hand, there are a great many ways in which we can assist the States. We have made a very great effort this time to get representatives from most of the States, and I am somewhat disappointed that we have not more. There is one thing to be said, however, and that is that when a State once takes this subject up, when it once gets a man who is really interested in weights and measures and who organizes the work in the State, there is never any going backward. We find here this morning the men who have been coming right along. We are going to try to help you a little more effectively this year.

We have asked Congress for an appropriation, small in itself, but large enough to enable us to accomplish something. The object of this appropriation is to enable the Bureau to send representatives into the various States to make an investigation. We have two objects in view—one is to find out what the States are doing with the standards that were furnished them by the General Government, and the other is to secure certain information that we desire, much of it the sort of information that we will eventually get through this organization when all the States are represented. This appropriation has been favorably passed upon by the House, and I think we have every reason to believe that it will be allowed by the Senate.

There is another point that I wish to mention, and that is the broadening of the functions of the state officials; in other words, I want a little broader and more general definition of the term "weights and measures," and I think the time will come eventually when the States will feel it just as important to handle affairs pertaining to gas meters, water meters, electric meters, and even thermometers, as they do the ordinary weights and measures. We find attempts at supervision over these instruments in a great many States. We find separate commissions and separate inspections. But there is no attempt to centralize the work. That is what ought to be done, because all of it is weights and measures. In some States the question of inspection is overdone. There is a tendency to create separate offices with separate officials where one man could attend to all the work. To my mind, there is but one really good and efficient way in which to handle the question, and that is to have all matters pertaining to weights and measures, the testing of all apparatus used in measuring commodities sold to the public, under one head, thus broadening the term "weights and measures," as is done here at the Bureau.

"Weights and measures" at the Bureau means electric measurements, heat measurements, light measurements, and all other kinds of measurements. The Bureau is making scientific investigations regarding these things, and promoting and developing methods of measurements, and doing other work useful to the state officials. The city officials and state officials concerned should bring the necessity of inspection to the attention of the public. There is no reason for separating these various kinds of inspection, and I think the work can be best done by having it centralized and under people who are trained along the lines to make them fitted for that work. What is the use of an inspector of gas meters, an inspector of electric meters, and all those other inspectors, if they are merely political appointees? The tendency everywhere is to create new positions. But it should all be put under one head, in the manner of a scientific institution,

politics being left out. I may be looking somewhat into the future, but that is what I think is going to come in the end.

I want to say again that we are very glad to see you this morning. We look forward to these meetings with pleasure, and we hope that next year you will help us to get some additional States to send delegates.

The first business on the programme is the roll call.

The secretary called the roll, the following-named delegates being present:

Mr. BAIN, Illinois.
Mr. BENT, Colorado.
Mr. BROWN, Kansas.
Mr. BRUNER, Kentucky.
Mr. CLANAHAN, Illinois.
Mr. FISCHER, Washington, D. C.
Mr. HASKELL, District of Columbia.
Mr. HAZEN, Vermont.
Mr. PALMER, Massachusetts.
Mr. PETTIS, Rhode Island.
Mr. REICHMANN, New York.
Mr. STRATTON, Washington, D. C.
Mr. THOMAS, Ohio.
Mr. WALL, Pennsylvania.
Mr. WELD, Iowa.

The SECRETARY. In addition to the gentlemen present, we were notified by the governor of Georgia that Hon. Philip Cook, secretary of state, who represented that State last year, would be present. We were also informed that Maryland would again be represented by Mr. Woolf, of Baltimore. The governor of Alabama was under the impression that we asked for "delegates," and appointed a number; but I do not see any of them present. Mr. Haarer, who was with us last year, was appointed to represent Michigan, but he notified us a few days ago that he would be detained on account of a trial in which he was a witness. We have also been notified by the governor of Utah that Hon. O. J. Salisbury has been appointed to represent that State. Mr. Richardson was appointed to represent Virginia, but we received a message from him to-day stating that he would be unable to attend.

All of the governors of the States expressed themselves as greatly interested in this matter, and in almost every instance where a delegate was not appointed it was on the ground that there was no appropriation from which the expenses of such a person could be defrayed.

The CHAIRMAN. I think the question of expenses has a great deal to do with it. There are few States that have made provision for the expenses. It will take them some time to get around to that.

The SECRETARY. I might also report that a delegate was appointed from Maine, but he declined to come because there was no fund from which his expenses could be paid.

The CHAIRMAN. How about New Jersey?

The SECRETARY. We have heard nothing from New Jersey; that is, nothing favorable.

The CHAIRMAN. Both New Jersey and Connecticut have sealers' organizations and should be represented here. The next order of business is the report of the executive committee.

The SECRETARY. During the year we obtained from the Solicitor of the Department an opinion, which had to be approved by the Attorney-General before it could be published. It is an opinion as to whether Congress could lawfully require all weights and measures to bear a prescribed stamp and provide penalties in case weights and measures other than those bearing the stamp and conforming to the standard were used. I will read the opinion, which is as follows:

SIR: My opinion is requested, by your reference of a letter from the Bureau of Standards, as to whether, under the fifth clause, section 8, Article I, of the Constitution, Congress may enact a law which shall define the standard of weights and measures to be used throughout the several States and Territories of the United States, require all such weights and measures to bear a prescribed stamp, and make it a misdemeanor to use in trade any weights or measures departing from such standard or without such stamp.

I have the honor to answer this question in the affirmative on the following grounds:

In enumerating the powers granted to Congress the Constitution provides (sec. 8, Art. I):

"The Congress *shall have power* * * * To coin Money, regulate the Value thereof, and of foreign Coin, and *fix the Standard of Weights and Measures.*"

The proceedings of the constitutional convention, as recorded, add nothing to the simple words of this grant, as brief as they are comprehensive and as clear as they are precise. In the earlier drafts of the Constitution no mention was made of weights and measures. The clause, precisely as it now appears, though standing alone, was first introduced in the draft reported by the committee on detail August 6, 1787; and it was adopted by the convention August 16, 1787, without debate. It was combined with the clause granting the power to coin money and regulate the value thereof in the draft reported by the committee on style and arrangement September 12, 1787 (3 Doc. Hist. Const., 449, 545, 724; 8 Fed. Stat. An., 152). In the Federalist the power in question is noticed only by Madison, who says merely:

"The regulation of weights and measures is transferred from the Articles of Confederation, and is founded on like considerations with the preceding power of regulating coin." (Federalist, No. 42.)

Referring to the Articles of Confederation, it is found that the power was there granted in the following terms (Art. IX):

"The United States, in Congress assembled, shall also have the sole and exclusive right and power of * * * fixing the standard of weights and measures throughout the United States."

The power to fix the standard of weights and measures having been granted to Congress without limitation, and the clause containing the grant having been "transferred" from the Articles of Confederation, where it was exclusive in terms, the view has been taken that it remains, now as formerly, a power exclusively vested in Congress; and it has been regarded as "doubtful whether the enactments of any State on the subject are of any validity whatever, even though Congress have wholly neglected to attend to this regulation." (The *Miantonomi*, 17 Fed. Cas., 9521.) This view, however, is not accepted either by the state courts or by general writers on the Constitution. (See *Weaver v. Fegely*, 29 Pa. St., 30; *Caldwell v. Dawson*, 4 Met. Ky., 123; *Harris v. Rutledge*, 19 Ia., 390; *Higgins v. Petroleum Co.*, 109 Cal., 310; and see remarks of Justice Woodbury in the *Passenger Cases*, 7 How., 282, 562; but see *Thompson v. District of Columbia*, 21 Ap. Cas. D. C., 395, 402, where the court intimated that this grant to Congress "effectually prevented the several States from fixing standards that might vary and hence prove a hindrance to trade and interchange of commodities.") The view more widely held is that the power in regard to weights and measures is exclusive in Congress only when it is exercised, and that, pending such exercise, the several States may fix their own standards, or, at least, enforce existing standards. This is the position taken, not only in the cases last cited, but by such commentators as Story, Pomeroy, Burgess, and Cooley, as shown by the following extracts:

"The other power, 'to fix the standard of weights and measures,' was, doubtless, given from like motives of public policy, for the sake of uniformity and the convenience of commerce. Hitherto, however, it has remained a dormant power, from the many difficulties attendant upon the subject, although it has repeatedly been brought to the attention of Congress in most elaborate reports. Until Congress shall fix the standard the understanding seems to be that the States possess the power to fix their own weights and measures; or, at least, the existing standards at the adoption of the Constitution remain in full force." (2 Story, Const., sec. 1122.)

"The power to fix the standard of weights and measures was left in the hands of the States as well as of the General Government. As long as this power remains dormant in the National Legislature, the local Commonwealths may fully exercise it. Although the standard of weights and measures is connected with the general subject of the trade, business, and commerce of the country, and although uniformity in this standard throughout the Union is demanded by considerations of expediency, yet it is evident that such a uniformity is by no means as essential as a common standard of coined money. Without the latter business would be interrupted and in great measure destroyed; without the former, some inconveniences have been and are felt. * * * Should the National Legislature, however, change its policy and fix a standard for the whole country, all inconsistent state legislation would be a nullity." (Pomeroy, Const., sec. 410.)

"This can not be claimed as an exclusive power of the Legislature of the General Government as against the Commonwealths. Congress may occupy the ground whenever it sees fit, and the acts of Congress will displace the acts of the Commonwealths upon this subject; but until Congress acts, the Commonwealths may regulate the system of weights and measures." (2 Burgess, Pol. Sci. and Const. L., 141.)

"When this power is exercised, it is exclusive, or there would be no 'standard.'" (Cooley, Prin. Const. L., 85.)

Where, however, as in this case, a power is vested in Congress, which is neither made exclusive by the terms of the grant nor expressly prohibited to

the States, the true test of determining whether or not it is exclusive was long ago laid down by Chief Justice Marshall in *Sturgis v. Crowinshield* (4 Wheat., 122, 196, 193) in considering the power to establish uniform laws on the subject of bankruptcies throughout the United States. "The power granted to Congress," it was observed, "may be exercised or declined, as the wisdom of that body shall decide. If, in the opinion of Congress, uniform laws concerning bankruptcies ought not to be established, it does not follow that partial laws may not exist or that state legislation on the subject must cease. It is not the mere existence of the power, but its exercise which is incompatible with the exercise of the same power by the States. It is not the right to establish these uniform laws, but their actual establishment, which is inconsistent with the partial acts of the States. * * * The principle laid down by counsel for the plaintiff, in this respect, is undoubtedly correct. Whenever the terms in which a power is granted to Congress, or the *nature of the power*, requires that it should be exercised exclusively by Congress, the subject is as completely taken from the state legislatures as if they had been expressly forbidden to act on it." As already pointed out, the power to fix the standard of weights and measures, by the weight of opinion, is not in its "nature" one which "requires" that it should be exercised exclusively by Congress.

But it is not necessary that the power should be exclusive in order that Congress may deal with the subject in the manner suggested by the present inquiry. All the authorities are agreed that the power of Congress with regard to the standard weights and measures is plenary and complete; that it is only while it lies dormant that the States may act; and that, once it is exercised, state laws are displaced, and, so far as inconsistent, nullified. It is clear, therefore, that Congress has ample power to enact a law which shall fix the standard of weights and measures to be used throughout the several States and Territories of the United States, and require all such weights and measures to bear a prescribed stamp.

And it is no less clear that Congress may make it a misdemeanor to use in trade any weights or measures departing from the standard fixed, or without the stamp prescribed. "Whenever Congress may adopt any particular measure, may require anything to be done, or anything to be foreborne, in carrying out the specific grants of the Constitution, it may declare acts of disobedience, or acts which tend to interrupt the accomplishment of the proposed design, to be crimes, and may affix such punishments as it deems proper." This principle is not only sustained by the uninterrupted practice of Congress in the passage of innumerable statutes providing for the definition and punishment of crimes, but it has received the explicit sanction of the Supreme Court. In *United States v. Marigold* (9 How., 559, 566) the question was as to the validity of a statute which made it a crime to utter or circulate spurious or counterfeited coin. The decision sustained the validity of the law, although there was no express constitutional authority to enact it, on the ground that such a law was one of the necessary and proper means for carrying out the power "to coin Money, regulate the Value thereof, and of foreign Coin."

"The power to coin money being thus given to Congress, founded on public necessity, it must carry with it the correlative power of protecting the creature and object of that power. * * * We admit that the clause of the Constitution authorizing Congress to provide for the punishment of counterfeiting the securities and current coin of the United States does not embrace within its language the offense of uttering or circulating spurious or counterfeited coin (the term counterfeit, both by its etymology and common intentment, signifying the fabrication of a false image or representation); nor do we think it necessary or regular to seek the foundation of the offense of circulating spurious

coin, or for the origin of the right to punish that offense, either in the section of the statute before quoted, or in this clause of the Constitution. We trace both the offense and the authority to punish it to the power given by the Constitution to coin money, and to the correspondent and necessary power and obligation to protect and to preserve in its purity this constitutional currency for the benefit of the nation. While we hold it a sound maxim that no powers should be conceded to the Federal Government which can not be regularly and legitimately found in the charter of its creation, we acknowledge equally the obligation to withhold from it no power or attribute which, by the same charter, has been declared necessary to the execution of expressly granted powers, and to the fulfilment of clear and well-defined duties." (9 How., 559, 567, 568.)

In the *Legal Tender Cases* (12 Wall., 457, 535) it was said:

"Congress is expressly authorized 'to provide for the Punishment of counterfeiting the Securities and current Coin of the United States,' and 'to define and punish Piracies and Felonies committed on the high Seas, and Offences against the Law of Nations.' It is also empowered to declare the punishment of treason, and provision is made for impeachments. This is the extent of power to punish crime expressly conferred. It might be argued that the expression of these limited powers implies an exclusion of all other subjects of criminal legislation. * * * Yet Congress, by the act of April 30, 1790, entitled 'An act more effectually to provide for the punishment of certain crimes against the United States,' and the supplementary act of March 3, 1825, defined and provided for the punishment of a large class of crimes other than those mentioned in the Constitution, and some of the punishments prescribed are manifestly not in aid of any single substantive power. No one doubts that this was rightfully done, and the power thus exercised has been affirmed by this court in *United States v. Marigold*."

Respectfully submitted.

CHARLES EARL, *Solicitor*.

The SECRETARY. That opinion is a most important one, as you will understand.

I might also report that during the year the Bureau was represented at the organization of the local sealers in New Jersey and Connecticut. We had expected to have a representative from both those States, if for no other reason than that the sealers had organized. That is a very important step and one that is bound to stir up interest in those States.

MR. PETTIS. What reason did Connecticut and New Jersey give for not sending representatives?

The SECRETARY. The governor of Connecticut reported that they had no fund for that purpose. New Jersey gave no reason whatever.

MR. PETTIS. I certainly expected after the enthusiastic meeting we held at Newark that we would have a representative here from New Jersey.

The SECRETARY. I might mention one other thing, and that is the *Journal of Weights and Measures*. This is not to be considered as a part of the report of the executive committee, but merely my own opinion. It seems to me that this is a very important matter for all of us. This journal is a publication that all of us can make use of, and it will have a great tendency to bring us closer to one another.

Everything that has appeared in the two numbers so far published is certainly very valuable and I hope that nothing will interfere with its continued publication.

The CHAIRMAN. You have heard the report of the executive committee. What shall be done with it?

Mr. PALMER. I move that it be accepted.

The motion was seconded and the report accepted.

The CHAIRMAN. The next business is the report of the subcommittees appointed.

The SECRETARY. Doctor Reichmann and Mr. Palmer are on both of these committees.

Mr. REICHMANN. The subcommittee that was appointed by the executive committee consisted of Mr. Palmer and myself, and was appointed to get an expression of opinion from the commercial organizations that are affected by weights and measures—that means every commercial organization, for all are interested in weights and measures, whether they are associations of leather or hardware dealers, or of packers; they are all affected. The committee sent out a circular letter in rather general terms, asking them to indorse honest weights and measures legislation. All replies received were favorable. A number of the organizations do not have their regular annual meeting until some time later in the year. In many such cases the executive committee acted and indorsed the necessity of federal legislation. Some of the organizations have taken a very deep interest in the matter, such as the Commission Merchants' Association, the Chamber of Commerce of the City of New York, and the National Chamber of Commerce, and have sent printed resolutions to the Bureau of Standards and to the Committee on Coinage, Weights, and Measures in Congress. We have received about 175 favorable replies and no unfavorable ones.

The committee also sent out a circular letter to all the state officials in charge of weights and measures, calling attention to the importance of this conference and of legislation in respect to weights and measures. We received, I think, only two or three replies.

The executive committee, as well as the subcommittee, was very much impressed with the fact that it was necessary to get the cooperation of the commercial organizations affected, and so far as we have gone there is ample justification for the belief that they will take interest in it and work for any bills we may recommend to Congress. That is all I have to report.

The CHAIRMAN. You have heard the report of this subcommittee. What shall be done with it?

Mr. HAZEN. I move it be accepted.

The motion was seconded and the report accepted.

The CHAIRMAN. We will now hear from Mr. Palmer's committee.

Mr. REICHMANN. I took all the thunder away from Mr. Palmer and reported on both committees.

Mr. PALMER. I think Doctor Reichmann is deserving of all the thunder, because he did all the firing.

The CHAIRMAN. I have been very much pleased with the replies brought out by this committee. It shows that all of the great commercial organizations, and many of the manufacturing organizations, will be with us in any effort to bring about uniform weights and measures, or regulations pertaining to them.

Mr. REICHMANN. I might add, Mr. Chairman, that it was the intention of the committee at one time to write to all the manufacturers in the United States, but when we looked over such books as the Buyer's Guide, which gives a list of the manufacturers, and considered the fact that our state appropriation was very limited, we hesitated to send out a hundred thousand letters. So we restricted it to commercial organizations. But I think it would be a very good thing if it were possible to send a similar communication to practically every manufacturing establishment in the country.

The CHAIRMAN. Mr. Secretary, shall we call upon the delegates in order? What has been the custom?

The SECRETARY. We have previously called upon them in alphabetical order, but that is not necessary.

The CHAIRMAN. Unless there is some objection, I will call for the reports in the order that we have the names of the delegates on the list. We might arrange them in alphabetical order, but it would require some little time to do that, and I do not see that it makes any difference one way or the other.

This is the part of the meeting that I always look forward to with a great deal of interest, and I hope that the delegates will go into detail. We are not only interested in hearing what has been accomplished during the past year, but we have some new delegates present, and it would be well to repeat to a certain extent the information that has been given here previously. This experience meeting is an exceedingly important part of our programme, and I hope that each delegate will take all the time that he feels he needs and give us a detailed and careful report of the conditions in his State, especially all additions to laws that have been made or any notes of interest or any progress that has been made in the State during the past year, and in addition to that a general summary or review of the affairs in the State, for the benefit of the new members of the association.

The first on the list is the State of New York. I will ask Doctor Reichmann to tell us what the great State of New York is doing.

Mr. REICHMANN. I can not say some of the things I would like to say in relation to weights and measures.

The CHAIRMAN. We know what they have been doing in politics recently, and we want to know what they have been doing along the line of weights and measures.

Mr. REICHMANN. I am a good deal prouder of what they have been doing in politics in New York than I am of what they have been doing in weights and measures. A few words will summarize what has been done in New York in the way of new laws, and that is that we are working under the law, with few changes, that was passed about a century ago. I might state that we tried to get some other legislation through and did not succeed, but we hope to succeed some time in the near future.

The CHAIRMAN. Doctor Reichmann, what was their objection to the new law—what seemed to be the difficulty?

Mr. REICHMANN. The difficulty seemed to be that the bills were introduced too late in the session and were not introduced by a member in the senate who was aggressive enough to take hold of them. I think the whole matter was one of lack of understanding of the subject, although the matter of weights and measures is of vital consequence to every person in whatever walk of life. It is the one subject which is perhaps least understood, and the accuracy of weights and measures of all kinds of dealers and the weight of all commodities put up in packages is largely taken on faith by the very people who would take practically nothing else on faith. Furthermore, there were certain provisions in the bill which met with considerable opposition, such features as the net-weight clause and the mistake of having the whole weights and measures legislation introduced in one bill. There is, furthermore, an aversion on the part of many to any city inspection, and such aversion was voiced in the constitution of our State by abolishing all inspectors except such as are for the benefit of the public health or for giving the people of the State standard weights and measures. This is, furthermore, a very wise constitutional provision, because up to 1846 there had grown up in our State a system of inspectors—a different inspector for almost any and every commodity imaginable. These innumerable county, town, and city inspectors were without doubt many times used for the purpose of coercion and were a detriment to the dealers. Also, all the inspectors were on a fee system, which meant a continual drain on the merchants. The abolishment of these numerous inspectors was therefore a proper proceeding.

The legislature of 1908 provided for two inspectors and a clerk and sufficient funds to equip the office of state superintendent of weights and measures, which office had been really nonexistent but which is now equipped to do practically any work which it may be called upon

to do in the way of weights and measures. The leader of the majority in the assembly, Hon. E. A. Merritt, is a believer in fairness and uniformity, particularly in weights and measures, and to him and to the gentlemen of his committee and to the members of the senate finance committee will fall due the credit of having started the department of weights and measures and which will eventually assure the people of the State honest quantity even more than they are now assured healthful quality.

I think at the coming session there will be no question of the passage of effective legislation, and I think Governor Hughes is in favor of such legislation, as he, as well as the legislature, is in favor of any legislation that will add to the happiness, comfort, and health of the people by giving them their just due.

Instead of introducing weights and measures legislation in the form of one long bill, it had been split up into several bills, which I will take up later more in detail. The purpose of these bills has been embodied in a letter and sent to the commercial and agricultural associations of the State, asking for their opinion and indorsement, and the commercial organizations as well as the granges have taken an active interest in the matter, and their help will be invaluable. The New York Merchants' Association, one of the strongest organizations in the State, in its Bulletin No. 55, which has just been issued, calls attention to the proposed weights and measure legislation.

The first bill which we propose to introduce will amend what is now known as the "domestic commerce law," in relation to weights and measures, and will be amended along the lines recommended by the National Conference on Weights and Measures, so as to preclude any interference of the state legislation with federal legislation, whatever that federal legislation may be. It furthermore compels the state department to fall back on the National Bureau of Standards for final authority, which is only proper and conducive to the best results and to uniformity.

The second bill provides for the manner of sale of various commodities. The provisions of this act simply conform to the best method in use to-day, and would work no hardship on any legitimate and honest dealer.

The third bill amends the penal statute so that it is a misdemeanor to use a false or unsealed weight or measure, viz, one that has not been sealed within a year, and also providing that the burden of proof shall be upon the party using the false weight or measure. This act, if it becomes a law, will be very effective in stamping out short weights and measures. As a matter of fact, the experience of Massachusetts undoubtedly is that up to the time of the enactment in 1906 of a similar penal statute practically no effective work could be done. It is unnecessary here to enumerate the difficulties of hav-

ing a penal statute in which it is necessary to show before a jury that the accused party had knowledge, and furthermore that the use of a false weight or measure, or the giving of insufficient weight or measure, was done with intent to defraud.

The fourth bill relates to the marking of the net contents of containers, and instead of stating that the net contents shall be shown it will state that the minimum contents in terms of weight, measure, or numerical count shall be shown. There can be no honest objection to such a bill, because the manufacturers of the containers—the boxes, cans, jars, glasses, etc.—could certainly make the sizes fixing a minimum limit. Furthermore, the manufacturer of a food product could estimate the amount of shrinkage. The shrinkage may be considerable in some commodities which are not put up in sealed packages or in packages carefully wrapped with waxed paper, but where the commodity is in a sealed package or is wrapped up in waxed paper, the shrinkage is small where it does exist and can be easily allowed for.

The fifth bill will amend the executive law so that the inspectors of the department are provided for in the law. It furthermore establishes a salary for the state office. The present salary is fixed by law at \$300 per annum. There is no provision for inspectors or assistants, and consequently they really have no standing in law, which is extremely embarrassing in case of prosecution where I wish to use one of the inspectors as a witness.

The passage of these bills would practically eliminate the giving of short weights and measures, would educate the people to knowing what they were receiving, and would prevent that most reprehensible of all short-weight practices of selling commodities by the unknown "package," "cup," "pail," "basket," "jar," "bottle," "glass," "handful," "double handful," "print," "tub," etc.

A number of these features should be federal statutes, and if the bills now drawn up in New York State become laws it will make little difference what federal statutes are passed, as they will simply supplant our measures and our measures can not conflict with them. I propose to-morrow to introduce several resolutions relative to federal legislation and to a full weight and measure organization, and I should have rather spoken more at length on those subjects to-day, because although these experience meetings are interesting they are not of as much value as many think. In New York State we believe in doing things rather than speaking of what we might have done or have done, and that same spirit should be manifested throughout every State, and particularly in organizations which draw from various States of the Union.

The work of the weights and measures department of a State is very exacting and consumes a great deal of time and expenditure of

a great deal of thought for the very simple reason that, as weights and measures enter into practically every transaction, if the state officer of weights and measures is conscientious in his work he encounters the details of practically every form of business concern in his State. Furthermore, he has to deal with the local geographical, industrial, and political conditions in the various cities, towns, and counties. This sometimes brings out amusing cases, sometimes very obstinate local officials, but I will say that in the State of New York, with very few exceptions, the local mayors, councils, chambers of commerce, etc., have been of great assistance, and have done everything in their power to see that proper ordinances with relation to weights and measures were passed and the local office put upon a proper basis.

To add a few more words in relation to what we have done, as that is what some of the members here desire to hear, I will state that we have perfected an organization of sealers of weights and measures of the State, and at our last annual meeting, in February, we had over one hundred sealers present, and a finer, more determined body of men, willing to learn and to go out and do the right thing, I have never seen. This organization is now on a firm footing, and has been of considerable help to the department.

Firmly believing that the majority of cases of shortage in weights and measures is due to the three primary causes which I mentioned in my last report to the governor—viz, ignorance, negligence, and intent—and that the first two of these are the cause of 95 per cent of the shortage, my two inspectors and myself have made throughout the State over 30,000 individual inspections, and have given written warnings (duplicates of which warnings are kept on file) to the merchants so as to aid them in every way possible. We do not prosecute until we are firmly convinced that a man is purposely doing wrong. Unfortunately there are many dealers, small as well as large, who fall by the wayside, due to sharp competition. We wish to help them and weed out the criminals, as it were, among the short-weight artists. The purchasing public and the legitimate dealer should be protected.

There is one thing I would like to see pass the National Congress, and it ought to pass every state legislature, and that is a net-container law. Of course, it is a very difficult matter to draft an effective net-weight package law. Just as soon as a net-container bill is advocated tremendous opposition will be met, because you will have the strongly intrenched positions of packing industries and the biscuit companies against you; and they are all good fighters; they are all effective fighters. When you get right down to it, a net-container law is one of the most important things in the subject of weights and measures. There is a growing tendency to sell everything by the cup, or by the package, or some way that has no legal or commercial

meaning. Probably most of you gentlemen here, unless you have investigated the case, do not know how much a 10-cent package of ginger wafers contains, and that the same amount in bulk sells for considerably less.

I am in favor of putting up commodities in containers because it is a sanitary and expeditious manner of selling them. It is in the interest of the public health to have commodities put up that way rather than to have them put up by some corner grocer who may be more or less unclean. But at the same time I do most sincerely object to asking the people to pay a high price for paper wrapping, and I do seriously object to paying 18 cents a pound for the canvas and paper that goes around a ham. Ninety-nine per cent of the purchasers do not know anything about weights and measures. They simply buy a thing by the way it looks. They will buy a can of peas which is 7 inches high for 10 cents rather than one that is 6 inches for the same price, although the former may be filled only about half full, but the person, of course, can not see what he is getting.

Then take the case of Vermont maple sirup put up in Massachusetts. No one can tell the difference between the two by looking at them, yet one contains $1\frac{1}{2}$ pints and the other contains 2 pints. The latter is put up in Massachusetts, where they have the most rigid inspection. Possibly it will not be sold in Massachusetts, but will be shipped to New York State. It is not sold by the quart, but by the bottle.

It is extremely important that something be done by this association. All these commercial organizations that have been written to expect that something will be done by Congress this time.

It is up to the Director of the Bureau of Standards, it is up to the Bureau of Standards, it is up to this conference, it is up to the Committee on Coinage, Weights, and Measures to see that something goes into Congress this year.

It is highly important that something be done at this session of Congress, if we do no more than simply get a bill in there, so that the people will know that we are doing something.

THE CHAIRMAN. We will next hear from Mr. Palmer, commissioner of weights and measures of Massachusetts.

MR. PALMER. Gentlemen, my report on new legislation will be very brief. At the end of the year 1907, after looking over the work of the year, I came to the conclusion that while the laws in the State of Massachusetts, some of which had been passed in the early forties, very badly needed revision, in view of the fact that possibly the National Bureau of Standards at a more distant date would be in a position to recommend a uniform act for all of the States, I would refrain from making any recommendations for my State. There seemed to be before me for the next year a large field of work in

taking up some of the details of the enforcement of the present law. That to a very large extent has been the work of Massachusetts proper in the year 1908. It has been an intensely interesting work; new features of the question continue to arise entirely different from anything that we had imagined existed.

In regard to the sale of what is known as half, three-quarter, and whole loaves of bread, I recommended that the three-quarter and one-quarter loaves be abolished. The trouble is that we find the whole loaf of bread, which is supposed to weigh 2 pounds, is not sold, but instead the three-quarter loaf is sold. A customer asking for a whole loaf of bread, which is retailed in our State at 10 cents, is not given a whole loaf, but a three-quarter loaf. Then, this three-quarter loaf is not a three-quarter loaf—that is, it does not weigh exactly three-quarters of 2 pounds, but rather exceeds that by 1 ounce or 2 ounces; it varies. In other words, it is really a short loaf, but the dealer avoids the technical violation of the law when questioned by saying that it is a three-quarter loaf and not a whole loaf. It works to the disadvantage of the customer. The legislature did not see fit to change that; in fact, I did not press it very hard. The master bakers were there to oppose my suggestion that the law should be changed. Some provision should be made whereby the enforcement of the law, which is now left to the police power of the cities and towns, would be placed under the local sealer of weights and measures and the state commissioner.

One other change was made in our coal laws. The coal laws of Massachusetts provide for a certain reinspection of the weight by the local sealer of weights and measures. To facilitate that and to protect the customer, it is provided that the dealer shall supply with every load of coal, or every portion of a load of coal, what is known as a “sworn weight certificate.” That must be furnished by the person who is in the employ of the dealer and who is appointed by the city or town under the state statute and sworn to weigh coal. The office of inspector need not necessarily be occupied by a man; it can be held by a woman. We have had the law changed so that it is permissible for a woman to be appointed a weigher. This person takes the oath of office before a city or town clerk. A record must be kept of all coal weighed by such weighers, and the sworn certificate given to the driver. This certificate must contain certain information, namely, the name of the person who sells the coal, the amount of coal that the load contains, as found by the weigher, and the name of the driver or the person taking charge of the load of coal. It ought to be signed by the weigher himself. We found that in many instances, especially in the larger cities, having to place the driver’s name on the certificate was a great inconvenience and resulted in

great confusion. For instance, in the city of Boston, we have one concern which employs in the delivery of coal about 2,000 drivers. This concern has about 2,500 teams in operation, located in different sections of the city. It was a common occurrence to find at one wharf three drivers with the same name. I have in mind one case where there were three men by the name of F. A. Bryan in a small place where about 25 drivers were employed. One man's name was Francis, another Fitzgerald, and the other name I can not recall at this time. So the Massachusetts Coal Association, an organization of coal dealers, asked that this law be changed, so as to designate the number of the driver on the certificate in place of the name. The state department tries as far as possible to cooperate with all the trade associations in any movement of this kind. We find that to be a very good policy and to the advantage of our department. The law provides that a careful record must be kept by the coal dealers as to the particular designating number and the name of the driver corresponding to that number, so that in case he was called into court, we would have no difficulty in proving who the driver was.

I made a recommendation to the effect that the county standards, which are in the possession of our county treasurers, be turned back to the State. I did not press that very hard, and the legislature did not see fit to adopt it. I think it will be adopted this year. In Massachusetts, the old law provided for a county sealer of weights and measures, who should be the county treasurer. Each of these county treasurers were supplied, in the same manner as are city and town treasurers, with a standard set of weights and measures. That law is practically obsolete. In the time I have occupied the office I have yet to find one treasurer who is exercising the functions of sealer of weights and measures. I have had letters from the county treasurers indorsing the moves we made, but the legislature did not see fit to adopt them. I did not care, because we were not having much trouble in that direction. It was really the old standards that I wanted to get, so that I could supply them to one or two of the poorer towns which could not afford them, the old sets having been destroyed by fire.

The civil-service commission of the State has made a new ruling during the present year, placing the sealers of weights and measures on the classified civil-service list. Unfortunately, we have had a general civil-service law which provided, among other things, that the head of the department could not be placed on the civil-service list; therefore the head of the department is exempt. However, the deputies coming into the department are now on the classified list. At the present time we are about to hold an examination for the appointment of deputies for our larger cities, the first examina-

tion for which has already been held. The state department itself has been very much in favor of the classification of the sealers, and I think this year we will have a bill before the legislature providing that the sealers themselves—the heads of the departments—shall be placed on the civil-service list. I believe that is the only way in which these troubles that are constantly occurring in the cities and towns can be taken care of. By getting good men into office who will prove efficient and do good work we can overcome these troubles. In one city we had the salary of the sealer increased three times in two years. The trouble has been that when an election occurred the man in office was supplanted by another, who, in a great many instances, would prove incompetent. I think possibly that will be done away with during the present year.

That takes care of everything so far as the changes in the statutes go. As I said, we need a revision of our laws; we need it very badly. This need is felt in the state department almost every day, because important questions come up that we are not able to take care of very well under the present statutes, but which I hope will be taken care of by the new legislation which the National Bureau of Standards will, I hope, before long, recommend to the different States, so that the law in Massachusetts will be exactly the same as in Texas, with the exception of some few trifling details to be adjusted to fit the local conditions. We have been taking up phases of the work which we have never taken up before. We have made a large number of prosecutions. The state department itself has made over 100 in the year. We have not lost a single case. Some of these cases have been in the superior court; some have even gone to the supreme judicial court. I have attempted, as far as possible, to get the local sealers to bring cases and to cooperate with them in obtaining convictions. We find that it is a splendid thing for the local sealer to convict a man in court for delivering short weight or cheating in weight or measure, because he earns the credit of his own community; then if he asks for anything, such as better facilities for doing his work or an increase in salary, he usually gets what he asks for. We have done everything we can along this line, because there are certain things we could not take care of if we brought these prosecutions ourselves.

For the benefit of those who are not familiar with the Massachusetts law I will say that we have four state inspectors who operate under my direct supervision, and the other local city and town officials are indirectly under my supervision.

We have had, as I say, a large number of prosecutions. In one of the principal cases a decision was handed down from the supreme judicial court to which we refer with a great deal of pride. It was given in a case brought by a prominent scale company of Dayton,

Ohio, against the sealer of Cambridge. The scale company attempted to enjoin the sealer from condemning certain types of computing scales made by this particular company. By agreement the case went to the supreme court, and we had a decision in our favor. I say in our favor because, although the decision was given nominally to the sealer, it was really a victory for the whole department. The state department could not take any action in condemning scales of that type; the action had to be taken by the sealer of weights and measures himself. The court can not enjoin the state department from giving any information, but it can enjoin the local officer from taking action in the condemnation of any scale. We had a splendid decision from one of the justices of the supreme court, and then the matter went to the full bench. That case was decided in October, 1908. It upheld all of the claims which the state department and the local department had made in relation to that particular type of scale, and it went even beyond that. The question had been a very serious one in our State. We practically have been the pioneer State in taking up the question of the computing scale. It has been a long problem, and a hard one. We have been thoroughly antagonized for taking the position we have; but I am thankful to say that the supreme court of the State upheld our position in the matter.

We have tried to take up the question of selling liquor. We have had a number of prosecutions for the selling of short quantities of liquor, and that is a question that will probably come up in all of the States unless we have the national legislation which we are proposing. Our particular attention has been called to the sale of what is known as the short half-pint. I found upon investigation that these half-pint bottles, or bottles supposed to be half-pint bottles, bear on the outside the glassblower's mark to that effect. In 99 per cent of the instances, instead of containing 8 ounces they hold $6\frac{1}{2}$ to 7, the latter being a liberal size. It was established that the dealers were selling these goods under the consent of the Liquor Trades Association. Their attorney came to see me and we talked it over. He said we were unwise to attempt to force them to stop it, as the custom had been established. I said, "All right; if you do it, you will be prosecuted. We are attempting to make the grocer, who does not make as much profit as the liquor people, give 16 ounces to the pound, and I do not see why the liquor dealer should not give 32 ounces to the quart. The package should be sold for exactly what it contains and not under false pretenses." The attorney for the Liquor Dealers' Association happened to be a particular friend of mine, and after the conference with him I came to the conclusion that they would fight us. He said, "We have done this thing for years and we will do it now."

My inspectors made purchases of short bottles, and we prosecuted the dealers, and in every instance in the lower court we convicted them, they being obliged to pay a fine of from \$10 to \$25. In a first case of that kind we always recommended a small fine. They all took offense at the prosecutions and did all they could to antagonize them, and the cases went to the supreme court, but in no instance has a case been called in the superior court. The latest information I had on leaving my office Monday was that the only case outstanding was in Hammond County superior court, and that case would be settled out of court by payment of the fine.

We do all we can to cooperate with organizations of that kind. If they can not give full-measure bottles, we find out the reason why. I have had from time to time a meeting of the representatives of the glassblowers in the East to talk the matter over. I find the general opinion is this: If the dealers insist on full-capacity bottles, they get them, and in no instances have I found a bottle maker's agent who would not guarantee to furnish full-measure bottles.

We have a very broad statute in Massachusetts, of which perhaps some of you know, which provides that: "Whoever, himself or by his servant or agent or as the servant or agent of another person, is guilty of giving false or insufficient weight or measures shall for a first offense be punished by a fine of not more than fifty dollars, for a second offense by a fine of not more than two hundred dollars, and for a subsequent offense by a fine of fifty dollars and by imprisonment for not less than thirty nor more than ninety days." This statute was passed a couple of years ago. I think it is worth all the rest of the state legislation we have on the subject. It is very broad and far-reaching.

There are many other matters along these lines, but I can not take the time to talk on them. There are many details of which I would be glad to tell you personally. I believe one of the chief things to which the state department of weights and measures of Massachusetts owes its success is the fact that we have attempted to give publicity to the work. I find that the press is a very powerful organization for helping us along. The press of Massachusetts will print, in just the shape that I give it, practically any kind of news item. I have a system of copying, and carefully record all news items that I give to the press, and I can not remember a single instance where it has published anything in any other manner than as I gave it.

We have taken up the question of strawberries in baskets, requiring them to be sold by measure, and that the baskets used shall be of a certain capacity, namely, 1 quart, 1 pint, and half pint. If they are offered for sale in boxes of any other capacity, the dealer or whoever offers them for sale is liable to be subject to a penalty of from \$5 to \$10 for each offense. Three years ago we told the commission

merchants of that and informed them as to the law. Through the trade journals I had it published in all the berry districts, so that the berry growers could be informed what the requirements were. We tried to enforce the law, and I think we had something like twelve or fourteen prosecutions. After that we found the baskets coming to Massachusetts were all right. We had no prosecutions last year to speak of. I think we found only three cases where short berry boxes were being given. As a rule, those short boxes held about 10 per cent less than they should. In Boston we have nine dealers who sell baskets to our local trade, and Boston covers practically all of the New England districts. I found one dealer with 180,000 boxes in one lot, which were from 10 to 12 per cent short. These boxes were about to be sent broadcast throughout the New England trade; in fact, some of them had gone out to the Cape District for berries. These berries come to Boston toward the last of the season and sell for 15 cents a quart. If the 180,000 baskets had come back short it would have represented a loss to the public of over \$2,700, at an average of 15 cents a basket.

We have in Massachusetts what we call a food fair. This is held under the protection of one of our large grocery associations. Massachusetts has two very powerful grocers' associations, which include practically all cities and 70 to 80 per cent of the grocers of the entire State. They have these fairs, or expositions you might call them, which are attended by great crowds of people, and are very successful. The exhibit, which lasted for the entire month, was visited by 20,000 or 30,000 people daily. Practically the only expense to the State in having the weights and measures department represented was the detailing of three men who were always in attendance during the hours of the exposition. You would be surprised to see the mass of people that came and stood in front of the cases listening to the short lectures and discussions the inspectors gave as to the methods of inspection adopted. I think that has been of more value to us in enforcing the law than anything we have done. We could issue detailed reports from the office, statistical reports, and so on, and not one person in five hundred would read them; but when you stand in front of people and show them a 6-quart measure cut down to 4 and a 4-quart cut down to 2, etc., they are bound to be interested.

In November of last year a conference of all the governors of the New England States was held at the Tremont, in Boston, and at that time certain questions were discussed in relation to the advisability of uniform legislation along the lines we are discussing here to-day. One of the things that was taken up on the first day was a paper by Mr. John Craig, professor of horticulture in Cornell University, making a comparison between the possibilities in the orchard industries of Massachusetts with the growth of the orchards

in Oregon. One of the things which was brought out very forcibly and which resulted in general discussion was the lack of uniformity in packages and methods of packing apples. That is one of the things which the governor has since taken up with me, and I think it will result in all of the New England States adopting some kind of a uniform package for retailing apples. There is no reason, to my mind, why there should not be uniform packages for the retailing of all commodities, and I think the key to the whole situation is national legislation along this broad line.

On my way to this conference I got into a conversation with one of the chief leather dealers in the United States. As soon as he knew who I was he introduced himself, and he was very enthusiastic. He said the thing we need in the leather trade more than any other one thing is a uniform measuring machine which can be utilized. He told me of a case in which he would probably have had to allow a claim of \$1,300 on one shipment of leather had he not been forewarned of the matter and had the local sealer in his town to make a measurement of the leather before shipment.

The CHAIRMAN. I would like to have had Mr. Palmer go on with his remarks in regard to leather, because a machine for measuring leather was recently submitted to the Bureau for test and investigation.

The conference adjourned to take luncheon.

SECOND SESSION (AFTERNOON OF THURSDAY, DECEMBER 17, 1908).

The meeting was called to order at 2.30 o'clock, with Mr. Palmer in the chair, in the absence of Doctor Stratton.

The ACTING CHAIRMAN. Gentlemen, we will first hear from Mr. George H. Pettis, state sealer of weights and measures of Rhode Island.

Mr. PETTIS. Mr. Chairman and gentlemen, I understand that this is to be a talk on personal reminiscences. I want to say a word in behalf of the Journal of Weights and Measures. I was the publisher and editor of two periodicals in San Francisco in 1858, 1859, and 1860; consequently I have some ideas about publications of this nature; and as I am the oldest member of this association my testimony should be added to what has been said. This publication is worthy of our earnest support. I have had the first number, but have only seen the second number since coming here, and in it is an article as to these snide trip scales. Now, in Rhode Island we do things a little differently than in other States. In Rhode Island we have no city ordinances. The State passes statutes, and these statutes govern the whole State. The only thing that is left to the city or town is the method of paying their sealer. If a man is paid by salary, he exacts the same amount of fees from merchants, but that is paid into the town or state treasury. It makes no difference to the merchants.

In Massachusetts all the work brought into the office is done there free. When they go out with their teams, they charge for it. We do the same thing, but we also charge fees for the apparatus brought into the office. For work done outside of the office, such as transporting material back and forth from the office to their places of business, the merchants are charged at the rate of 50 cents an hour for the use of the team.

I have been the state sealer now some seven years past, and I have adopted the plan of having the legislature make an appropriation to enable me to travel about the State. An appropriation is made every year for this purpose. Along through the summer, after most of the sealers of the towns and cities have finished their work of sealing, I make my visit; I go through several of the stores in a town without notifying the town sealer in advance. I look over his work to see whether it has all been done properly. If it has not, I take him to task for it. For instance, last July I went down into a certain

town, and found that the sealer had neglected to test dry and liquid measures. I wrote him a letter asking why he had not attended to it, and his answer to me was not satisfactory. Again in October I went to his town and found that he had not yet tested these measures. I went to his house and asked him why he had not attended to the matter, and not obtaining a satisfactory answer I wrote him a formal letter in which I stated that if he did not take care of the matter by the 25th of October I would call the attention of the authorities to the matter. Five days later I got a letter from him in which he reported that he had gone around and tested all the dry measures, and had seized two scales. I will give you another instance to show you how a little assistance will effect a great deal. I went to Toledo the last week in August to attend the meeting of the Grand Army. There I met the city sealer, a Mr. Kellechner. I found that he was very much interested in this question, and was going to make a good officer. The second morning of our acquaintance, as he and I stood on a street corner, a peddler came along with a horse and wagon, and we noticed a measure. I said, "Let us take a look at his measure." So we went over to where he was and I said, "I want to see this measure." He handed it to me and after looking at it I said, "This measure is too small." We took the measure to the office, tested it, and found it too small. The sealer seized the measure; he did not prosecute the man as I should have done if I had caught him in Rhode Island. The sealer has since written me that he has secured fifteen convictions for using short measures.

He has also sent me a photograph to show at this convention, and wrote, "Do not overlook berry boxes, and apple, sweet-potato, and cranberry barrels."

In regard to matters in Rhode Island, at the last meeting of the legislature we had a law passed in regard to coal and wood baskets. When I was the city sealer of Providence, in 1893, we had no law in regard to coal and wood baskets, and on one occasion a team came by with 6 baskets of coal on it which I noticed were very small. I followed the team for 2 miles before I came to the place where delivery was to be made. The driver stopped, and I allowed him to deliver 2 baskets before I went up and spoke to him. I found that the coal was being delivered to a poor woman with three children. I weighed this coal and found that this poor woman was paying at the rate of \$19.25 a ton for the coal, when the same coal could be bought in Providence by the ton for \$5. That woke me up to the necessity of having a law enacted in regard to coal and wood baskets, so I took the matter up when the legislature convened again, and we had an act drawn up. The law read something like this: "Coal sold by measure shall be sold in standard baskets, sealed."

That law was enforced for nearly two years, when I found that dealers were selling coal in small baskets. I went to see some of these dealers and found that instead of selling 80 pounds of coal to the basket, which the baskets by law should hold, they were selling baskets weighing 25, 30, 35, 40, and 50 pounds. I asked them why they did it, and if they did not know the law. They pointed out that the law read "all coal sold by measure." The words "by measure" should never have been there; that changed the whole effect. I could not prosecute them under the law, because they were not selling by measure; they were selling by weight. Last year in the legislature I drew up a new act to cover the case. It reads like this: "All amount of coal over 100 pounds shall be sold by weight, 2,000 pounds to the ton. All coal sold under 100 pounds shall be sold by standard basket, 80 pounds to a basket." We have enforced that law and it has done a great deal of good, although a day before I came here I learned that the dealers had found a new flaw in it. I addressed a letter before I came away to our attorney-general asking for his opinion on it. When I get back I will take the matter up.

I want to call attention to the fact that to get this law passed by the States and to have it enforced we must have national legislation. The Constitution provides that the Congress of the United States shall have charge of all weights and measures. That is all there is to it; there is nothing more. Any law that we have passed relating to uniform weights and measures throughout the United States will have to be observed. As long as you have such men as Doctor Reichmann, Mr. Palmer, and Mr. Kellechner, and some others I can name, the laws will be enforced in the States. But we want them to be enforced alike all over the country. We want them enforced in Massachusetts in the same way that they are in Rhode Island and Illinois. To be sure, there is a difference in States. In Rhode Island I can go around to all the towns in the State in two weeks time. I go around about three times every year to the different towns, but I know that in the other States, such as New York, Massachusetts, Ohio, and Indiana, a state sealer can not do what I can do in Rhode Island. The State of New York, for instance, has 900 towns; Rhode Island has 38. In New York one man could not attend to all the work.

MR. WALL. I would like to ask Mr. Pettis a very commonplace question. Have you made any particular tests to show whether it makes any difference where you place the weight on one of these trick scales?

MR. PETTIS. Yes; I can tell you. I found that out years ago. The illustration in the *Journal of Weights and Measures*, the November number, explains thoroughly the whole matter. There are many of these cheap scales in use. They are in use in Rhode Island now, but I

will venture to assert that in the State of New York there are 15,000 of these scales in use to-day.

Mr. REICHMANN. The truth is that when there is no inspection the dealers, especially the small dealers, are always looking to get the cheapest thing they can get, and of course unscrupulous manufacturers are encouraging them. They will take a scale of a certain make and use it as a pattern to cast something that looks like a scale. I know that they are selling in New York a certain type of scale at \$9 a dozen. You take any standard make of scale of this type, you can buy none of them at that price. And what is the result? It is just as I saw illustrated in the city of Rochester last summer, where they take a casting and merely dip it into paint. It is just like watered stock. A man was selling a scale at \$1.65, one of the bearings of which had broken off because the iron had chilled. The dealer said, "That is all right; it acts just as well with three bearings as it does with four." Now, the innocent buyer could find no difference as far as the appearance of the scale was concerned; the buyer does not know anything about it. The average dealer in groceries has no technical knowledge of scales.

Mr. PETTIS. You will not find that situation in American groceries; you will always find that among foreigners—the Italians. It is particularly the Italians who buy these cheap scales. They pay only 90 cents for a scale.

Another scale that has given us all trouble is what is known as a sliding-face, spring-balance scale. It is a scale used by peddlers who buy rags, bones, bottles, and things of that sort. They put their thumb in the ring, and by holding on to the hook with their forefinger they can move the indicator up and down. If a woman has 50 pounds of rags she wishes to sell, when the rag peddler comes along he weighs them for her. She may really have 50 pounds, but she is not aware of the fact. The dealer will manipulate the scale so that it shows but 24 pounds. The dealer pays her for 24 pounds and goes away satisfied, and she is satisfied, because she has seen the weight. We have confiscated something like 23 of these scales in Rhode Island, and in each case the man was fined \$20 and costs.

The ACTING CHAIRMAN. We will next hear from Prof. Benjamin F. Thomas, state sealer of weights and measures of Ohio, who will make the report for that State.

Mr. THOMAS. Mr. Chairman and gentlemen, after the last session of this convention I took a copy of the proposed legislation as to weights and measures which was adopted here and inclosed it with a report of the work done at the conference and sent the same to our governor, asking that he submit it to the legislature about to convene and recommend legislation proper to the State of Ohio along these

lines. He did so. He made the matter the subject of a special message to the senate, and it was filed with the senate, but nothing further was done in the matter.

This fall I have had a conference with some of the state officials over the matter, and the secretary of state promised me just before coming here that he would draw up or have drawn up in his office a new code as to weights and measures for the State of Ohio along the lines of this suggested legislation. There will be considerable support in behalf of this, but I do not know whether we can expect it to be passed at this session. I am advised that it is the purpose of those who are the leaders in the session about to convene to make the session as short as possible. The main business will be the election of a United States Senator to succeed Senator Foraker and the passage of the appropriation bills. The leaders do not intend to make it a session for general legislative action, but this matter is of such importance that I have been assured of its receiving, possibly, some consideration.

In the State during the past year there has been a growing amount of attention paid to the subject of weights and measures, locally. The state sealer has no power over the local sealers in the State of Ohio under state laws, but a number of local sealers have become much more active than they were, and many inquiries are coming into my office from private citizens and from corporations as well as from local sealers.

It is my purpose when I get back and have a copy of the bill which the secretary of state has promised to draft for reference to call a convention of local sealers and of representatives in cities where there are no local sealers, to lay before the convention the proposed bill. I hope to enlist their interest and cooperation.

There is one matter in which the state sealer has exclusive authority, namely, the testing of meter provers used by both the artificial and the natural gas companies, and I have been much pleased during the past year to find that there is a really honest desire on the part of the large gas corporations to get their meter provers correctly in place, and to use them in such a way as to secure truthful tests of meters. I had an interesting experience in the city of Findlay, Ohio. That city is supplied by the gas company with natural gas. This gas company submitted to me in the spring a new meter prover for test. It was tested and found correct, and soon after the city of Findlay, through its council, provided for a city meter prover and appointed a city meter inspector. They submitted that meter prover to me for test; it was tested and found correct and sealed. Thus, there were two certified meter provers in the same city.

I received during the summer months a letter from the natural gas company stating that it had been found that certain meters tested by

their meter prover and by the meter prover of the city inspector showed a difference of some 5 per cent in the two tests, and wanted to know whether the two meter provers could not be reinspected. I replied, saying that I should not object at all to repeat the test, but I knew that the result would be the same, that the meter provers were correct. The difference found in the test arose from the difference in the methods of using the provers. As anybody knows who has ever tested meter provers, a meter prover may show an error of 2 per cent in its indications, depending on the temperature and the humidity of the air or the gas that is used in making the test.

Upon my return to Columbus the natural gas company's representative came to me again and I explained the whole matter to him more fully, thus settling the whole question. He then asked me if I would not prepare directions for inspection for use by their meter inspectors. I declined to do so officially. The company drew up instructions for the use of its gas men, and submitted them to me for examination. These instructions covered the entire matter completely. One of the points made in connection with the inspection was that of insuring uniformity of temperature in all parts of the apparatus, and particularly the insuring of the saturation of the air or gas that was used, and, as nearly as possible, of the air in the testing room. I showed him that by taking dry air into the prover and letting it stand for a few minutes the valves being closed the register of the meter would show as much as 2 per cent variation arising from the evaporation and saturation and cooling, and then the subsequent warming of the gas within. The meter-prover question and the meter-testing question in Ohio is now, I think, in a very satisfactory condition.

I think the situation in Ohio with regard to weights and measures while it has been rather quiet, is becoming more and more disturbed, and I think the time is ripe for effective action along the lines which we have already discussed.

Mr. PETTIS. I forgot to mention one thing to show the necessity of having laws throughout the United States the same. When I was in the office of the city sealer of Toledo I noticed fifty 8-quart measures, which had been brought in a day or two before. They were made of heavy sheet iron, painted black, with a neat rim around them. I was asked to test them. I found every one of them absolutely correct according to the Winchester standard. He showed me the measures that he had received from the authorities at Columbus, three in all, a half-bushel, 8-quart and 4-quart measures. They are not like ours furnished by the Government, but taller and smaller, made of different material and very nicely painted. He said that the 8-quart measure held nearly a quart more than it should. I mention this fact to show the necessity of having the laws the same throughout the United States.

Mr. THOMAS. Mr. Chairman, I should like to mention one other point, one which I have overlooked. I have had a number of inquiries, the last one being official, regarding the question of the selling of commodities by measure or by weight in the case of commodities which are by law specified to weigh so much per bushel. Section 443 of the Ohio statutes provides that in the case of certain commodities a bushel shall contain the number of pounds specified for each article, and then follows a list of such articles. The case was submitted by the mayor of an Ohio city, and is as follows:

"A" bought a peck of potatoes from "B," and thinking that he was not receiving full measure he had the potatoes weighed and found that they weighed $13\frac{1}{2}$ pounds, whereupon "A" had "B" arrested, the charge being the giving of false measure. "B" made the defense that the measure that he had used in measuring the peck of potatoes was sealed by a former official sealer of that city. The question was submitted to the attorney-general in that form. Another question was also submitted, which was that in the case of a commodity whose weight per bushel is defined by the Ohio statutes does the statute specifying the weight govern the buying and selling of such articles, or does the statute specifying measure, as in the case of dry commodities, govern? I received his reply by telephone just before coming away, and he said that in the particular case cited he thought "B" was not guilty of a crime, because "A" had seen the measuring done with a standard measure, at the time of purchase, and he accepted the article, thereby making the transaction legal. Furthermore, it would be difficult to prove in the transaction as described that there was any effort or any intention on the part of the seller to defraud. The attorney-general said in relation to the general question that if a person were to purchase or to order from a dealer commodities whose weights were specified in the statutes he would be entitled to receive the quantity called for as determined by weight and not by measure; that if, in the particular case cited, "A" had bought his peck of potatoes and had received $13\frac{1}{2}$ pounds without being present to see the measurement made he would be entitled to 15 pounds instead of $13\frac{1}{2}$. In other words, that the statute specifying what a certain commodity is in pounds was the governing statute, and even in that case it might be difficult to prove that "B," in making the sale with a sealed measure, had been guilty of any intent to defraud. This is the situation with us in regard to that question. I bring it up, and hope that if any of you have requested decisions on those points you will give us the benefit of your experience.

The measures at Toledo, referred to by Mr. Pettis, were not furnished from my office.

The ACTING CHAIRMAN. I think the point Mr. Thomas has brought up emphasizes the fact that we should have national legislation on

this subject, and that the weight of a commodity should be determined after a series of careful tests, by the Bureau of Standards, showing what the weight of a bushel should be. I referred to the fact several times that there is a discrepancy in the weight of a bushel of onions between the State of Massachusetts and the State of Rhode Island, and if you will consult the compilation of laws issued by the State of Rhode Island you will find all through it variations in the weight of different commodities as prescribed by the different statutes. I think that is a very important question, and one that is going to constantly recur, especially when the law is being more rigidly enforced in the different States.

We will ask Prof. Laenas G. Weld, state superintendent of weights and measures of Iowa, to report for that State.

Mr. WELD. Mr. Chairman and gentlemen, the office of state superintendent of weights and measures, as I have had occasion to explain before, is located at Iowa City instead of at the capital. In some respects this is unfortunate, but it is a matter of history.

Iowa City was our first state capital and remained so until the year 1857. Last May we celebrated with considerable formality the fiftieth anniversary of the adoption of our present constitution, and the occasion was also the semicentennial anniversary of the removal of the capital to the city of Des Moines.

The old capitol building is now used as the executive building of the university. The small building, a brick vault of about 24 by 30 feet, which had been erected for the accommodation of the standards furnished by the General Government, continued, however, to serve its original purpose. In the new constitution just mentioned it was and is provided that the state superintendent of weights and measures shall be a member of the faculty of the university "possessed of sufficient scientific knowledge and mechanical skill to perform the duties devolving upon this office."

Thus, the provision is deeply entrenched in the constitution of the State, and any proposed changes must be practically in accordance with it, as it would be quite out of the question to enlist enough interest in the matter to have it made the subject of a constitutional amendment. The office pays no salary which will warrant the superintendent's giving any considerable attention to its duties further than as actually required by law, as his first obligation is to the university, of the faculty of which he is by necessity a member, and it is of course not to be expected that he will receive a duplicate salary from the State. Neither can I agree with the opinion that services in such an office should be rewarded by fees. However, there is no real difficulty here, as it would be perfectly practicable to comply with the requirements of the constitution by nominating some person fitted to perform the duties of the superintendent who should

receive a salary fully commensurate with such duties from the State and at the same time hold an appointment at a merely nominal stipend as a member of the university faculty. His obligations as an employee of the university would thus be slight and practically his whole time might be devoted to duties pertaining to his office as superintendent.

Some years ago one of the popular magazines sent an explorer west to write characterizations of some of the Mississippi Valley States. Among other agreeable things which this redoubtable gentleman had to say about Iowa was that the State is "upon a 'dead level' like its own prairies." This is largely true, but he might have added that Iowa is also upon a high level, both morally and intellectually; so much so that I am positive that no such condition exists as has been reported by some of us. The population of Iowa is remarkably homogeneous. The people are prosperous, are intelligent enough to look after their own interests, and are abundantly able to do so, even if it involves the expenses of a legal process. No man can do business in Iowa and habitually impose upon his fellow-citizens by such primitive devices as false weights and measures. Every farmer has his scales, and if those of the elevator company or of the cattle buyer or even of the railroad company do not agree with them he has nothing to fear from raising a "howl" that will be heard through the whole community.

Along these lines there is very little trouble. Neither is the situation complicated to any very serious extent by large cities, the largest city in the State having a population of hardly more than 50,000. Even in these larger towns there is no considerable element of very poor people. There is not a slum, in the usual sense of the term, within the borders of the States, and the imposition practiced upon the miserably poor in such cities as New York and Philadelphia finds no very extensive parallel with us. Of course, the fact that difficulty of this sort exists to any degree at all is sufficient warrant for securing adequate protection for those affected, and I have little doubt that such protection will be forthcoming as soon as we here can definitely determine what seems to be the best procedure. We must, moreover, look forward to the time when we too shall become more "highly civilized."

What we need in Iowa more than inspection of scales, weights, and measures is adequate and effective package legislation. We are, like other people, careless enough to buy milk and vinegar and catsup by the bottle, crackers and breakfast foods by the package, coffee by the can, butter by the "print," and often are much imposed upon in this way. This is not as it should be and can readily be remedied by any reasonable package law. There is already ample provision in our code to protect us against fraud in cases in which the net

weight or quantity of contents is overstated on the container. As I understand our statutes, however, there is no fraud committed in selling a package of crackers for 5 cents, whether the package contains 8 ounces or 5 ounces. In this connection I may mention that a case has come to my notice in which the manufacturers of a well-known breakfast food have been brought before the federal court at the instance of the pure-food commission for overstating the contents of its packages.

I should like at this point to indorse Mr. Palmer's opinion that eggs should be sold by weight instead of by the dozen. The present practice is not one whit less objectionable than that of selling goods in packages of purely conjectural capacity. In fact, we in Iowa suffer from this imposition—it can not be called a fraud—about as much as can well be imagined, for the reason that the egg buyers enter our markets, buy up the biggest eggs, and send them to the cities. The same condition is to be noted in the case of other commodities, the local consumer being put at a disadvantage.

Whatever may be the situation in other States, I am certain that in Iowa the best and most directly attainable method of securing general inspection is through the appointment of county sealers of weights and measures. Provision is made in our code for such appointments, but the statute is not mandatory and there is no salary attached to the office. Unless a salary be fixed by the county board of supervisors, the sealer is reduced to the extremity of making his office remunerative through the fees collected. These fees are not and can not be made, except by petty tyranny and browbeating, a decent compensation for any man who is able to perform the duties of the inspector. Thus it is that of the 100 counties in Iowa there are not half a dozen in which there are regularly appointed sealers. Perhaps a dozen or fifteen of the cities have market superintendents or inspectors of scales appointed by the city council or mayor. They are not, however, in the proper sense inspectors, but merely official weighmasters or wood measurers, or something of the sort, and are acting under special city ordinances rather than under state statutes. These ordinances only provide the protection that should be provided the purchaser of coal, wood, hay, and other coarse commodities. Some city ordinances provide also for the regulation and testing of gas meters. In the smaller towns there are maintained private scales for public use, the owner charging a small fee for each weighing and thus making his investment and trouble mildly remunerative. The owners of such scales have frequently asked for iron weights with which to test or adjust them. They are sometimes licensed to perform this function by the city council. Under whatever authority they are acting, if any, they are sure to be closely watched by the farmer or coal merchant on the one hand and the con-

sumer on the other. Being disinterested parties there is little or no reason why they should willfully keep false scales.

By such means as these matters are kept "straight" in Iowa, and I believe that, relatively speaking, there is little chicanery of the sort which we have had so abundantly illustrated in these meetings. The whole subject is, however, in confusion; but local self-government is something which our communities will not readily give over, even in matters of detail.

It is obvious that, in the midst of this confusion, the office of superintendent of weights and measures is one of rather uncertain function. As specified in the code, the principal duty of the office is to furnish such standards of weight, measure, and capacity as may be ordered by county or city sealers of weights and measures. As a matter of fact, however, few such standards are ordered. They are frequently ordered by private parties—manufacturers, packing houses, elevator companies, or the like—seldom by a county board or a city council. Letters frequently come asking for the adjustment of some difficulty or misunderstanding. Such cases are often disposed of by shipping to the parties interested perhaps half a ton of test weights, a supply of which I have found it convenient to keep on hand for this purpose, even at my own expense. Along with the weights I generally send a letter of instructions which any intelligent mechanic or farmer or tradesman will be able to follow to the result of either confirming the accuracy of the scales in question or of condemning them. I fancy that the results of such inspections are fully as satisfactory as they would be if the tests were made by such a county sealer as would be appointed by the average county board.

In this connection I am going to take the opportunity of speaking a good word for the railroad companies. They may bear pretty heavily upon us in some ways, but whatever other means they take to do it they do not descend to the use of false weights and scales. The scales used in the ordinary railroad depot are, for practical purposes, as good a standard of reference as we need have. I know that the various railroad lines traversing Iowa have provided for the periodic inspection of the platform scales used in their stations and of the track scales upon their sidings. Elevator men seem to be equally particular, and, in fact, there is an abundance of standards of reference for any one desiring to keep a correct set of scales or to secure evidence against a party who does not so desire. This is how it comes about that in a State where the state sealer is vested with the very minimum of authority a general uniformity in the matter of weights and measures is maintained. There is some petty thieving through the use of short milk bottles, short berry boxes and baskets, the use of liquid measures for dry measures of capacity, and similar devices; but there is no question in my mind but that a little judicious

legislation and agitation would put an end to all but the merest remnant of such a condition.

If we can agree upon some uniform method of procedure, and if we can secure some effective package legislation, there is no question but that in Iowa the difficulty will be at an end. There is, however, no use in proposing measures which will require our counties and towns to invest hundreds of dollars apiece in standard balances and weights and measures which may excite some spasmodic interest and afterwards be left to rust in some basement storeroom of the court-house or the city hall. I am waiting for this association to agree upon practical recommendations with respect to this problem, after which I shall take pleasure in laying them before our state authorities. Our code is obsolete with reference to the question, but the fact that the legislature has appropriated the money to pay my expenses to this meeting shows that there is some interest in it. I do not think that it will be difficult, if the legislation here proposed is reasonable and practical, and the expense of its enforcement not too great, to put the inspection of weights and measures on a perfectly satisfactory basis in Iowa.

I thank you.

Mr. PERTIS. What is the condition of the standards sent you?

Mr. WELD. When the office of superintendent of weights and measures was established, which was before the capital was removed to Des Moines, a small brick building was erected for the accommodation of the standards furnished by the General Government, as I have already stated. This building is very substantial, practically fire-proof as far as danger from the outside is concerned, and is of such construction as to insure the greatest possible dryness within. The floor was laid up with gravel, sand, and lime in successive layers, with a top layer of flagstones. At any rate, the standards have kept very well; being, moreover, very little used, they do not show the slightest signs of wear. At one time the roof of the building was neglected and one of our standards of length was ruined by water which leaked through upon that occasion. We never have any use for this standard, so I do not know that any harm has been done. The standards of weight and measure are, apparently, in perfect condition, and I believe that it is perfectly safe to use them. The measures are slightly tarnished, but not corroded inside, and would possibly, if brought here and tested, show a diminution in capacity amounting to some thousandths or ten-thousandths of a cubic inch. Perhaps the weights would, from the same cause, show appreciable increments. The case is different, however, with the set of metric standards sent to the office some time in the seventies. The brass in these standards seems to have been poor—porous, perhaps. At any rate, all of them have become badly corroded and unusable. Fortunately we have no use for them.

The SECRETARY. They were probably made of poor material.

Mr. WALL. I want to ask you this question: Have you no legislative authority for the establishment of the office of sealers of weights and measures in the cities?

Mr. WELD. Yes; cities and counties may appoint sealers.

Mr. REICHMANN. Is it purely a matter of volition on the part of the county?

Mr. WELD. Yes. The code is not mandatory in that respect; it simply provides for the office. I may add, at the risk of repetition, that the duties of the superintendent of weights and measures are not in any way connected with the matter of inspection. The superintendent simply provides standards to regularly appointed county or city sealers or inspectors as they may be ordered of him. He has nothing to do with the inspection itself.

The ACTING CHAIRMAN. The next on the list is Mr. W. C. Haskell, sealer of weights and measures of the District of Columbia.

Mr. HASKELL. I do not know that there is anything in particular that I can say that will be more interesting or different from what we have been listening to. We have the same trouble with short weights in the District of Columbia as you have in other parts of the country. Perhaps we are differently situated, though, in getting legislation for the benefit of the public. Our board of aldermen is the United States Senate and our common council is the House. All of our legislation has to go through Congress. That relating to weights and measures is requested by our office and has to be recommended by the Commissioners of the District of Columbia.

I have been interested regarding the remarks made in the matter of potatoes, among other commodities mentioned. Our law in the District of Columbia reads that potatoes when weighed shall weigh 60 pounds to the bushel. The consequence is that in the fall of the year, when potatoes are green and heavy, they are weighed, and in the spring, when dried out, they are measured.

I think the whole matter resolves itself into this, that a committee should be selected by this conference to present to Congress a suitable law on weights and measures that will be general all over the country. I am becoming very much impressed with the necessity for this. We have felt that matters in the District of Columbia in regard to weights and measures were in a satisfactory condition, but there are new difficulties arising all the time. At the last session the Commissioners submitted to Congress, on the recommendation of our office, an amendment to a section of the law that all commodities should be weighed or measured in scales or measures duly tested by our office. When it got to Congress the proviso "when weighed or measured" was supplied. The consequence is that we are somewhat handicapped

in compelling dealers in the District at the present time to weigh or measure certain commodities.

There is a growing practice of selling articles by the package, berries by the box (although berry boxes in the District must be standard size), and potatoes by the barrel, there being no stated amounts. It is so with many commodities. Oil is sold in some instances by the can, which may be standard, but short in contents, and flour by the sack. For instance, two years ago a thirty-second sack of flour weighed $6\frac{1}{8}$ pounds net, for which the people paid 20 cents. That amount has been reduced, so that the thirty-second sack holds only about 5 pounds, and the people are paying the same price. The people who buy flour by the barrel usually get 196 pounds, but the poor people, the people who have to buy in small quantities, are paying a much higher price for flour, and this is a hardship they can not well bear. So that, it seems to me, it all resolves itself into a condition where it is quite necessary that Congress should understand the situation, and it should be presented in the strongest possible way. The chairman of the committee having the matter in charge should, I think, be the Director of the National Bureau of Standards. Mr. Fischer, who is head of the Division of Weights and Measures of the National Bureau of Standards, should be a member. The others should be selected by these two gentlemen because of their familiarity with this question. Conditions all over the country are about the same; in many articles needed for living purposes the people are being defrauded out of what rightfully belongs to them by short weight and measure. When the proper time comes I will be glad to offer a motion for the appointment of such a committee.

MR. REICHMANN. I want to accuse Mr. Haskell of being over modest, if that accusation is not out of place. Most of the gentlemen who are here to-day paid Mr. Haskell a visit to his quarters a year or two ago. We went up some ramshackle stairs and reached a dingy looking place which he described as his office. If you will go to see Mr. Haskell now in the new municipal building of the District of Columbia you will see the finest weights and measures office in the United States. I am giving you an opportunity to invite us, Mr. Haskell.

MR. HASKELL. I cordially invite you to inspect our new headquarters. I will be pleased to have you make that your headquarters for any business you may wish to attend to while in the city. I am pleased to invite you to come and see us now, because we feel that we are in a position to properly care for and receive you, and you certainly will be welcome.

THE ACTING CHAIRMAN. I will ask Mr. Hazen, of St. Johnsbury, Vt., to report to us on the conditions of weights and measures in the State of Vermont.

Mr. HAZEN. When it was announced in the state papers that the governor had appointed a delegate to this conference, the Rutland Herald came out with an item to the effect that if their delegate would carry through a provision whereby a pint measure could be made to hold a quart they thought he would fulfill his mission. That is about the only mission that was given me. The laws in Vermont, I think, are very much on a par with conditions found by the old Vermont Yankee who at one time was a curb broker in New York, but unfortunately for him he was there on "Black Friday," and as a consequence was obliged to go back to Vermont and take up farming. Afterwards, he had occasion to visit his old stamping grounds in New York. It was in the early days of the automobile, and after he got home some of his friends in asking him about his experiences (they called him by the familiar name of Orville) said, "Orville, did you ride in one of those horseless carriages?" He replied, "No, I didn't; but I drank some of that cowless milk." I think our Vermont laws are very much on a par with that cowless milk which Orville drank in the city of New York.

The laws of Vermont to-day are about the same as they were when these conferences began three years ago, and provide substantially as follows: That the state treasurer is the custodian of the State's weights and measures, which are stored in the statehouse at Montpelier; that each county treasurer shall have a set of weights and measures and shall keep the same in repair; in case of his neglect to do so, he shall be fined \$1 for each month of such neglect. I expect that if some of these county treasurers were looked up it would be found that their salaries would be badly cut into in paying the fines. It is also provided that the town treasurer shall have a set of weights and measures, and that he shall seal and test any weights, measures, or scales brought to him and shall receive as compensation the munificent sum of 10 cents for each test.

I think that this conference should have been attended by the state treasurer instead of myself, and I visited him in his office a few weeks ago and strongly urged him to do so. There was no appropriation for the expenses, however, and although I requested him to ask for it from the legislature, which is now in session, so that he might be able to come, he didn't quite have the nerve to do it.

I was not present last year, and therefore was not cognizant of the fact that a model law had been suggested. Mr. Fischer has promised me copies of it, and upon my return home I intend to place copies in the hands of the governor and of the state treasurer, and while it may be pretty late at this session of the legislature, which meets once in every two years, to have any action taken, I am quite sure that two years hence there will be positive action taken in the State of Vermont upon that subject.

I am very much interested in this work, and I want to add to what Captain Pettis has said with reference to the Journal of Weights and Measures. The publication is one which I am glad to see started, and I think that it is worthy of a very large subscription list; I hope it will be taken and kept on file throughout the length and breadth of the land. I believe it is an avenue by means of which this subject will be agitated a great deal. I am sure that much good has emanated from these conferences since their inauguration three years ago, and a great deal of credit is due to Doctor Stratton and Mr. Fischer, and such men as Captain Pettis, Mr. Palmer, Doctor Reichmann, and others, for all the work they have put into it. I have seen the results of it, and am looking for still greater results.

This state treasurer said to me: "The first thing I will have to do is to write to every county treasurer in order to find out whether he had his weights and measures tested, and, incidentally, to remind him that there is a little fine in case he neglects it." You can see that the ball has commenced to roll in Vermont. I am fully in sympathy with getting before Congress some national legislation which will govern state and municipal legislation, and I think that we shall see uniform legislation throughout the United States in the course of time.

The ACTING CHAIRMAN. It is extremely gratifying to find that Mr. Hazen is confident that the State of Vermont will do something. I know that they need it very badly in that section. We have towns on the adjoining state lines, and every day we hear of some complaint from one of these border towns of the State where the measures or scales tested in the majority of instances do not comply with the requirements of the State of Massachusetts, and are shipped over the border into this State, which has no inspection service. That is one of the arguments which we attempted to bring to bear on the governor of Connecticut in order that we might have a representative from that State.

Connecticut adjoins Massachusetts and Rhode Island, both of which have more or less efficient inspection services. From my own personal observation and knowledge I know that thousands of short milk jars are dumped over the border into Connecticut towns. You can probably realize what the loss is to the purchasing public of the State of Connecticut alone.

The next State on the list is Kentucky, from which the Hon. B. S. Bruner, secretary of state, was appointed delegate. On account of his being unable to attend, his brother was to represent him. I understand he has been here, but had to leave, but will be here tomorrow, so we will probably hear a word from the Blue Grass State then.

The next State is Michigan, and I know we all miss having Mr. Haarer with us. He was one of the most enthusiastic delegates we

had from the western part of the country, and I had the pleasure of being with him several days after the conference. I know that he has the welfare of this work at heart, and I believe they are doing much good out there in his State. I think Mr. Fischer may tell you later what has been done.

Next on the list is the State of Utah, which appointed the Hon. O. J. Salisbury to represent it, but he is not present.

Mr. REICHMANN. I understand that a great deal is being done in weights and measures work in the State of Utah, particularly in Salt Lake City. The sealer of weights and measures there is also the inspector of flour and food. He is doing a great deal of work.

The ACTING CHAIRMAN. It is unfortunate that Utah has no representative here. We like to hear from all the States which are taking up this work. I know you get tired hearing of the work that is being done in Rhode Island, New York, and Massachusetts. It would be exceedingly interesting to hear from some other States.

Mr. PETTIS. I believe a large amount of work is being done in New Mexico. I think that a man has been selected to take charge of the work, and some of the towns have appointed sealers.

The ACTING CHAIRMAN. The next State is that of Kansas, represented by Mr. Edward E. Brown, of Lawrence, Kans., who will give us a word from that State.

Mr. BROWN. By law the chancellor of the University of Kansas is the state sealer of weights and measures. He is very much interested in this work, and desired that I represent him at this meeting. The State thus far has no systematic inspection of weights and measures used in trade. The law provides that the clerk of each county shall be the sealer for that county, and in order to get an idea of how many counties were provided with equipment we sent out a circular letter on the 1st of December, requesting answers to certain questions. I have here a summary of answers received from 81 counties out of 105. The first question asked was, "What standards of weights, measures, and balances are owned by your county? Give detailed list. Please indicate their present condition." Out of 81 counties, 52 reported that they had no such weights or measures; 9 reported a full set (I do not know of what these full sets consist); 14 reported part of a set; 5 reported a few weights only; and 2 reported 1 weight only. The second question asked was, "How many times have you been called upon during your term of office to test weights, measures, or balances?" Fifty-nine counties replied "None;" and 22 counties reported once or more. The third question asked was, "In your opinion what would be the attitude of the people in your county toward a law establishing a department of public inspection and testing of weights and measures?" Fifty-five counties reported favorably; 8 unfavorably; 16 did not know;

and 2 gave no expression at all. The last question upon which we desired information was, "Would you be willing to attend a meeting of the county clerks of the State (who are also by law the county sealers), at some time in the near future, at Topeka, or here at the university during the holidays, to discuss the situation in regard to weights and measures?" Thirty-five reported that they would be glad to do so; 26 replied "No" (17 of these because their terms expired shortly); 11 reported that they would be glad to come if their expenses were paid; 6 suggested that the matter come up for discussion at the meeting of the county clerks and county commissioners at Hutchinson, which occurred on the 15th of December just passed; and 3 gave no answer.

It was thought desirable to have a man represent the state sealer at the meeting at Hutchinson, and we therefore sent Prof. E. F. Stimpson, of the department of physics and electrical engineering, who has been taking an active interest in this work and who is practically the deputy of the state sealer. I have not heard from him as to the result of that meeting, as it was held only a few days ago. The state board of health also intended to send a representative.

During the past few months this matter of weights and measures has been brought before the public to some extent by the inspectors of foods and drugs, and it is attracting the attention of the people at this time more than at any time heretofore.

As to our equipment, the standards which are now at the university were received many years ago, and I do not think that they have ever been returned to the Bureau of Standards for test and verification. I considered that it would be desirable to know in what shape they are at the present time, and after deciding to make this trip I concluded to have them shipped to the Bureau of Standards to be examined and, if possible, tested. At the last session of the legislature we requested an appropriation to cover additional equipment. An appropriation of \$3,200 was made, and we are now in a position to have the best standards and a proper place to keep them.

The laws of the State are not very complete on the subject of weights and measures, and we are considering making certain recommendations to the legislature at this coming session. I think that the State is ready for something of this kind. Some of the expressions in regard to this matter given by the county clerks were quite interesting. I am sure this is a matter that the Kansas people will take hold of very quickly when it is once stirred up, and we are looking to the Bureau of Standards for suggestions as to a model bill to put before the legislature. I doubt, however, if the State is up to that point where much inspection can be made at this time unless it is in general with the state board of health in connection with the inspection of pure foods and drugs. There is a great deal of

that work being done. The testing of drugs and foods is done at the laboratories of the university, and the inspectors are inclined to branch out into weights and measures work. Quite recently one of the inspectors in our home town of Lawrence made a trip among the grocers and bought about 15 packages of potatoes, ordering a peck in each case. These were delivered to the university and tested by our standards, and only 2 were found to be correct, and we afterwards learned that these 2 dealers were aware of the fact that an inspector was buying the potatoes. All the others were from 4 ounces to 3 pounds 8 ounces short. If I remember rightly, 3 packages weighed less than 12 pounds each. So you see we have no protection from improper weighing and defective and fraudulent weights and measures.

The CHAIRMAN. We will next hear from Mr. A. E. Bent, state treasurer of the State of Colorado.

MR. BENT. Mr. Chairman and gentlemen, this is my second opportunity to meet with you, and it will probably be my last, for the constitution of my State requires that the treasurer of the State (who is also the custodian of the state standards) shall not succeed himself; but before bidding farewell to this organization I wish to say a few words.

I found the set of state standards about eighteen months ago stored in a subbasement of the capitol building. They had been there some thirty-odd years without being opened so far as I could discover. We are laboring under the same conditions as the old State of Vermont, I imagine—that of lethargy to our own interests and the interests of the people on the subject of weights and measures. Colorado passed various laws many years ago providing for the securing of a set of standards by the state treasurer and even making it imperative that he secure from the Federal Government a set of standards. It was also provided that the standards of the United States Government be the standards of Colorado. It was also made obligatory upon the county commissioners throughout the State to procure a set of standards for each county and appoint a county sealer. But they seem to overlook the fact that it is necessary to have a uniform bill in order to have it at all effective. There is no state sealer or commissioner of weights and measures. The only connection the office of the treasurer has with this subject is that he is the custodian of the standards. He is not directed even to permit anyone to check up with those standards. It does seem to me that the question of weights and measures in this country is second only to that of pure food, and the same sentiment on the part of the great American public that very recently demanded from Congress and many of the States pure food laws is the sentiment that will

take advantage of the work of this organization, together with the able cooperation of the Bureau of Standards.

It does seem to me that the little journal which has been started by this organization, and the gentlemen who edit it, should receive the strong support of the organization, and it should be made a medium through which the public may be educated to the great importance of this question. If nothing more could be accomplished by this organization than to give publicity to (and, mind you, the people take up these questions very rapidly nowadays), and to show in detail the various and many specific instances that have been met by the active commissioners of weights and measures in the States of New York, Massachusetts, and Rhode Island, together with the experiences of the sealer of the District of Columbia, I believe that alone would be a sufficient basis upon which to demand and receive from Congress and the state legislatures absolute protection to the people through laws resulting from such publicity.

The auditor of our State and the commissioner of insurance came in contact with a new line of insurance legislation resulting from the recent agitation started in the State of New York over the handling of our great insurance companies, and it was my observation at that time that national legislation, while ideal, I believe, was regarded by the legislators of many States, in fact, probably by the great majority of the States, as an encroachment upon States' rights.

Whether national legislation upon this important question might be so regarded is a question in my mind; I doubt it, but the result, as you all know, of the request for national legislation with reference to insurance companies and the insurance business, has not seemed to have been regarded favorably. However, on the other hand, state legislation has been rampant and voluminous and of much good to the public. If it is possible to secure from Congress the desired legislation that is certainly the ideal method, but in the meantime it devolves upon you gentlemen who will from year to year meet here together to maintain this organization; and as a mere suggestion from one who will probably never meet with you again I might say that a provision for a nominal appropriation by the legislatures to the proper department or official in each State to defray the expenses of representation here, and the urging on the part of the present active membership of this organization and those who will be here from year to year that each State send a representative to these annual meetings will serve as a great distributor of the important facts which the Bureau of Standards and your organization desire to get before the people. The appropriations by the legislatures are the first elements necessary to insure a good attendance, and that is what you ought to have, because that distributes and makes public in all of the States the importance of this work. I think it is an extremely impor-

tant work. It is no short task; it will take a great many years to get anything like ideal results. There are many elements in Congress, you will find, that will oppose, restrict, and impair the ideal results; but there is, on the other hand, the great public at large which is now being listened to more intently and with greater care by the public servants than perhaps at any other time in the history of the country; and this publicity emanating through the cooperation that now exists between this organization and the Bureau of Standards, together with the little Journal of Weights and Measures will, I think, bring about the desired results in time.

It is very gratifying to me, representing a State which though young and small in population is a heavy purchaser of the products of the great manufacturing States of the East, to observe the active organizations in the States of New York and Massachusetts, for instance. The active organizations in those States will assure to their people and to the people of every State in the Union that the time is not far distant when the public will be able to buy almost all commodities by standard measurement or by standard package; and, as Mr. Pettis has so clearly outlined in his little story of the woman who paid \$19 and some odd cents for a \$5 ton of coal, such conditions will not last very much longer in this country. I believe the great manufacturing concerns of this country are unwilling victims and participants, in the main, in this irregular method of manufacturing nonstandard packages of every description, and the tendency, as so well described by Mr. Haskell, is to grow in the production of that character of output simply because the great American public has not yet awakened fully to demand and receive from proper sources the protection to which it is entitled. I say "unwilling victims," because I think that is shown in a little circumstance coming under my personal observation, which I will relate to you.

Some years ago in disposing of a large quantity of baled hay in our State it was necessary to contract with a man to bale the hay and also to contract with jobbers for the sale of carloads of the hay. This product was sold by the ton, baled in certain sized bales. Everyone knows that the ordinary bale of hay used years ago weighed 100 pounds, while to-day it runs from 65 to 70 pounds. At least that is what it weighs now in our section of the country, and I think if you will weigh your bales in the East you will find there is little variation from these figures. I say we were unwilling victims to this "graft," as it were, but in order to sell our product we were obliged by the jobber in hay to put it up in bales not exceeding 80 to 85 pounds in weight as the maximum. A year or two later it fell to about 75 or 80 pounds; and ultimately about 75 pounds was the maximum. It matters not to the producer whether a bale of hay be 75 or 100 pounds, but the jobber was forced to demand a small bale from the producer

to satisfy his retail merchants all over the country. Therefore, you see that the jobber and the producer and the man who bales the hay are all unwilling contributors to this result. In fact, it is brought about by the desire on the part of some merchants to sell the public a "package." We have drifted absolutely from any standard on all our great commodities in this country. That is why I appreciate so deeply the work of this organization.

I will say to my friend from Iowa that if he can find a 100-pound bale of hay in the State of Iowa I will give him \$20 for it. The same offer holds good for any other State in the Union; that is, unless it is especially baled to sell to me.

The internal commerce between the States of this Union is greater than all the commerce of the rest of the world; and when we think of it that fact alone should justify us in exerting a special effort to look after our commerce. But the custom of this country has drifted into handing each other "packages," and the work of this organization is to break up that practice. The organization is extremely fortunate in having the able assistance of the Bureau of Standards, for which we have such high esteem; and it is gratifying to know that Congress makes appropriations for the Bureau to carry on its work.

It is also gratifying to see that Congress has seen fit to provide in the city of Washington such beautiful quarters for the sealer of weights and measures. I think, from what I have heard on various occasions, that the conditions in this city ultimately will be, if they are not now, a model for this country to follow along the lines of weights and measures and standard packages.

The great American public is spending millions of dollars annually that it should not be required to pay for the goods it buys, just as, for instance, that poor woman who paid \$19 a ton for coal. The percentage of overcharge is not so high in all cases, but I venture to say that it runs from 10 to 20 per cent. That is the excess amount the public pays for the common commodities, and for which it fails to receive value, due to the lack of standard packages alone. I believe there is a greater loss to the people due to the lack of standard packages than to the lack of proper scales and the inspection of weights and measures.

MR. HASKELL. I do not think your statement is exaggerated at all.

MR. BENT. I am very glad to have you say that.

It is that feature of this great work that appeals to me, the standard package. Coal in carload lots is sold and weighed by the public weighmaster or the assistant weighmasters employed by railroad companies, so that the carload consumers seem to get a square deal on the weight; but it is not so with the people who get the ultimate

distribution from the retailer. I would not presume to charge any retailer with deliberately robbing the people. I believe the people of Colorado are like all other people in the country; likewise I believe the people of Massachusetts and New York are just as good as they are in our State, but the nefarious methods demonstrated by the evidence produced here on the part of the inspectors in New York, Massachusetts, and Rhode Island, and even in the city of Washington, leads me to believe that we all need this protection, and the question is how to get it. I believe publicity would be a great factor in inducing the people to go to the polls and demand this protection. In Congress is the proper place to take this up, but in order to get what we desire from Congress the people must be educated, and that takes time. Therefore, I believe this movement for uniform state laws to be the essential thing to do at the present time. I believe it will come nearest to giving us quick relief. However, if appropriate effort is put forth in educating the people, it is possible that Congress might relieve us much quicker than state laws. In any event, state laws will ultimately be passed in the various States; and it seems to me that before this organization adjourns this time action should be taken upon the suggestion, which is a good one, that a very strong committee put this matter before Congress at once. I think now is the time to push it with a view to getting results. Our State has had no legislative session since our last conference here. A session will be held this winter, and I have already recommended in my annual report to the governor, and urged, the passage of a law, in conformity with the suggestions of this organization and the Bureau of Standards, to create state supervision of weights and measures. It does seem to me that every State in the Union is equally interested. It matters not whether your constituents are tradesmen, manufacturers, farmers, or miners; they are all equally interested as great consumers of commodities manufactured all over the country. They are very much alike in trade, and one class is about as good as another.

I hope this organization will not adjourn until something tangible, definite, and forceful is effected. I thank you, gentlemen.

Mr. HAZEN. Mr. Chairman, I am not sure that I understood the gentleman from Colorado, but, not to provoke discussion, I would like to ask him a question if he will permit. I understood him to say that a law by the States rather than national legislation would be more effective, citing as an instance that the national insurance laws requested were not very successful.

Mr. BENT. I put that, as I remember, this way, that my observation in connection with the body of insurance commissioners of this country during the insurance agitation was to the effect that the consensus of opinion of the representatives of practically every State

in the Union in insurance matters was that state laws were more desirable and much easier to secure. As you all know, state regulation of insurance seems to have been the trend which that matter took, in many States following in the main the government law.

Whether or not this weights and measures matter would take such a course is a question in my mind. Many of you gentlemen here are better judges of that than I am. I related the insurance matter merely as an instance to show the trend in the various States and state legislatures. In other words, when the commissioners of insurance assembled at various times to discuss the question of national legislation, the great majority were very fearful that the legislatures of the various States would decline to recognize or aid by cooperating along the lines of a general national law. Their idea was that the state legislatures should pass laws for themselves, but in conformity with the general outline.

The question of weights and measures in many ways is different. I believe it is along the lines of the pure-food question. It should be easy to educate the American public to such a frame of mind that it will demand from Congress a law fully as effective as the pure-food law for weights and measures. Therefore it is an open question as to which is the better course, but either or both will do no harm at the present time.

Mr. HAZEN. It seems to me that this is along the lines of the pure-food laws and the insurance laws. Take Vermont, for instance. Vermont is regarded as a rural State. Probably most of you will be surprised to know that the value of its manufactured products far exceeds the value of its agricultural products. Its products are shipped from Maine to California. Therefore the question of weights and measures is an interstate one, and any federal law that will have jurisdiction over interstate distribution of the products of any State will be more in line with the pure-food law. Federal legislation would be a guide for State legislation. The States do not know what laws are needed; they do not know what the people ought to have; but by having something formulated by Congress, and then have the States enact laws along the same lines, this question will be handled in a proper manner. That was my idea from the outset.

Mr. HASKELL. I wish to say a word with reference to what was said a few moments ago in regard to shipping from one State to another. We had that illustrated here less than a year ago. There was a car-load of milk bottles which we rejected here, and the remark was made that they would be shipped to some Western State. I do not want to discredit the State, but I think Iowa was the State to which they were to be shipped.

I wish to speak of another matter. We pay 5 cents for a package of crackers. That does not seem very much, but when we figure it out

we find that we are paying at least 16 cents a pound for crackers that we can buy anywhere in bulk for 10 cents. That is where the people are imposed upon, and largely because of a custom.

The ACTING CHAIRMAN. I think we all appreciate one very strong point brought out by Mr. Bent, and that is possible interference with States' rights. I do not think that ought to scare us, however, as that is a question bound to come up in every matter of this kind. I believe with careful consideration of a measure on the part of the members of this organization before presenting it to Congress the congressional committee would safeguard the States so that there would be no danger of antagonism coming from that quarter. I believe it is a good point, though, and one of the very important ones we have to consider.

The State of Pennsylvania is represented by Mr. J. Sutton Wall, of the department of internal affairs. I will ask him to tell us of conditions in Pennsylvania.

Mr. WALL. Mr. Chairman, I made a report in detail to the last conference. Since then we have made practically no progress—very little, at least, on legislative lines. At the last session of the legislature we had a bill introduced in the senate, which passed that body with very little objection. It was amended in some respects. But this bill got hung up because it went to the house on the last day of the session with some 60 or 70 other bills and the House failed to concur in it. I understand there is talk of introducing that bill again, and we will try to get it through.

I think you will pretty well understand the difficulties that we have to encounter on account of our peculiar state constitution. I might refer to my report given at the last conference for the benefit of those who have not had that report. I will preface that by saying that prior to the adoption of our present constitution, in 1873, we had state inspection under the act of 1834, but, as Doctor Reichmann said of New York City, it became a little obnoxious. The merchants thought they were being imposed upon, because it was a fee system of inspection and paid for by them. We had county, municipal, and city inspectors, and so forth. When the constitutional convention met in Philadelphia in the winter of 1872-73 the Merchants' Exchange of Philadelphia petitioned the convention not to incorporate anything in the constitution along those lines. That was also the sentiment of Pittsburg and other large trade centers. There was pronounced opposition to any provision creating state officers for the inspection of weights and measures or merchandise. The persistence of this opposition led to the adoption of a peculiar clause in the constitution, section 27 of article 3, which is still in force. This section reads: "That no state office shall be continued or created for the inspection or measuring of any merchandise, manufacture, or

commodity, but any county or municipality may appoint such officers when authorized by law."

In Pittsburg and other cities we have had local inspection through ordinances passed by the councils under the act of 1834, which was not repealed in toto.

An act was passed June 26, 1895, which appears to have been an attempt to restore that part of the government; that is, the appointing power in cities of the first and second class. Under a subsequent act of April 11, 1903, appropriating the sum of \$2,500 to purchase standards of weights and measures to carry into effect the act of June 26, 1895, several cities of the first and second class applied to the department of internal affairs for the equipment, and Secretary Brown made inquiry of manufacturers to learn what the complete equipment would cost. From the prices quoted he discovered that he could not furnish an equipment for each of these twelve cities of the first and second class for the sum appropriated, so he declined to take any further action in the matter on the ground that the appropriation was totally inadequate to purchase the proposed equipment, and that the act was in violation of section 3 of article 3 of the constitution. Inquiry was made at that time, and we learned that the National Government would not furnish a second set of standards free of charge, but would do so if payment was made. Under the act of 1834 we could not buy new standards without a special appropriation by the legislature.

Mr. REICHMANN. From speaking to Mr. Brown about the matter two years ago, I understand your constitution abolished all offices of inspection of merchandise. Does it say anything specifically about weights and measures?

Mr. WALL. Section 27 of article 3, which I have just quoted, is all there is on the subject.

Mr. REICHMANN. At the time that was passed the State of Pennsylvania had no superintendent of weights and measures. That act applied only to merchandise, etc. Can they not appoint, under the constitution, a sealer of weights and measures, and give him duties which do not apply to the inspection of merchandise?

Mr. WALL. Perhaps it can be done.

Mr. REICHMANN. I went over that with Mr. Brown two years ago when he was down here. I do not think your constitution prevents you from acting. The point I make is that although you have abolished all the offices of inspectors, the act does not contemplate, nor did the framers of the constitution contemplate, abolishing anything that served to give the people honest weights and measures. With us, it did away with a number of unnecessary offices and combined them into one.

The CHAIRMAN. Do you know just what the condition of the state standards is?

Mr. WALL. Yes; they were mutilated and partly destroyed. It is just what would happen in a building burned from top to bottom. The standards were in the basement of the capitol when it burned. Timbers fell upon them, and some of them were melted. I saw some of the pieces.

The CHAIRMAN. I think probably there are certain pieces of apparatus that could be furnished from here. Have we not some of them left, Mr. Fischer?

Mr. FISCHER. Yes; but I think the best thing to do would be to buy a new set.

Mr. WALL. There are some parts preserved yet, I think.

Mr. FISCHER. We have always considered that the standards of Pennsylvania had been destroyed. It was so reported to us.

The CHAIRMAN. If the set is not too badly damaged, we might put some of the pieces in order, as we have a few extra pieces we could supply.

Mr. WELD. Was there not some action taken at the time the National Government furnished them to the State, guaranteeing that they would be taken care of?

Mr. WALL. Our state law provides that they shall be taken care of. The secretary of state is charged with their safekeeping.

The CHAIRMAN. We will be glad to help you as far as we can. I can not say positively that we can furnish all the pieces, but we will loan what we can until the State of Pennsylvania can afford to buy a new set. I think we can loan almost a complete set.

Mr. WALL. We had better have some good legislation so that we can use them.

Mr. FISCHER. Yes; that is the idea.

Mr. REICHMANN. What is the use of having the standards if we have not the legislation so that use can be made of them?

Mr. WALL. I think if we had our laws in proper condition we would have no trouble about getting a set of standards.

The CHAIRMAN. I was simply thinking of providing the means of getting around Mr. Brown's objections. One of the reasons advanced was that Pennsylvania could not do anything because the standards were not in proper condition. I was trying to remove that objection.

Mr. WALL. There is one point, and that is, that the \$2,500, according to the estimates we obtained, would not furnish 12 complete sets, leaving out those for the city of Philadelphia. If we could furnish these 12 cities with standards, then Philadelphia would require fully 12 sets or more, perhaps 18. That is what Mr. Brown had in mind. The appropriation was inadequate to carry out the provisions of the act.

The ACTING CHAIRMAN (Mr. PALMER). Has Philadelphia taken no action whatever in this matter? I know they bought some standards. They have a new set of standards.

Mr. WALL. They have not taken any action through the state department. They are doing that themselves.

Mr. REICHMANN. I get newspaper clippings from all over the United States, and I notice, by the increased number I have to pay for, the great interest that is being taken by the newspapers in honest weights and measures. A year and a half ago my monthly bill for newspaper clippings did not run over \$8 to \$10; now it runs from \$18 to \$20. As I understand it, when Greater Pittsburg was formed, the city of Allegheny had a sealer of weights and measures, but the city of Pittsburg did not. Pittsburg had only an inspector of oil, a "gauger of oil," as they called him. When they formed the city of Greater Pittsburg the question was whether they would have a sealer of weights and measures, and I believe they have not at present. I understand there is an inspector at the North Side Market, who has done very efficient work within the confines of the market, where everything has to be sealed, except in the rows. This condition is, of course, an advantage to the peddlers outside, because they do not have to have their weights and measures sealed. The matter is now being taken care of by a committee of the Chamber of Commerce in Pittsburg.

Mr. WALL. The conditions are bad; they are bad enough in Harrisburg.

Mr. REICHMANN. In Philadelphia there is no sealer of weights and measures. The matter is under the control of the police department, and anyone who wishes can go to the police department and have his weights and measures tested.

Mr. WALL. I do not think there is anything to prevent the municipality, through its council, from attending to this.

Mr. REICHMANN. They can have a good system of inspection in theory.

The ACTING CHAIRMAN. I believe we have a new delegate from Illinois this year, Mr. Harrington Clanahan. We would be glad to hear his report on that State.

Mr. CLANAHAN. In the State of Illinois the secretary of state is the custodian of the standards of weights and measures. He has in his possession, and in good condition, the standards furnished many years ago by the United States.

All standards in Illinois must conform to those in the custody of the secretary of state. But the secretary of state has no authority to inspect scales and no authority to test weights and measures for the public, his only power or duty being to try and prove such

weights and measures as may be brought to him by the county clerks of the various counties.

The county clerks are required by law to keep standards which have been tested by the secretary of state, and to test all weights and measures brought to them for that purpose. But this law in Illinois is a dead letter in most counties, the county boards having neglected to appropriate the money necessary to pay for these standards. I have been connected with the office of secretary of state for twelve years in the capacity of chief clerk, but can recall only three instances where the department has been called upon to test weights or measures.

The matter of testing scales so far as the same has received public attention at all has been by officers appointed by ordinances of the various towns and cities. Except in the larger cities, I understand that little or no attention is paid to the correctness of scales.

Recently a great deal has been done in Illinois toward protecting purchasers in the matter of the quality of goods bought, but I understand that little attention has been paid to the question as to whether or not full weight and measure are given. In the coal-mining industry and in the handling of grain at the elevators, the matter of correct weights is amply taken care of by officials appointed for that purpose, but the general public is left to the tender mercies of the meat man and the grocery man.

I have heard of no agitation in Illinois on the subject of requiring the druggist or the grocery man to put into the package he sells the full amount which the package purports to contain. So far as I know the pound package of rolled oats contains the full 16 ounces and the ounce of quinine its full measure of grains. I would not be surprised, however, if an officer appointed by state authority could find extensive frauds practiced in our own State the same as in the good State of Colorado and the States farther east. Many of our people are Yankees or descendants of Yankees, and our good friends Captain Pettis, from Rhode Island, and Mr. Palmer, from Massachusetts, might find the people of Illinois quite as cunning in making a pound out of 14 ounces as the Yankee is reputed to be. I have heard that the farmers of Illinois are wise to the trick reported by our friend from Colorado, of putting only 80 pounds instead of 100 in a bale of hay.

I understand that this is a kind of experience meeting. The facts and figures as given here have opened my eyes. I should be glad if the information that has been imparted here to-day could be sent out among the people so that they could learn of these conditions. The great thing needed is more laws in relation to inspection. It seems to me that the arrangements for securing standards are ample, but that the laws we find, in relation to all the States, are, in the

language of a distinguished citizen, lately deceased, in the state of "innocuous desuetude." I mean the lack of some means of inspection. It seems to me that is what we need.

In Illinois we have provided amply for protection as to the purity of the food we use, but the poor people, of which we have a large number in all the great cities—Chicago, Peoria, Quincy, and others—are absolutely without protection as to the amounts which they receive when making purchases. I am impressed with the idea that the purchaser should not only be assured that what he buys is suitable for food, but that he is getting the full amount that he pays for. If our laws are weak in any respect, it is in the matter of inspection. That is what this meeting has impressed upon me. Inspection is what we need; something that will look after the interests of these poor people. Of course, our laws now provide that we can go into court and make complaint and prosecute the matter, but it seems to me that our Government at least ought to be paternal enough, that it will go far enough, to see that people get the right weights, and that the scales are correct.

I am hoping that the gentleman from Colorado, although he is making his farewell address, will be able to go from that mountain city, Denver, to the other end of the big capitol building, and there infuse into the body of senators some of the enthusiasm that he has imparted to this assembly here to-day.

The ACTING CHAIRMAN. That, I believe, closes the list of States we had represented. I will ask Doctor Stratton to take the chair again, because he is more familiar with the programme we have outlined.

The CHAIRMAN. It is planned to make the question of national legislation the order of business to-morrow morning. Is there anything else you wish to take up this evening?

Mr. PETTIS. I want to say one word more, if you please. I am delighted with the reports we have received from our delegates. They show that we are making material progress in this matter. I hope it will continue.

Mr. PALMER. I would simply like to say this: I trust all the delegates will be here to-morrow, as I think to-morrow's business will be by far the most important day's business we have had at our conferences. I know you will be very much impressed with the laws which the subcommittee has to offer. The subcommittee has been in touch with about 150 different associations throughout the country, in some cases representing two or three hundred of the principal merchants of the country. One of the delegates spoke of hay here to-day. We have a very strong letter from the National Hay Association on this matter. The National Food and Products Commission Merchants and other bodies, such as refrigerating associations, all inform us that they believe in uniform weights and measures. They say, "We

are ready to stand by you in anything you want to do or lay before the Congress." I believe this conference should in some way, inadequate though it may be, give expression to the fact that it would like Congress to do something along the lines of weights and measures. If we leave this matter for any extensive length of time it will lose force. It should be taken up this time. We have deliberated this thing for some time and now we ought to be prepared to do something definite regarding the legislation we desire. The details can be left until later. No matter what we may do in the line of legislation, we are going to make some mistakes. Of course, we want safe and certain legislation, but undoubtedly mistakes will occur. That has been true of every other legislative question taken up in the country. It is a simple matter to have the details changed afterwards. But now we should be prepared to make some kind of a start if we are going to accomplish anything in twelve months, or even twenty-four months. It is going to take several years; and, as one of the delegates has before stated, we will be prepared to get together and formulate what we think we will do in detail. Let us appoint our committee and let the committee go ahead and work out some of the details for the body.

Mr. WALL. That is right. I thoroughly agree with Mr. Palmer in what he says. I am only sorry that national legislation has not already been undertaken. If there were national legislation on the subject, Pennsylvania would have framed an act after the national law and in harmony with it. We did not know when we introduced that bill in our State whether it would conform with what this association will recommend, because we may have to preserve what we call the State's rights. But, in my opinion, it will do no harm for the States to pass acts conforming to the acts of Congress, though perhaps carried out more in detail than would be in a general act of Congress.

The CHAIRMAN. I am sure that is true. I think that question is no longer debatable. We ought to get something under way; but it is a question of what to get, and we will spend to-morrow in discussing that. I might explain what has not been done along that line and offer some suggestions that have come to us, but I think we had better reserve them until to-morrow morning. The case is not as difficult as it might seem.

A motion to adjourn until 10 o'clock to-morrow morning was seconded and carried.

THIRD SESSION (MORNING OF FRIDAY, DECEMBER 18, 1908).

The meeting was called to order at 10.30 o'clock a. m. by the chairman.

The CHAIRMAN. I think we have come to the most important object of the meeting, the discussion of proposed national legislation. Perhaps at the outset I should state what has been done along this line.

A year ago those of us at the Bureau who had talked with the different members of Congress and with our legal advisers concluded that it would be almost impossible to get through a national law such as we would like, and at the last meeting a method was suggested whereby each State was encouraged to enact uniform legislation. For a long time I felt much in favor of that, as being the only way we could get in an entering wedge, but during the year, in talking with Mr. Smith, Chief of the Bureau of Corporations, and Mr. Earl, the solicitor of the department, two of the best lawyers in the service, they both advised very strongly against the method proposed. I refer only to the first few paragraphs of the proposed national law. The advice of these gentlemen and also the members of Congress with whom I have talked is that it would be unwise for us to go before Congress with such a measure as this. They say they want a matter in definite form; they want definite points to consider, and I am positively sure that the paragraph in relation to packages (the things we have made provisory here) must be taken out and considered as a separate measure.

The proposed local law has been taken up by the Bureau and recommended to at least three or four different States in the last year. We are having many inquiries in regard to it. Quite a few States are working and planning to adopt something along that line.

I am encouraged as to the possibility of getting through a national law, a simple mandatory law, in regard to the fraudulent use of weights and measures. We have found a number of precedents in the government service, notably in the navigation laws and in the steamboat-inspection laws, where mandatory laws exist. The question that is going to come up in Congress is this: How do you propose to carry out the law? That, of course, is vital. It is the opinion of our legal advisers and others I have talked with that it is possible to devise a plan whereby the General Government can cooperate with the States. A compulsory law will be an absolute failure unless backed up by the States. I know it will be supported by the

States so far as enacting their own laws is concerned. That is not the point, however. Suppose Congress enacts a law making it a misdemeanor to use fraudulent weights and measures and providing a penalty for its violation. Then all cases must be tried in a United States court. The question as to how we can penalize the fraudulent use of weights and measures in an effective manner is very puzzling, yet I think it can be worked out by the General Government cooperating with the state governments—that is, by deputizing state officials—or by the States enacting laws themselves, which is, in effect, the same thing. It is a matter that must be very carefully thought out.

That will not prevent us from formulating at least two sharp, definite measures—one requiring the net weight of contents to be shown on the packages and another making it a misdemeanor to use fraudulent weights and measures. I suggest, if you agree to introduce separately two such measures, that you draw them up this morning and have them introduced immediately. You have had enough experience in connection with the handling of packages to draw up such a bill.

Mr. PETTIS. I believe we ought to get a commissioner of weights and measures appointed in every State and get a movement started in that direction before we get to work on this package business.

The CHAIRMAN. Mr. Pettis, we assume that that is to be done. We are asking for an appropriation to go out and make an investigation in the different States, and the principal object of that appropriation is that the Bureau may assist in getting all the States started in this work. Those two things do not conflict.

Mr. REICHMANN. In order to bring this question before the conference, I would like to introduce three resolutions. I think it would be a waste of time to go over these bills here, because we have gone over and taken them up step by step. We have agreed upon them; and the executive committee and the Director of the Bureau of Standards know generally what is desired. It is a legal question at the present time; it is a question that has to be considered by the legal advisers of the Bureau and of the Department, the general outline having been acted upon section by section at the last meeting, in May, 1907—over a year ago. I therefore would like to introduce these three resolutions:

(1) *Resolved*, That the National Conference on Weights and Measures, in session in Washington, D. C., on December 17 and 18, 1908, realizing the enormous number of defectively constructed scales of weight and measures, strongly urges that appropriate legislation be enacted by Congress, making it a misdemeanor to manufacture, use, sell, or offer for sale a type of scale, weight, or measure that had not been proved at a careful investigation by the Bureau of Standards, Department of Commerce and Labor.

(2) *Resolved*, That the National Conference on Weights and Measures, in session in Washington, D. C., on December 17 and 18, 1908, most emphatically urge and indorse legislation by Congress which will secure throughout the United States a clear indication, on the outside of containers, of the net contents thereof, in terms of standard legalized weight or measure, of the commodities put up, sold, or offered for sale in containers.

(3) *Resolved*, That the National Conference on Weights and Measures, in session in Washington, D. C., on December 17 and 18, 1908, request and respectfully urge the Director of the Bureau of Standards to have introduced into Congress the national weights and measures law proposed and acted on by the conference at its meeting in May, 1907, in such a manner as may be proposed by the legal advisers of the Bureau and of the Department of Commerce and Labor, which, in the main, carries out the provisions of the legislation proposed on the above date by the conference. If the Director finds by the 1st of April, 1909, that he is unable to have such measures introduced, to report to the executive committee of the conference, that they may take up the matter; in other words, that they may render such assistance as they may through their Senators and Representatives, or through commercial organizations.

If you are interested in honest weights and measures, you should be willing to assist financially and set up late at night writing to these commercial organizations and getting them interested. There is the primary trouble; a lot of weights and measures work is nothing but talk. What we need at present is action, and I am satisfied that it would be a great detriment if within the next ten months we can not get some legislation before Congress. In the great Empire State we are used to doing things. We want to get right out and do them. Of course, I do not want to interfere with the niceties of custom of Washington and Congress, but it seems to me that these resolutions are reasonable, and we would only lose time by going over the details, section by section, of the measure as it is at present, because it is now simply a legal question.

Mr. WALL. This does not interfere in any way, does it, with the investigation to be made by the Bureau of Standards?

Mr. REICHMANN. No. As a matter of fact, we want it. I think I have shown by every action that I want to work with the Bureau and help it. This weights and measures proposition is absolutely next to the pure-food proposition, which is a matter of public health and therefore of primary importance. But next to the pure-food bill this is probably of most importance for the commercial interests of the country; also for interstate and foreign commerce. If any of you gentlemen are imbued with the idea that foreign markets take American goods without question as to weight, you will be disgusted and ashamed when you learn the facts. That matter comes up time and again. It is not necessary for me to give you hundreds of illustrations from my experience in New York State. There are questions coming up all the time from the foreign markets because we have no official way of measuring. The producer, the farmer, the packer,

and the commission man have to play both ends of the game. But who finally pays it? The consumer—the gentleman from Iowa, and the gentleman from Colorado, and the people out West. The commission merchants in New York do not pay anything.

The CHAIRMAN. The trouble with Doctor Reichmann is that he represents not only one great Empire State, but two—New York and Texas.

Mr. REICHMANN. I have been a citizen of New York for five years, and anybody who can be a citizen of that State six months and not be imbued with its spirit had better get out.

I would like to make another remark. Two years ago I was in Texas, and told the governor, Mr. Campbell, who is a personal friend of mine, that the condition of weights and measures in respect to retail business in Texas was bad. He said, "I do not doubt it, but what are you doing in New York State? As soon as New York State does something we will follow. The eyes of the South and Southwest are on New York. As soon as you do something there, it will be time for us to do something."

The CHAIRMAN. That is a very common way of turning away criticism.

Mr. THOMAS. I thoroughly favor these resolutions, but before a vote is taken I want to speak concerning the penalty clause, to which the chairman has alluded. I believe I raised this question as to national legislation at the last conference, and at that time expressed the opinion, which I have since seen no reason to change, that a penalty clause accompanying the legislation would prove of the greatest assistance in state work. In Ohio the respect of citizens generally for a United States court is far greater than for a court held by a justice of the peace, or almost any local court. I have no idea that if the penalty clause were included in the national law it would often be called into operation, but for one I should like to see it there. A few cases carried into a United States court would be effective in case it should prove necessary to bolster up state and local enactments in the local courts.

The CHAIRMAN. Mr. Thomas may be interested to know that our Solicitor has almost exactly the same view of it. I feel myself that the penalty in that form is going to be the best thing. However, there is another matter we must take into account, and that is, how we are going to enforce this penalty. On this point I am not quite clear. If it is a United States statute, the case must be tried in a United States court. How are we going to do this without United States officials? The enforcement of the navigation laws is looked after by the Bureau of Navigation, and there is a provision whereby in many instances the informer gets half of the fine. We may be able to utilize state and county officials, but the trial will be in a United

States court and the penalty administered by it. Whether or not there is danger of conflict, I do not know. I am not a legal authority, but we are working on that question.

Mr. WELD. I agree perfectly that if this can be bolstered up by a penalty clause, and the trial carried to a federal court, it will be much more effective than if we have to depend simply on a jury trial by the neighbors of the person tried. How do cases of counterfeiting get before federal courts?

The CHAIRMAN. I suppose usually by the party injured making complaint, and then it comes before the court.

Mr. WELD. It seems to me the way would then be clear for parties injured through the use of false weights and measures to obtain redress, if they called attention to the matter and got it before a federal court. There ought also to be indictments by grand juries, as in other cases, and if those fail there ought to be recourse to the federal courts.

The CHAIRMAN. I am glad this question of counterfeiting has been brought up, and I might state in connection with it that the Treasury Department maintains a large secret service, organized primarily for that service; and wherever the United States has provided laws and penalized them it has provided means for getting evidence and bringing suit. That will have to be done in this case, I am sure. I hope you can always have back of the local and state law a United States law. But it is going to require some time to bring about the co-operation between the federal and the local authorities, which I think can be done.

Mr. PALMER. That is largely a legal question that will have to be settled outside. We can not do much by discussing it here, as we seem to be all of one opinion. If there are no further remarks on the remainder of the resolutions, I call for a vote. The state courts are considered very important in many of the States at the present time, but I think as a last resort we should have the power of the United States behind us and the United States judiciary.

Mr. WALL. Mr. Chairman, it is not proposed to interfere with any laws that a State may wish to enact, provided they are parallel with the national law. Injured parties would have two courses open to them. They could take the case before either the State courts or the United States courts. If they failed in the State courts they could then take it to a United States court. Is that right?

The CHAIRMAN. I would not like to give you a definite answer to that, as I am not a legal authority. It would be a good thing if we could bring about something like that.

Mr. WALL. We propose to try to have a law passed at this session of our legislature, and any information we can get along those lines in the way of shaping our laws to conform to what may be enacted by

Congress will be of benefit to us. The penalty clause in a national law would have a moral effect outside of the actual threat of resorting to it. People sometimes do not respect the State authorities nearly as much as they do the national authorities.

In speaking of the moral effect of the United States law I do not believe it amounts to much unless the laws are enforced. You remember how the navigation laws have been enforced in regard to gasoline yachts. Nobody has paid any attention to them lately, yet there was a penalty; but the moment the laws were enforced, arrests made, and people fined the laws were obeyed. I think the penalty can be provided for. In the navigation laws anybody can inform and the informer gets half the fine. The Secretary of the Department has a right to remit these fines, and whenever it is a perfectly apparent case of ignorance of the law or there is some circumstance which justifies the breaking of the law the Secretary remits the fine, but he never does it the second time. That has proven a very wise thing in regard to navigation laws and might be the best thing to do here, as it would educate the people.

Mr. PALMER. Is not this a slightly similar case to the enforcement of the national pure-food laws? We have national legislation in regard to the purity of food and drugs, but, notwithstanding that, we have state departments which have charge of the enforcement of the pure food and drugs laws. I know that in Massachusetts we have a very efficient department, although it has been in existence a great many years. Prosecutions still continue to be made in local courts in relation to purity of food and drugs. I think Kansas and other States also have the same law. Now, all this exists notwithstanding the fact that we have national legislation and, presumably, enforcement of the national legislation in relation to the same subject. I can not find that we are getting much enforcement of the national pure-food law, although I do not want to be quoted as authority. I know in regard to a question that came before the department for investigation some time ago I was told that practically nothing had been done in relation to the actual enforcement of the law. Massachusetts has a very efficient state inspection service in relation to this particular thing. There is hardly a day passes that there is not some case brought up in relation to those offenses. The cases are brought by the state board of health and I know that there is no cooperation except possibly in a general way.

The CHAIRMAN. It seems to me this is a case very similar to what we will have to meet. The advantage of discussing this question thoroughly here is that it enables us to come to an understanding in regard to it. If we have thought out some of these problems we will feel stronger in regard to them when we come to promote them among our local people or our Congressmen.

The SECRETARY. Mr. Chairman, it seems to me there is a necessity for national authority in the matter, even if the States were all organized. A case may come up in which one party who is concerned is in one State, and the other party in another State. I do not see how that can be settled except by national legislation, especially if the state laws are different. I happen to have an example of that right here. This is the second letter received from an importer of olive oil. About two weeks ago he wrote that whenever he imported olive oil and gauged it in Philadelphia the amount that he gauged was always less than the amount with which he was charged. We wrote and inquired whether gauging in New York was done by the customs service, or whether it was done by private individuals, and the answer I have here is in reply to that letter. It reads:

Yours of the 4th instant received. Thank you kindly for the same. I would respectfully ask you to advise me in this matter. Parties in New York in the olive-oil business have a way of doing business that I do not think is right. They scratch out the gauger's mark made by the customs service and substitute another made by their own gauger, and always in their favor. This is what I wish to know, Can they do this without violating the law? Thanking you sincerely for your kindness in advising me, I respectfully ask your reply.

The CHAIRMAN. Who does this gauging in New York, Mr. Reichmann? Is it separate from weights and measures?

Mr. REICHMANN. The commission merchants and the associations are very anxious to have state legislation or national legislation, but they have not been able to get it, consequently they have had to have their own gaugers. They are the ones who are kicking, however.

The CHAIRMAN. Let them have it.

Mr. REICHMANN. We are trying to give it to them.

The CHAIRMAN. I want to say, from the standpoint of the Bureau, that those resolutions have our hearty support. If I had written them from my own personal opinion, they would be the same. I do not see the slightest objection to them. (I am speaking from my own standpoint). I do not see anything there that we can not take hold of and assist in every way to get through. There are two definite things to work for. That to my mind is far better than this provisional legislation, because it is a positive measure. It does not make it permissible on the part of some dealer to do a certain thing if we do so and so, but it says he shall do so and so, which is far preferable. Are you ready for the question?

The resolutions were unanimously adopted.

Mr. PETTIS. I personally am intimately acquainted with both Senators from Rhode Island and the Members of the House. I can assure right now that you will have their support. I would like to have a copy of these resolutions go to them, explaining what we want. I also move that the secretary be instructed to send to each one of

the commissioners of weights and measures and the state sealers, and the governors of the States, a copy of these resolutions.

Mr. WALL. I would like the motion to include all the present members of this association. We are not all sealers of weights and measures.

The motion as amended was unanimously carried.

Mr. REICHMANN. I move that a committee of three be appointed to confer with prominent citizens and at least 12 national commercial organizations, with a view to organizing a national full weight and measure association, whose membership shall be unlimited, and to which anyone in favor of honest weights and measures shall be appointed, the committee to report at the next meeting, but with the proviso that if the committee find it advisable or expedient to organize such an association they will have full power to do so. I would like to know what the sealers think of it. What the whole weights and measures cause needs is the interest of the general intelligent public as well as the purchasing public. Take, for instance, the enormous effect, the enormous power, created by the forestry association. Anyone interested in conservation of any kind can become a member, and thousands of members of the National Forestry Association. Take, on the other hand, the honest weight movement of the millers' association. Think of the thousands of members they have. Practically every miller is giving full-weight flour, and it is wielding a tremendous influence. Take the Flotten Verein, of Germany, with over a million members. Do you think they would get any of the large appropriations they receive in the German Empire if it were not for the Flotten Verein? I think exactly the same thing is needed in weights and measures. I might say that I know a number of prominent and wealthy men in New York who are willing and anxious to start such an organization and finance it for a time until it becomes self-supporting. The National Forestry Association has a fee of \$2. I think a fee of \$1 a year would get a large number of these people interested, and we could have our meetings of the national full weight and measure association (if such be the name adopted) in Washington annually, or twice a year, or even once every two years. We could have thousands of people here and the whole country would be aroused to the importance of the subject.

Mr. PALMER. I do not want to take up time by a repetition of Doctor Reichmann's remarks, but I think the idea is a good one. We constantly have inquiries as to whether such an organization is in existence, or whether they shall do what they can individually to help the cause along. I think I referred yesterday to a talk I had with a dealer in leather while coming over in the Pullman. He told me of some cases which came under his observation, one involving

\$1,300 on a certain shipment. He said what he most desired at the present time was some kind of a standard system of measurements, a standardization of measuring machines themselves and their subdivisions. He asked me whether there was a national organization which considered those things. I told him of this conference. He asked, "Is there not anything that the manufacturers can be connected with in case they desire to give their support, to help establishing new laws?" I think we are all in favor of starting an organization along the lines laid out by Doctor Reichmann.

Mr. REICHMANN. I would like to read a sentence from a letter from Governor Guild. It is not necessary to say anything about Governor Guild, as he is well known all over the United States. I asked him for a letter on the subject of weights and measures, and I wish to read the last sentence of his reply. I think it is the keynote of the whole situation. He says:

Some reforms only touch the average citizen once in a lifetime; but the enforcement of honest weights and measures touches every human being at every moment of every day.

Mr. BENT. I think we all have abiding faith in the natural integrity of the ordinary American business man. I do not believe that it is the desire of great institutions to manufacture nonstandard packages when the conditions can be brought about that will enable them to sell their products in the form of standard packages; nor is it, in my judgment, the desire of the producers of any of our great commodities to sell nonstandard quantities when conditions will enable them to sell their products in standard quantities. I believe this last resolution strikes directly for the fundamental principle and will evolve the most desirable results. I believe there are thousands and thousands of people in this country who will interest themselves from the broad standpoint of equity; and the managements of great institutions furnishing commodities desire standard packages and honest weights and measures.

The CHAIRMAN. This is a matter almost too apparent to need discussion. Any such organization would do a vast amount of good. It would bring the subject before the public and go far to popularize it. We need organization; we can not do anything without it.

The motion was seconded and unanimously carried.

Mr. PALMER. I do not want to impose too many tasks on the Bureau of Standards, as I think it has enough to do already, but there is one thing of which I think we all realize the importance, and that is the letters which the subcommittee received in reply to its inquiries from the different trade associations, in which they heartily indorse the general movement for honest weights and measures and the enactment by Congress of fundamental laws on the subject. We have those letters on file here, each one of which repre-

sents the sentiments of the executive committee of a particular organization. They are strong letters and represent thousands of firms in various lines of business throughout the country, trade associations, etc.

Now, when you get back to your homes each one is going to talk about weights and measures, and it will be considerable advantage if you could have sent to you by the Bureau of Standards a list of the various trade associations that passed those resolutions. It may be possible that the officers of a particular trade organization are in your own town. I know that we have several members of the executive committee and officers of some of these organizations in Boston, and I have already had inquiries by phone and personal inquiries at my office from some of them. Then when this matter is taken up by the local organization or committee, or members of that particular organization in your town, you could take up the matter with them intelligently. I think it would be a decided advantage for each one of us to know just what trade organizations are favorable. I know it will impress you, because they are from large organizations.

The CHAIRMAN. There is another matter that I want to speak of before we get off the subject of national legislation. There will be no trouble arranging for a hearing on such a bill so far as the Committee on Coinage, Weights, and Measures is concerned, and I assume it will be referred to that committee, where it will have to be very carefully and wisely handled. If there is opposition to the bill, the opposition will ask to be heard, and we also will wish to be heard. It would be wise, in case opposition does develop, to have one of the members of the association who is particularly interested here in Washington. We will want to know just what the line of attack is. You can not wait until it is published afterwards, because nine times out of ten it must be answered right on the spot. To my mind it would be a mistake for us to go to the committee and say all we had to say at one hearing, and then let the opposition come in and be heard. I am assuming that there is going to be opposition; I have no doubt of that.

Mr. REICHMANN. There is no doubt about that. There will be great opposition.

The CHAIRMAN. We must plan our campaign accordingly. We will have to have some one who is deeply interested, and preferably it should be some one outside of the Bureau of Standards. Just as quick as the Bureau of Standards goes down there and attacks the opposition, they will say, "Why, this is a Bureau of Standards measure; they have some object in getting that through." In the committee meeting is where the opposition will be met first. We must have representatives from the outside right on the ground. Those of you who encounter this species of deception every day and

can come out with the facts, are the ones who should be heard. The Bureau will come out in as strong language as possible, as we are strongly convinced as to the importance of the matter. We want the measure to go through; but the evidence must come largely from you. I hope you realize the importance of that statement.

Mr. THOMAS. Mr. Chairman, I move that a committee be appointed by the chair to represent this conference at a hearing upon the proposed national legislation before the committee to whom the bills are referred.

Mr. PETTIS. I second the motion.

Mr. REICHMANN. I would like to add this also—to devise ways and means of addressing commercial organizations before the hearing is held. My reason is that many times it is effective to write a letter and anticipate their objections. I will cite one instance out of many. The Eastern and Central New York Coal Merchants' Association was thoroughly opposed to any weights and measures legislation. Their executive committee came to see me in opposition to the measure, and they wanted me to withdraw certain parts of it. Inside of fifteen minutes I showed them where it would help them. They had one of the strongest lobbies in the legislature in favor of the bill. I think it will be very effective to draw up a circular letter, have it printed and sent to all these commercial organizations, together with a copy of the resolutions, and anticipate any of the points of attack which we think will be made.

After a brief discussion the motion was put and carried.

Mr. BENT. It seems to me, in connection with this legislation which it is suggested be enacted by the present Congress, that outside of three or four States and the city of Washington the general public and Members of Congress themselves and their friends and advisers know very little of the real evil; that is, the boiled-down essence of how the public suffers from present conditions. It will be a good plan to prepare a concise statement of definite, specific instances, as many as can be compiled quickly by the gentlemen who have come in personal contact with them, and have the copies distributed among the members of this organization and those interested with us, and the membership of the proposed organization of honest weights and measures advocates. That would furnish the basis of argument before Congress, because it will bring it to their attention from a standpoint they have never considered before.

My attention was thoroughly aroused to the situation during my first visit to this conference by the specific instances set forth in the statements of the gentlemen who are in charge of weights and measures in New York, Massachusetts, Rhode Island, and the city of Washington, and the statement of Mr. Haskell yesterday qualifying a rather random statement I made estimating that people were losing

10 to 20 per cent of what they had paid for. It strikes me that specific facts to show to Members of Congress and the Senate of the United States how their constituents were suffering (and we are all probably suffering alike from this condition of affairs) would bring it directly to them.

Mr. REICHMANN. That is what we are trying to do in the little "Journal of Weights and Measures." In the January number we have a picture of some beans that were bought by the quart, and an estimation as to how much people were losing by buying beans in this manner. An exceedingly conservative estimate tells us the loss in the United States is very nearly a million dollars, or about \$960,000. This is the actual loss to the people of the country. Of course, we have to show it by pictures. There are a lot of detailed measurements of things of that kind which it is difficult to publish. For instance, I have in my office over 5,000 weighings on various package commodities in which we weigh the gross weight and the tare, and find the net weight. We measure the dimensions of the box and put the date on the outside of it. For instance, take the case of raspberries. Here is a box, the gross weight of which is $15\frac{1}{2}$ ounces, tare 2 ounces, leaving a net weight of $13\frac{1}{2}$ ounces, yet it is sold as 1 pound. The box on the outside measures 2 inches by 6 inches by 4 inches. The words "one pound" were formerly on the box, but they had been blotted out with black ink, showing that the box had been used before the pure-food law went into effect. We have 5,000 measurements of that kind on hand; also the names of the packers and the times and the places where packed. We propose to publish all of it. Yet you see what a rather risky thing it is to publish it, because, in a sense, you would do an injustice in that you would not include every one. When we publish something on lard we want to have the name of every packer who puts up lard in the United States. The first thing people will say is, if you publish this man's package of raspberries, why don't you publish this man's and that man's, etc.? That is, referring to your statement of specific instances. Of course, a specific instance is what the people want, and we shall take up all the cases we can in the "Journal of Weights and Measures." We can not do it officially, at least I can not do it officially in New York State as an official publication of the State, but I do hope to publish in June, when the bill goes through, the names of the people who put up such things. I think it would make a book of nearly 150 pages.

The CHAIRMAN. One object I had in asking for this complete statement was that we might use it in our campaign. It is a sort of old story to us, but we have had some of the most valuable evidence given here. I think it is the most interesting meeting we have had from that standpoint.

Mr. BENT. The reason I suggested this feature of the question was due to the fact that I received from the Bureau of Standards a copy of the proceedings of the second conference of this organization. We can only judge the effect upon others by the effect upon ourselves, and my attention was riveted to the specific instances therein set forth by the gentlemen from Massachusetts, New York, and Rhode Island. It seems to me that those would appeal to Members of Congress with great force. The compilation of those facts, without, of course, injuring any line of business, in a volume as large as possible, and yet not so large that it would lose the attention of the Congressmen and Senators, will bring to them the situation of their constituents in such a way as to cause them at least to give the question serious consideration.

The CHAIRMAN. We will do all we can to hurry that up.

Mr. PALMER. I know you are all very glad to get here each year, and it is a great pleasure for us to come and meet here together and meet the officers of the Bureau. I know we all appreciate the fact that they are all very kind and courteous to us, and I make a motion that this organization extend a vote of thanks to Doctor Stratton, Mr. Fischer, and the other officers of the Bureau of Standards for the courtesies extended to us.

Mr. THOMAS. I second the motion.

The motion was put by the Acting Chairman, Doctor Reichmann, and unanimously carried.

The CHAIRMAN. I am sure we all appreciate that. We deal with a great many organizations; we have representative committees in almost every line of the Bureau's work, as the committee of the American Institute of Electrical Engineers, and various committees of that sort, but there is none that is as near to the Bureau as this organization. I am sure we appreciate your coming here, and by and by the knowledge we get from you—that is, the assistance we get by learning the details of what you find in the various places—will be of great assistance to the Bureau. It has already been, but that feature of your work will grow; that is, the relation of your work to the Bureau of Standards.

The election of officers is next in order.

Mr. BENT. Mr. Chairman, before we proceed to the election of officers, it seems to me that this body ought to express itself in some way commendatory of the work of establishing the "Journal of Weights and Measures" by these few members of this organization. Therefore I move you that it be the sense of this body that the journal is highly appreciated and has the hearty support and commendation of the National Conference on Weights and Measures.

The CHAIRMAN. I think this is very opportune and I am pleased that you brought it up, because the executive committee practically

pledged the association to the support of this magazine, and I think it ought to be supported by all the members.

Mr. PETTIS. I second the motion.

The CHAIRMAN. I wish to suggest that it is the custom in most scientific societies to include a subscription to their official journal in the membership fee, and I wonder if it would not be a good plan, if we form this full weight and measure association contemplated, to include in the membership fee a subscription for this journal. If we can get 10,000 members of this larger association, and each one gets this journal as a sort of return for his membership fee, it would help enormously. That is the custom in nearly all societies; for instance, the Physical Society has the Physical Review. I think the matter is worth considering at least.

Mr. BENT. It seems to me that this question of publicity is an important one. This journal is the proper avenue through which publicity should be sought by this organization, and with the consent of my second I shall be pleased to incorporate in the motion that the subscription fee be included in the membership of the broader organization, the full weight and measure association, subject, of course, to the action of the committee after due consideration.

The motion as amended was put and unanimously carried.

Mr. REICHMANN. On behalf of the publication, I wish to thank the gentleman for the motion and compliment. There was a necessity for the publication. You understand it is not a money-making business, as all the services are rendered free of charge. The salary list is incorporated under the laws of the State of New York. We had a peculiar incident when the comptroller asked for our report. He said, "You fail to state the salary of the editor." I put in what we call a "goose egg" for the editor, the assistant editor, the secretary, and all the way down the line. The comptroller said that was a very unique corporation in the State of New York.

Mr. BENT. It seems to me, Mr. Chairman, that the lack of attendance at this conference is worthy of just a moment. The fact that the attendance is less than it was at the first or second conference from some standpoints might be considered of a discouraging nature. However, I do not think it is discouraging to those present; but I think the active cooperation of the governors of the various States could be sought and attained so that our next conference will be very much larger. I believe the governors, when they realize the importance of this work, will take sufficient interest to see that their respective States are represented.

Mr. PALMER. It is a pretty good thing for the delegates to consider getting in touch with some of the surrounding States not represented here. I am sorry to see that Maine, New Hampshire, and Connecticut are not represented. They have very good, active sealers

there who could have represented the State, but they declined to do so on account of the expense. Mr. Pettis, Doctor Reichmann, and myself have written personal letters to the governors in relation to this matter, and I think by next year we will get a representative from each of these States.

The CHAIRMAN. I want to say along this line that in making the investigation of the condition of weights and measures throughout the country, for which we have asked Congress for funds, we intend to go first into States which have no representatives here and depend, so far as we can, upon you gentlemen here for the information from the States you represent. In that way we will not duplicate each other's work. I am sure that the work we are about to inaugurate will bring a larger attendance next year. The plan of taking up neighboring States is a good one. One of the large scale manufacturers was at the Bureau a few days ago and was anxious to undertake some movement exactly like this. I told him that this association had the matter under way and that the thing for him to do was to take some one or two definite States and work up a sentiment there. We can not do all ourselves; we can only reach a number; but we will try to pick out the worst cases.

The SECRETARY. There is undoubtedly more interest being manifested in this particular conference than there has been in any other. We expected to have a large number of delegates, because this seemed to be a desirable time to invite people to Washington. There are many conferences here at this time, Congress is in session, and we were disappointed in having so few delegates. But many of them had good reasons for not coming; for instance, Mr. Haarer, of Michigan, was coming, but at the last moment he had to attend to some very important business and was forced to remain away.

Last year Maine did not even appoint a delegate. This year a delegate was appointed, but there was no fund from which to pay his expenses. The same was true of Connecticut. So it was in other States; for instance, the governor of Alabama appointed seventeen delegates, and the governors of California and Georgia one each. Had all the delegates arrived who were appointed, we would have had by far the largest attendance we ever had.

Mr. WALL. Mr. Chairman, I feel interested in seeing as many States represented as possible, and will do all in my power with people in a position, politically or otherwise, to help. There are a few Western States in which I have relatives and acquaintances, and I will ask them to try to have their States represented at the next conference.

The CHAIRMAN. I want to call attention to the fact that all the delegates present are practical weights and measures officials. It has been a mistake in the past for States to pick up somebody and send

him as a delegate, as they would to any sort of a convention or conference. As a real active representation of the right sort of officials, this is far ahead of any meeting that we have ever had. This is what we want. It is, however, better to have a State represented by an official appointed for the occasion than not to be represented at all, because he goes back to the State and tells what we are trying to do. It results in bringing the proper sort of representation the next time.

Mr. HASKELL. I would like to make a statement relative to the conditions that we find in the city of Washington in regard to flour. If one were to weigh sacks of flour that are sold in thirty-seconds, sixteenths, eighths, quarters, and halves, I think he would find a situation that would astonish him. We estimate that we use 350,000 barrels of flour a year in the District. Of the amount of flour that is put up in sacks for this market about 80 per cent (taking the lowest estimate) will run 4 pounds short to a barrel. We find that the annual loss to the people of Washington on that one item alone is \$67,200. That illustrates the necessity of having something done about this package business.

The CHAIRMAN. Mr. Haskell, does that come from weighing the bag in with the flour, or is it a deliberate leaving out of a certain amount of flour?

Mr. HASKELL. That is a part of it; but the flour itself is short.

The CHAIRMAN. Does it come from the drying out of the flour? In many commodities the question of moisture is very important. What is the usual amount of moisture?

Mr. REICHMANN. It is 16 per cent in butter.

The CHAIRMAN. And you can force in how much?

Mr. REICHMANN. Twenty-five per cent, I think. In fact, a man can not get a position in a creamery in some places unless he understands how to put moisture into butter.

The CHAIRMAN. I wonder if that condition arises in connection with flour; that is, does it dry out to some extent?

Mr. HASKELL. The thirty-seconds should contain $6\frac{1}{2}$ pounds of flour. Our investigations show that it runs from $5\frac{1}{4}$ to $5\frac{1}{2}$ pounds.

Mr. REICHMANN. I would suggest that if any of the gentlemen make weighings of flour and keep the results they send them to the president of the Honest Weight Association, in Knoxville, Tenn. The association has in its employ a half dozen detectives and desires all the evidence of short weight it can get in regard to any brand of flour. When any evidence is obtained against a certain mill, it is notified that it will be exposed to all wholesale merchants if it does not give full weight.

The CHAIRMAN. Mr. Haskell, is the flour you speak of rebagged in Washington, or is it bought in the barrel?

Mr. HASKELL. It is put up at the mill. We have estimated and obtained figures on this matter. In regard to a certain brand of flour manufactured in Minneapolis, we found that the amount of flour saved to the mill by these short packages pays the expense of those big mills.

Mr. REICHMANN. I have not the least doubt of that. I went into a little creamery in Washington, and the proprietor said to me, "We don't have a small creamery; we put up 400,000 bricks a year. We put them up 1 ounce short purposely. It pays all the 'overhead' expenses—that is, operating plus interest on the investment—of this creamery. I do not see why we should not get this as well as the man who is buying the goods."

Mr. HASKELL. The output of one of the concerns in the city of Minneapolis is 20,000 barrels of flour a day. Four pounds shortage on each makes 80,000 pounds of flour a day saved to that mill.

Mr. REICHMANN. With reference to the question of shrinkage, I have in mind a man who buys all commodities in large quantities. He buys flour in lots of about 10 carloads. I weighed some flour which he had just received and also some he had had on hand for eight months and found exactly the same shortage; each 20 bags showed the same. Was it a loss by shrinkage? It was not conclusively proven, yet it seemed to me it was evidence of the shrinkage due to evaporation.

The CHAIRMAN. I would like to ask those of you who are in a position to make a few simple weighings to do so on this question of shrinkage whenever it is possible, as Doctor Reichmann has done. We need to-day all the information we can get on this question. There is a gentleman here to-day who is interested in establishing a conditioning house in New York to study shrinkage in weight, etc. The question of shrinkage comes up in nearly every subject, and the more information you can give us in regard to it, the more interesting it will be.

Mr. REICHMANN. They are inclined to make the excuse of shrinkage on everything, and it is a matter which has to be carefully watched.

Mr. HASKELL. We arrested a man for selling a short-weight pound. Our maximum fine is \$100. He was asked to put up \$100 collateral, which is allowable in the District. Then if the party does not appear it is not necessary to bring him to trial. This man did not appear for trial; he lost his \$100.

Mr. THOMAS. Mr. Chairman, I think we ought to take this position in regard to shrinkage: That water is something that does not cost anybody anything practically; that a person who buys butter or anything else wants the thing he buys and not water, and that it is the consumer who should receive full weight. If the question of shrink-

age is involved, the manufacturer ought to put in an excess weight, so that the water which is there would simply be his overweight. In other words, he will sell a pound of butter as it reaches the consumer.

Mr. REICHMANN. That is the position I have always taken—the consumer is entitled to the correct weight as he buys it over the counter.

The CHAIRMAN. The question of the standard amount of moisture allowable often comes up. Take, for instance, butter. I do not know how it is, but it is quite likely that butter can not be produced without a certain amount of moisture. We have to agree what is allowable, say 10 per cent, or whatever it is. In the case of wool and silk, the standard is a certain per cent of moisture necessary to have in order to weave the material. It is dried "bone dry," then the standard amount of moisture is added. So in some cases we might have to add a certain amount of moisture.

Mr. WELD. In the case of butter, the per cent of moisture depends on the temperature of the churn. In Iowa the temperature at which butter is churned in the creameries is prescribed.

Mr. PALMER. Mr. Chairman, we have some of the same conditions in Massachusetts. Take the case of sausages. In the East it has become the practice, for sanitary reasons, to put up sausages in oiled packages. We found them running a trifle short. I thought possibly it was due to evaporation. This question of evaporation is a most important one and a very lengthy matter to examine into and determine what the amount should be. I investigated this case of sausages, and as far as I could determine they were not pound packages. A short time ago I learned from an employee of the manufacturer that the beam scale was set at $15\frac{1}{2}$ ounces.

We have the same question in regard to butter. It is an important one. Only last week one of my inspectors, working in one of the cities in western Massachusetts, went into a store and took commodities down from the shelves as our inspectors do. He assumed that authority because he knew the commodities were to be sold by weight or measure. We have never yet had our authority questioned. The inspector also took packages of butter out of the ice chest, and those in a great many instances were found to run from $14\frac{1}{2}$ to $14\frac{3}{4}$ ounces. In all cases the butter was received from the same creamery. My inspector told the dealer not to sell this short-weight butter; that if he did he would have him up in court. When the inspector went down to the depot the next morning he found 26 cases of this butter being shipped back to the creamery.

I had correspondence with the largest millers in the West, and found they are all disposed to put out full-weight packages; but in their letters they said, "Why is it that Massachusetts demands we put up full-weight packages and other States do not demand it?" Their

complaint was that they had to put up special packages to be sold in Massachusetts to comply with what they called the arbitrary law there.

There is a reputable business man in our section who is much interested in the weight of flour. He goes to the trouble of weighing sack after sack of the flour he buys. He buys the finest kind of flour in almost trainload lots. The bags of flour are supposed to weigh $24\frac{1}{2}$ pounds. Only last Saturday we took final action on a case reported to us of 500 bags of flour, which were sold in southern, central Massachusetts. The flour was bought from a wholesale dealer in Springfield, and was the very finest grade we use in the East. All of these bags were from 4 to 6 ounces short of the $24\frac{1}{2}$ pounds gross weight. The dealer said he did not care to prosecute the case if the matter could be adjusted. We corresponded with the wholesale dealer, who said to ship it all back to him at his expense, and that it would be replaced by full-weight bags. He said he would return them to the western miller.

If we take some concerted action in regard to this package business I think it will result in some sort of uniformity being brought about, and the packages will not be, as now, uniform only in some particular sections.

The CHAIRMAN. We will now proceed with the election of officers. Nominations are in order for president.

Mr. THOMAS. I move that the secretary be directed to cast a unanimous ballot for Doctor Stratton as president for the coming year.

The motion was seconded, with Doctor Reichmann in the chair, and carried unanimously.

The CHAIRMAN. Gentlemen, I thank you for this vote of confidence. I am perfectly willing to serve and will do all I can to assist in this matter. I do hope, though, that some time you will break that precedent, because I would like to see this office passed around.

The next election is for vice-president.

The SECRETARY. Last year the office of vice-president was created for the first time, and Mr. Palmer was elected.

Mr. WELD. I make a similar motion in reference to this office, viz, that the present incumbent be unanimously reelected for the ensuing year.

The motion was seconded and carried unanimously.

The CHAIRMAN. The next election is for secretary.

Mr. HASKELL. I move the rules be suspended and Mr. Fischer reelected secretary.

The motion was seconded and carried unanimously.

The CHAIRMAN. The executive committee consists of the officers of the association and four additional members. For the information

of the delegates, I would like to ask the secretary who the members were last year.

The SECRETARY. The members are Mr. Hazen, Doctor Reichmann, Mr. Pettis, and Professor Thomas.

Mr. PALMER. I nominate Professor Thomas, Doctor Reichmann, Mr. Pettis, and Mr. Haskell, of Washington, as members of the executive committee. It seems to me it would be well to have a representative in Washington who is an active sealer.

The CHAIRMAN. Mr. Haskell is on the ground, and that will give us one more member in Washington. It is a very good suggestion, Mr. Palmer.

The nominations were closed and the nominees unanimously elected.

The CHAIRMAN. The next order of business is the date of the next meeting.

Mr. PETTIS. I move that the date of the next meeting be left to the discretion of the executive committee.

The motion was seconded and unanimously carried.

On motion, duly seconded, the convention adjourned for luncheon at 12.30 p. m., to reassemble at 1.45 p. m.

FOURTH SESSION (AFTERNOON OF FRIDAY, DECEMBER 18, 1908).

The meeting was called to order at 1.45 p. m. by the chairman.

The CHAIRMAN. We are very fortunate in having with us this afternoon the Hon. William R. Wheeler, Assistant Secretary of Commerce and Labor, who was to have been with us yesterday, but, as I have explained, he was unable to attend. He is not only very much interested in this movement, but is a business man, and is vitally interested for that reason. He comes from the Pacific coast, and I think I may introduce him as our delegate from California.

Mr. WHEELER. Mr. Chairman and gentlemen, I was exceedingly gratified on arriving here to learn from Doctor Stratton that your meeting has been delightfully informal, because that relieved me of some little embarrassment, as I propose only to make a very informal address. Furthermore, I believe from a practical standpoint that informal meetings—round-table discussions, as it were—are conducive to the greatest good, and the results are far greater, in my opinion, than where the proceedings are made top-heavy with formality.

I assure you it is a great pleasure for me to be here and meet you. I trust you will pardon me for not remembering each and every one of your names, because you have the advantage of being introduced to one man, while I have been introduced to twenty.

I trust that you will feel that the right hand of good fellowship has been extended, and that the hospitality and cordiality we feel toward you are not lessened by the tardiness of this expression. As Doctor Stratton has explained to you, it was impossible for me to get here yesterday, but I am very glad of the opportunity to be here to-day.

I do not propose to take up your time telling you what I do not know about the subject you are here to discuss. I would have liked to have had the opportunity to be present at your meetings in order to have learned something, so that I might speak intelligently on the subject; but that opportunity was not afforded me.

You have all learned from Doctor Stratton's remarks that I am from California, and I remember that when I was a boy there the prosperity of a certain successful butcher in our town was said by some ill-natured persons to be due to the fact that, as they alleged, he sold his goods by the "meat-trick" (metric) system.

As I understand it, the purpose of this meeting is to guard against such tricks. It is to guard against the miracle, as it were, of turning 1 gallon of wine into 5 quarts, which I believe is frequently done in my own State. This is not a day of miracles, and, particularly, we want to guard against that sort of miracles.

While that is not, as I understand it, the direct purpose in hand, yet by cooperation and coordination of the work of this Bureau with that bureau which deals with pure food and the like I believe that we will eventually bring about such a standardization as will prevent that imposition on the public. This is the day of the "square deal," and it seems to me that the work that you gentlemen are engaged in is eminently in line with that policy. I regard you as disciples and missionaries of the "square deal." You bring home to the people who are apt to be imposed upon—the poor and the ignorant—the benefits to be derived from the carrying out of the policies which you advocate and which you are striving to bring about; that is, the establishment of uniform laws with regard to the weights and measures of the country. You confer a direct benefit on the people who more than any others need the benefit of the "square deal."

Therefore I say to you, without attempting to discuss the intricacies and the technique of the very important subject you have under discussion, that my heart is with you; that the heart of the Department is with you in this movement, and that we thoroughly appreciate the interest you have manifested and the zeal with which you have done your work. I thank you, gentlemen.

The CHAIRMAN. I believe that this finishes our business; and if so, a motion to adjourn is in order.

Mr. PETTIS. I hesitate to make a motion to adjourn, because I dislike to break up the meeting and say good-by to all these fine, kind gentlemen; but as we have to leave, I move that we now adjourn.

Mr. PALMER. I second the motion.

The motion was put and carried, and consequently the conference adjourned sine die at 1.50 p. m., December 18, 1908.

