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# DEPARTMENT OF COMMERCE AND LABOR BUREAU OF STANDARDS S. W. STRATTON & DIRECTOR

## Weights and Measures

SIXTH ANNUAL CONFERENCE OF REPRESENTATIVES FROM VARIOUS STATES HELD AT THE BUREAU OF STANDARDS WASHINGTON, D. C., FEBRUARY 17 AND 18, 1911



WASHINGTON
GOVERNMENT PRINTING OFFICE







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1912

### OFFICERS AND COMMITTEES.

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#### OFFICERS.

President, Dr. S. W. Stratton, Director of the Bureau of Standards, Washington, D. C.

Vice president, Mr. D. C. Palmer, Commissioner of Weights and Measures, Boston, Mass.

Secretary, Mr. L. A. Fischer, Chief of Division of Weights and Measures, Bureau of Standards, Washington, D. C.

#### COMMITTEES.

#### Executive committee:

The above-named officers and—

Dr. Reichmann.

Mr. Henry.

Mr. Haskell.

Mr. WALL.

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#### LIST OF DELEGATES WHO ATTENDED THE CONFERENCE.

J.

G. F. Austin,

City Sealer,

Detroit, Mich.

H. A. Boyer, City Sealer, Harrisburg, Pa.

R. W. DUNLAP,

State Dairy and Food Commissioner, Columbus, Ohio.

L. A. FISCHER,

Chief, Division of Weights and Measures, Bureau of Standards,
Washington, D. C.

W. F. Goodwin, State Sealer, Lincoln, R. I.

W. F. Hand, State Chemist, Agricultural College, Miss.

W. C. Haskell,
Superintendent of Weights, Measures,
and Markets,
Washington, D. C.

Hugh H. Henry,
Commissioner of Weights and Measures,

Chester, Vt.

F. C. Janssen, City Sealer, Milwaukee, Wis. W. R. Jackson,
State Dairy and Food Commissioner,
Lincoln, Nebr.

Edward J. Maroney, City Sealer, New Haven, Conn.

D. C. Palmer,

Commissioner of Weights and Measures,

Boston, Mass.

F. Reichmann,
Superintendent of Weights and Measures,
Albany, N. Y.

S. W. Stratton,

Director, Bureau of Standards,

Washington, D. C.

John H. Sullivan, City Sealer, Newark, N. J.

B. F. THOMAS,

Professor of Physics, Ohio State

University,

Columbus, Ohio.

J. S. Wall,
Department of Internal Affairs,
Harrisburg, Pa.

#### INTERESTED PERSONS INVITED TO TAKE PART IN THE CONFERENCE.

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#### W. H. BAHRENBURG,

National League of Commission Mer- Inspector of Weights and Measures, chants.

New York City.

J. C. Connors, Troy, N. Y.

#### A. T. CUMMINGS,

President Boston Produce and Fruit Exchange.

Boston, Mass.

J. F. East,

Secretary Farmers' Manufacturing Co., Norfolk, Va.

#### A. W. EPRIGHT,

Scale Inspector for Pennsylvania Railroad,

Altoona, Pa.

#### F. S. Holbrook,

Bureau of Standards, Washington, D. C.

#### T. C. Johnson,

Director Virginia Truck Experiment Station. Norfolk, Va.

#### E. L. McIntyre,

Assistant City Attorney, Milwaukee, Wis.

#### M. H. STILLMAN,

Acting Inspector of Weights and Mcasures, Burcau of Standards, Washington, D. C.

#### N. P. WESCOTT,

Assistant Secretary and Treasurer, Eastern Shore of Virginia Produce Exchange.

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Michigan (Mr. G. F. Austin, city sealer, Detroit)
Mississippi (Mr. W. F. Hand, State chemist, Agricultural College)
Ohio (Mr. B. F. Thomas, professor of physics, Ohio State University)
(Mr. Dunlop, State dairy and food commissioner)
Pennsylvania (Mr. J. S. Wall, State department of internal affairs)
(Mr. H. A. Boyer, city sealer, Harrisburg)
Rhode Island (Mr. W. F. Goodwin, State sealer)
Vermont (Mr. Hugh H. Henry, State commissioner of weights and
measures)
District of Columbia (Mr. W. C. Haskell, superintendent of weights, meas-
ures, and markets)
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### REPORT OF THE SIXTH ANNUAL CONFERENCE ON WEIGHTS AND MEASURES OF THE UNITED STATES

HELD AT THE BUREAU OF STANDARDS WASHINGTON, D. C., FEBURARY 17 AND 18, 1911

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#### FIRST SESSION (MORNING OF FEBRUARY 17, 1911).

The sixth annual conference convened at 10.30 a. m., in the lecture room of the Bureau of Standards, the chairman, Dr. S. W. Stratton, Director of the Bureau of Standards, presiding.

The Chairman. Gentlemen, it gives me very great pleasure to welcome you, the delegates to this, the sixth convention of State and city officials.

The representation is not as large as we expected, and not as large as we ought to have, but no one knows, perhaps, as well as Mr. Fischer and myself, what the difficulty is in getting representation from the States that have no organization. There is no difficulty after the State has perfected its organization, but to get a new State started, and to get a delegate from a State in which the work has not been put on the proper basis, is a very slow process. Most of the governors respond with a formal letter expressing their hearty sympathy with the work and wishing it success, but stating that they are unable to send a delegate on account of lack of funds, or lack of this or lack of that. Sometimes we get discouraged; sometimes it seems that it is almost impossible to get the State officials together; and yet I am very greatly encouraged at the number that we have this morning.

We had planned to have our Secretary with us. You met Secretary Nagel last year and he gave us a splendid talk. Since that time we have had occasion to go before him with a great many questions pertaining to the bureau's work, and especially weights and measures, and I can assure you that the department has never had a Secretary who has taken as much interest in this particular part of the work as Secretary Nagel. He was unexpectedly called out of town—he will be with us to-morrow morning—but he wished me to say to you that he was heartily in sympathy with this work and that he had done all he could during the past year and intended to assist us in every way possible. It is a pleasure to work with a Sec-

retary who takes such great interest in the affairs of the various bureaus.

We had invited Representative Mann, Representative Wilson, and Senator Page, and one or two others who are interested in weights and measures, to be with us, and they had expected to be here, but I think we have perhaps made a mistake in calling this convention at the end of a short session, especially this short session. The complications are such in Congress that for the past week they have been meeting early in the morning. The legislative situation is rather critical and most of the members can not get away. This morning the House is called to meet at 10 o'clock, and Mr. Mann telephoned that it would be simply impossible for him to get here. They all wished me to express their regrets to the members and say that they were interested in the work and sorry that they could not be with us at this particular meeting. I hope that their absence will not be taken in any way to indicate that they are not heartily in favor of what you are trying to do, and helping all they can.

Now, I am not going to take up much of the time this morning, but there are one or two remarks that I would like to make. We have a number of new delegates here, and I want to say just a word to them. The objects of this association are two—that is, two principal objects. There are many which we can accomplish; there are many good things which the association can do; but the object of the bureau in calling the convention together originally was, first, that it might be an instrument through which the bureau could arouse interest and bring about a better condition as to weights and measures in the various States, especially those States in which comparatively nothing was done. The second object was to make the bureau an efficient clearing house for matters pertaining to weights and measures. The bureau is called upon continually to advise our legislatures—the national legislatures—in regard to bills that are presented. States and cities are calling upon us for model laws and suggestions as to State laws and city ordinances. Now it is exceedingly important that what we give to these organizations shall be the right thing, and we can only know the right thing by keeping in constant touch with those local officials who have to do with the administration of weights and measures.

As to the new members, they can be of the greatest assistance to us in the first object stated, namely, the originating of the weights and measures movement. In making a digest of the laws of the various States in regard to weights and measures, we found that every State had a law and had an official of some sort who was delegated to have at least the custody of the standards, who was designated in some way as a weights and measures official. We found at the first meeting, and we have found since, that many of these offi-

cials, knowing probably that they are not in the strict sense of the word weights and measures officials, have hesitated to attend these meetings. In nearly every case the secretary of state or an auditor or some other State officer was delegated as the weights and measures official of the State, and in that capacity they seem to have been looked upon as merely custodians of the standards. That sort of official has always hesitated to come out and attend these meetings and get up against, as it were, those officials who are actually carrying out weights and measures administration.

Now, this sort of man can in many ways be of better service in this first stage than the technical weights and measures man. The technical weights and measures man is the best, perhaps, to suggest a law and to carry out the administration of that law after it has been formulated. But I sincerely hope that those delegates here who represent the former class, and those who are not here, will not feel that because they are not technical weights and measures people they can not be of great assistance in our work. They can be of the greatest assistance. In fact, the auditor or the clerk of the court, or whoever he may be, is the very best man to go back and say to the governor of his State that they ought to have in that State a proper weights and measures official. If it comes from any other source, as we have found in many cases, there will be jealousy; the incumbent of the office will immediately think that someone wishes to displace him, that they wish to get this out of his hands, and his dignity is offended. So for diplomatic reasons we thought it best to take the situation as we found it and work through that man; and we have found in many cases that they have been of the utmost assistance. Some of the best influence extended to the States has been exerted through these officials, the officials who are not in any sense of the word weights and measures men as we think of them.

So, again, I want to welcome especially the new delegates and those who do not consider themselves weights and measures officials, but have been delegated to attend this meeting for the purpose of finding out what should be done and reporting to their respective States. We hope that your report will be along lines that will stimulate regulation of weights and measures in the various States.

I wish I could report a greater progress in the bureau's work along this line. However, it has been very satisfactory. Sometimes we feel that it is slow, and I have no doubt that you people think that it is slow, but I feel that what has been done has been well done. Our relations with those cities and States with which we have come in contact are exceedingly good, with one or two exceptions, and that in itself is a very important matter. I am pleased to say that so far as the work has been done it has been done harmoniously in the various States. This stimulation has gone on in almost every case

without offense and without any friction whatever. The States and cities, as a rule, feel that we are there not in the sense of inspectors—I speak now as to the original work of getting a State started along these lines—that we are there simply to find out the truth, the conditions, and that we have the means of getting this information that they have not; and we have put that information in their hands in every case, and it has produced the greatest good. It is our intention to continue this work through the coming years and not to treat it as a special thing. I had the greatest difficulty in the first case in securing the appropriation, not because of its amount—it is not a question of the amount of the appropriation at all—but it is this question of how far the National Government should go into the States, and that is a thing that must be handled carefully. I had to handle that. I had to get this first appropriation solely for the purpose of getting information for our own selves. I said that we needed this information as to what the conditions were in the various States, and that I wanted to get it first-hand; that we could not get it from the States in which there were no officials. That was the purpose for which the appropriation was made, and we will have to proceed very carefully indeed in all these matters which pertain to the local administration. Now we have decided to put this on a permanent basis. The employees will be appointed permanently, certain funds will be set aside, and this work of inspection will continuc until all of the States have efficient organizations. There is no doubt that in the meantime legislation which is proposed, and which must come about sooner or later, will aid us in extending this contact with the States. I can not say just how it will come about, but it is sure to come sooner or later, and that will all tend toward bringing the local weights and measures officials into closer contact with the National Government.

We are not able to report as much along the lines of legislation as we would like to; that is, as to definite acts. Legislation, as some of you know, is exceedingly slow at the very best. I think it is much slower at the National Capital than at the State capitals. There is always this tendency to let a thing rest and see what is coming of it, see what is behind it, see what there is to it. There has been the greatest inertia at the Capitol in regard to taking up some of these measures which are very dear to us, largely because they felt that it was going too far, as I said before, into the local matters, and largely because of the misrepresentations that have been made by manufacturers and others. That is one of the things that has surprised me very much. I had the pleasure of meeting the coming Speaker the other evening, and he dwelt for a considerable time upon that matter. Mr. Clark has been a member of the Ways and Means Committee, as you know, and has had to do with the revision of the tariff; has been

a Member of the House for 20 years, and a very active Member; and he mentioned a thing which is so apparent to the people who are on the ground, namely, that those who go before the committees exaggerate to such an extent. You would not believe the statements that were made before the House of Representatives when this package law first came before it, when it came up in connection with the original pure-food bill—statements that evaporation could take place in the can, and all sorts of unscientific and untrue things. These things make our legislators suspicious, and the tendency in every case is to be careful, to let the thing settle down and filter out and see what there is to it. Nevertheless the fact that you have been busy in the States and have suggested legislation along these same lines is the very thing that has stirred these people up. Just the other day I was called over to one of the committee rooms to meet with half a dozen of these people in connection with the amendment to the purefood law which has to do with the net weight on packages—the netweight law, as we call it. These people, to my great astonishment, were all in favor of such a law—the very people who had fought this before—and I said, "Why have you come around? What has been the cause of this, when you have been fighting it all along?" The answer was immediately from every one of them, "Because the various States have proposed legislation, and if we have got to have it we want one law rather than 47." Now, that was just the object of this State legislation in many ways. It is exceedingly important that if there is national legislation the State legislation should be uniform with it. We come in contact with that in a great many different ways. It is very embarrassing to manufacturing concerns to have a different law in every State. It should not be permitted. The Pennsylvania Railroad in going from New York to Chicago goes through several States, and every one has a different law in regard to headlights. Now, that is all wrong, and that is only an illustration of what exists in so many different ways, and sooner or later it must be cleared up. So it is, to my mind, very important that national legislation should precede, and if it precedes it should be founded upon the right principles; and the right principles can only be arrived at through the men who are working in this line, who are interested in it and who watch this legislation and take care that what is enacted is along the right lines.

It is almost impossible to secure any legislation whatever during the short session other than the large appropriation bills. I know of no session of Congress since I have been in Washington in which so little of an outside nature has been done as this session. Of course, there is a reason for it. There are many large matters pending there; the time is very short, at most; the House has a very large number of members and each has his own particular interests to get through, so that the amount of actual legislation of a general nature during a short session is very small indeed. But do not think that because no particular bills have been passed nothing has been done; because I think there has been more agitation over there this year than in any previous session. I think more results have been reached over there than in any previous session, so far as the conviction of members is concerned that they must take this up and do something. I think they are thoroughly convinced of that, and I think that you are going to see legislation very soon along many of these lines that you are so much interested in.

Now, I have taken too much of your time already, but before closing my remarks I want to read a letter which I had intended to read in connection with the bureau's work of inspection. I stated that one of the objects was to stimulate and bring about better conditions in those States which are not organized, and I received a letter this morning from Mr. Smith, of Wisconsin, which pleases me very much. I will not take the time to read it all, but just this extract; and I will say that the results accomplished in this one instance, in this one State, to my mind fully warrant the expenditure of every dollar that the bureau has put into it.

As a result of the agitation, several of the larger cities of the State have organized or reorganized a city department of weights and measures. A most notable instance of this is found in Milwaukee, where, under the able leadership of City Sealer Janssen, a thoroughly equipped bureau has been established and an exceedingly aggressive campaign inaugurated. Mr. Janssen's work has been somewhat unique in that he has stretched the law to such an extent as to confiscate all of the illegal weights and measures which his five inspectors have discovered, aggregating over 8,000 weights and measures in the first nine months. I do not recall any such thoroughgoing work by any eastern city of like size. It seems to me that the confiscation of the illegal weights and measures should be a most important step in the effort to secure honest weights and measures. If such illegal measures are left in the hands of the dealers they may attempt to use same again or to perhaps sell or barter them in other neighborhoods.

I have recently inspected Mr. Janssen's office and find everything to commend. At the present time I am making efforts to organize similar bureaus in several of the other large cities of the State.

I am sending you, through Mr. Janssen, a copy of the new bill on weights and measures recently introduced in our State legislature, which I hope will go far toward improving Wisconsin conditions. Some of its provisions are rather stringent, but it is hoped that the machinery provided will be ample to enforce a thoroughgoing inspection. One important provision makes it obligatory upon each city of 5,000 inhabitants or more to have a city sealer. The smaller cities and villages are looked after by a county sealer. Two inspectors are provided for going over the State and inspecting conditions and seeing that the law is thoroughly complied with.

I think at the very first meeting a plan was outlined almost identical with that, and this one instance—it is only one of several—should be very gratifying to members of this convention. That a

State can be started up and an organization perfected in so short a time as has been done in Wisconsin shows what can be done through efficient weights and measures officials. Now, Mr. Smith for several years took absolutely no interest in weights and measures—I know him personally; I do not hesitate to say this; he is a very busy man and is interested in other things—and it was at this meeting that he became stimulated in these matters, and he went home and he did all he could to make amends and put the thing on a proper basis.

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

Mr. MARONEY, Connecticut.

Mr. HASKELL, District of Columbia.

Mr. Palmer, Massachusetts.

Mr. Cummings, Massachusetts.

Mr. Austin, Michigan.

Mr. Hand, Mississippi.

Mr. Jackson, Nebraska.

Mr. Sullivan, New Jersey.

Mr. REICHMANN, New York.

Mr. Bahrenburg, New York.

Mr. Thomas, Ohio.

Mr. Dunlap, Ohio.

Mr. Wall, Pennsylvania.

Mr. Boyer, Pennsylvania.

Mr. Epright, Pennsylvania.

Mr. Goodwin, Rhode Island.

Mr. Wescott, Virginia.

Mr. Johnson, Virginia.

Mr. Henry, Vermont.

Mr. Janssen, Wisconsin.

Mr. McIntyre, Wisconsin.

Mr. East, Virginia.

The CHAIRMAN. The next on the program is the report of the secretary, who will also report for the executive committee.

The Secretary. Mr. Chairman and gentlemen: In regard to the report of the secretary, that is more or less involved with the report on the Bureau of Standards inspection. Happening to hold this dual office, my duties are very much mixed up, so perhaps what I may report as secretary may be repeated as delegate from the bureau. I must apologize, first of all, for not getting out this report of the last conference sooner than I did; but it was gotten out just as soon as I could without neglecting other duties which seemed to me to be more important. We had quite a number of demands for this, but instead of giving the information contained herein in the shape of a full report, it has been given out in the form of special reports, which

seemed to be very much more in demand than anything we might have in here, though we realize that this would have been of very great help to us if we had had it in time.

Now, the executive committee has had just one meeting as a committee, and that was this morning, when we decided on this program. I might state that we have had quite a number of informal meetings from time to time. I have met various members of the committee, both by visiting them and having them come here, and we have kept in touch with one another and have used the influence of this association whenever it was possible. Dr. Stratton touched on the importance of the work of this association, and I think we can not do any more than corroborate what he has said. I think that at the present time the agitation that is apparent in so many States is due almost entirely to the efforts of our association, aided, of course, to some extent by our inspection. At the present time there are State laws in regard to weights and measures in California, Colorado, Idaho, Indiana, Illinois, Massachusetts (new laws in Massachusetts which Mr. Palmer will tell us more about), Minnesota, Montana, Nevada, New York, New Jersey, Nebraska, Ohio, Oklahoma, Oregon, Pennsylvania, South Dakota, Vermont, Washington, and Wisconsin. I think that makes a very creditable showing. One of our members who was with us last year, I think, is to a great extent responsible for the new law in Vermont. Vermont has a new law, and a new commissioner of weights and measures, and, so far as the law is concerned, I think Vermont is as well off as any other State in the Union. This has been brought about largely by the efforts of Mr. Hazen, who has been with us a number of times, and also through the efforts of Dr. Reichmann and Mr. Palmer, and I claim some little credit for myself in the matter. Of course, the reports of the bureau are of great value in bringing the attention of legislators to the necessity of some new laws on the subject.

I think that is about all I have to report, Mr. Chairman, unless there are some questions that the delegates want to ask about some of our work.

Mr. Reichmann. I move that the report be accepted.

Mr. Palmer. I second the motion.

The question was taken, and the report was accepted.

The Chairman. The next is the report of the committee to prepare a net-weight package bill and arrange for its presentation to Congress. The members of this committee are Mr. Quist, Mr. Palmer, Mr. Kjellander, Mr. Reichmann, and Mr. Yoder. I presume Mr. Palmer will report for that committee.

Mr. Palmer. Mr. Chairman, I am not prepared to make any extensive report. I think Mr. Fischer is a little more familiar with the details of it than I am. I am sorry to say that the committee has

had no regular meetings. Doubtless you all know that there is a netcontainer bill before Congress and that, to some extent, possibly the weights and measures interests of the country are directly responsible for it. I do not think I have anything to report in addition to that. Possibly Mr. Fischer can give us a little more light on it.

The Secretary. I might say, Mr. Chairman and gentlemen, that the Page bill, which was introduced last year, was submitted to Mr. Quist, the chairman of the committee, with the idea that he would get the opinion of the other members of the committee. As a matter of fact, he did nothing about it; and so, except for the fact that he gave his approval to the bill which was afterwards presented by Mr. Page, nothing was done. Mr. Quist is, of course, in one section of the country and Mr. Palmer and the other members of the committee in another, and that represents, I think, one of the difficulties that are going to arise every time we appoint a committee. It is going to be almost impossible to get these committees together. You will all have a chance, however, to look over this bill, although I do not think I have enough copies to go around. I tried to get them yesterday, but could not.

On motion of Mr. Reichmann, the report was accepted.

The Chairman. The next will be the report of the committee on organization of the Full Weight and Measure League, of which Mr. Reichmann is chairman.

Mr. Reichmann. Mr. Chairman, the committee respectfully reports progress and would like to have further time.

Mr. Palmer. Mr. Chairman, I move that the report of the committee be accepted and that the committee be given further time.

The motion was duly seconded and carried.

Mr. Reichmann. I would like to add, Mr. Chairman, that while the committee has not had a formal meeting, I do not want to convey the impression that this is simply a matter to be put off, because I have done a great deal on that committee and I think things are looking very bright for the formation of such an organization. But, as all of you know, to have an association of that kind requires money. It is not a matter of a hundred dollars, or two hundred dollars, or a thousand dollars, but it requires a good deal more, and it is a question of getting some philanthropically inclined multimillionaire who is willing to go into his pockets. I think we have three of our fingers in already; we want two more. I hope we can report the other two fingers in the pockets by next meeting.

The Chairman. I sincerely hope that something of that kind will go through. This organization is bound to become in time a purely technical one of weights and measures officials; and there is a large amount of work outside of that that can be done by such a league, which can handle things this organization can not possibly handle.

The next item on this program is the reports of the delegates. Heretofore we have given entirely too much time to the reports of the delegates, and yet we felt at this time that we could not cut them out altogether. Especially are we anxious to hear from the new delegates. I have been requested by the executive committee to confine these reports to three minutes. We will give the new members five if they wish. Personally, I think these reports are of the greatest value. The bureau must in time become a clearing house for these matters. Of course we get a good deal of it informally, by correspondence, etc., but the testimony of the officials probably is best brought out in the discussions that come up on specific points.

I will call for these reports in their order. The first will be Connecticut. We would like to hear from the delegate from Connecticut.

Mr. Maroney. Mr. President, in regard to State laws, at the present time we are in the same condition exactly as we have been for a number of years. The State treasurer is the State sealer. But the legislature is in session at the present time, and they also have a bill introduced there which is practically a duplicate of the Mann bill in the National House. It has been pigeonholed for the time being, waiting to see what action you would take here in Washington. As far as local conditions are concerned, I am very well pleased to state that we have a new ordinance there, for which the members of this bureau are responsible—both Mr. Fischer and my friend, Holbrook. It went into effect last Monday.

Mr. REICHMANN. Where is this?

Mr. Maroney. New Haven. The laws are identically the same as recommended from this department. That, taken in connection with the placing of the official there under civil service, appointment being made through examination and confined to the first three, makes it ideal. There is also a hearing there to-night on requiring the public-service corporations—I mean the electric light, gas, and water companies—to submit all meters, in both manufacturing plants and residences, to the department of weights and measures. It provides for fitting up a laboratory, and that these meters must not go out unless they are tested and sealed by the sealer, and that seal put on so that it can not be broken into. That, I believe, covers about all that I have to say. This hearing comes up to-night and the probability is that the bill will pass and will provide enough assistance to cover it in a thorough manner. That also includes milk bottles, and the idea is to take milk bottles before they go into the hands of the producers of milk and have them sandblown and tested, and in that way it will cover it pretty thoroughly. The new ordinance, as I stated before, went into effect last Monday. It is verbatim as this department sent it out.

The Chairman. Is there anything being done in Connecticut to bring about the appointment of a State weights and measures official?

Mr. Maroney. I think it is about two years ago that we had a bill of that kind, but through internal dissension and perhaps a little jealousy on the part of some of the members of the State sealers' organization there, the bill was killed. I assumed all the responsibility of the expense of the organization for two years, and this year we are, to use a slang expression, "up a tree" in that matter. Eventually it will come, but it will not come until such time as they can get together and be harmonious and bury their individuality, and all get into a corner and find out who is to be the man. Until such time I do not think we will have a State sealer. There is one more thing I would like to mention. We have what we think is a very good law, namely, a butter law, which says that print butter must be 16 ounces, net, and stamped as such in half-inch letters right over the face of it.

Mr. Goodwin. Mr. President, I would like to ask Mr. Maroney if it would be possible for him to give me a copy of the law regarding the sealing of water and gas meters, as there is a law being agitated now in our State for that purpose.

Mr. Maroney. The law as we have it in New Haven at the present time became effective last Monday. The laws are now in the hands of the printer. I have ordered some 3,500 copies of them and I will be pleased to send copies of the laws, as they are, to any of the gentlemen here if they will kindly give me their addresses to-day or to-morrow.

The Chairman. I am glad to see that New Haven is interpreting the term "weights and measures" in the broad sense, in the modern sense. It must mean water meters, gas meters, and all those things. And I hope you people in organizing this work will not let the opportunity go by to take in these things.

The next State is Massachusetts. Mr. Palmer needs no introduction.

Mr. Palmer. Mr. President, the Massachusetts Legislature of 1910 made several additions to our State laws in regard to weights and measures, namely, an act relative to the sale of coal, coke, and charcoal; an act establishing bushel weights of certain commodities; an act relative to the inspection and sealing of weights and measures, which has amended the present act somewhat; and an act relative to the sealing of paper bottles and jars. The legislature of 1911 has before it at the present time some 28 bills relating to weights and measures, directly or indirectly, covering a variety of subjects. A few of these bills have been recommended by the State Department. Six of these bills relate to the placing of the net contents

on the outside of all food packages, and two relate to the testing and sealing of gas, electric light, and water meters by the State—in one case by the State commissioner of the weights and measures department, and in the other by the State commissioner of the weights and measures department and such additional town and city inspectors as he may designate. Then there are a variety of other subjects which are covered by the proposed bills. One relates to a standard barrel of apples, and there is another doing away with the tolerance on thread.

Those are the most important ones. There is another bill which relates to placing the licensing of coal dealers under the State department of weights and measures, and taking it from the secretary of state's office, where it is at the present time.

Very few of these bills have been heard. Our legislature is now in session, and they will come up for hearings within the next month. Some, I think, stand a very good show of passage.

The general conditions in Massachusetts, I think, are improving all the time. Our local departments are making progress, and I am glad to say that our various trade associations are doing a great deal to help us out. Mr. Cummings, who is with us to-day, representing the Boston Food and Produce Exchange, is quite often in conference with the department, and almost every week or two we have some information in regard to weights and measures and general trade conditions, not only in this but in the paper trades and other trades. I believe they are realizing at last that they should have weights and measures legislation; and it seems to me a good sign to see these various trade organizations come forward indorsing weights and measures propositions.

The Charman. We will pass to the next State, Michigan, represented by Mr. Austin, who is with us, I believe, for the first time.

Mr. Austin. Mr. President and gentlemen of the convention, I have nothing to report of progress, this being the first meeting I have attended of this kind. I am very much pleased to meet and personally know the men who are interested in this work. In Michigan, as in many other States, the State treasurer is the custodian of the standards of the State—such standards as they possess—for safe-keeping; and safe-keeping is the proper word. I think that in addition to that we should have working standards, and working men to carry out some uniform system of weights and measures throughout the entire State. At the present time we have none, and the result is that the county treasurer, being the custodian of the county standards, appoints a deputy, whose sole duty is to examine the weights of the city sealer—that is, my own weights—so that with the exception of some seven or eight of the larger cities which have felt the necessity and have attempted to regulate the matter by

ordinance, there is no organized system of inspecting weights and measures. Those cities are Detroit, Grand Rapids, Port Huron, Pontiac, Flint. I do not know about Saginaw; I understand there is a sealing system there. In Detroit the city official and his assistants are appointed by the police commissioner. That office has had but two incumbents during the last 37 years. Mr. Heyl, my predecessor, held the office for 26 years, and I have been there 11 years. In fact, the department, I take it, if it is progressive, is not interfered with through any political changes that may occur.

Having only recently received notice that I was appointed delegate to this convention, I had not time to prepare anything very satisfactory to myself. I will say that in the city of Detroit we have about 40 square miles of territory; we have perhaps 1,400 grocers, 500 or 600 meat dealers, about 400 or 500 confectioners, and about 300 bakers, together with the manufacturing interests. Since Detroit has become an automobile center it has attracted many other classes of manufacturing, and most of them contribute something to the work of the sealer of weights and measures.

I do not know of any better way of giving the gentlemen an outline of the work which I am doing in the city of Detroit than to quote from my annual report of June 30, 1910. I will say that I have been furnished with an auto conveyance for conveying my weights and facilitating me in my work. I have at present four assistants. Last year the total number of scales tested was 4,464, of which I found 3,479 correct and 987 were condemned. That includes those that were unfit for service at the time, but many of them were capable of being repaired and readjusted and put in working condition. The balance of those were stamped "Condemned," or confiscated. Dry measures, 5,449; 5,210 approved and 239 condemned. Liquid measures, 8,597; 4,882 approved and 3,715 condemned. Individual weights, aside from those that were tested in connection with the scales, 692; approved, 573; condemned, 119. Milk bottles tested, 628,060; approved, 604,955; condemned, 23,105. In connection with the milk-bottle inspection, we test each bottle and mark those that are correct with the letter "M." Our ordinance requires that all scales and measures shall be marked with the letter "M" or the word "Approved"—we choose to use the letter "M"—and the date. Those that we find incorrect we stamp with the word "Condemned." The total inspections for last year were 647,262.

We visited bakers 120 times in reference to the weight of bread. We weighed last year 1,314 loads of coal in transit. I will say that that is considerably below the average amount of coal that we weigh yearly. That is occasioned by not having any additional assistance, and the going into the milk-bottle inspection, which consumes a vast amount of time.

The complaints, I imagine, would be uninteresting to most of you. We have in the city of Detroit something like 50 or 60 railroad track scales which we are required to inspect. We have some very good ordinances regulating local matters, but we find much difficulty in the sale of fruits and vegetables, of which a large proportion is shipped in from outside States or from the district outside of Detroit in the State of Michigan, and consequently the sizes of packages, boxes, crates, etc., vary considerably. The local courts are reluctant about enforcing the city ordinance on the ground, as they claim, that it will divert the patronage of that class of merchandise from the city. Two years ago I drafted a uniform-package bill, which the Retail Grocers' Association fathered, and presented, and backed up, requiring that all fruits, vegetables, nuts, berries, etc., should be sold in nothing but uniform measures conforming to the standards of dry measure. That bill stood a good chance of being passed, but was defeated on the eve of its passage by a concerted effort of the commission merchants, who contended that the whole State of Michigan would not be sufficient market, so that if there was any restriction made on the size of packages to come into Michigan, or the city of Detroit, it would be diverted elsewhere and we would be the sufferers. I feel convinced that the representative business men of Detroit, and Michigan as a whole, are entirely in sympathy with some system of weights and measures that will be uniform throughout the United States, both in regard to net containers and a full-measure law. The State Association of Retail Grocers, at their meeting at Port Huron, which has just closed, adopted resolutions toward aiding in passing a State law which, I understand, the Grand Rapids delegation are placing before the present legislature, providing for a uniform standard for the sale of merchandise-or the sale of fruits, vegetables, berries, etc., at least—in full-measure packages. They also passed a resolution to urge and further the appointment of a State sealer who shall have authority and shall be active in assisting local sealers, and establishing others, wherever possible, for the purpose of making the weights and measures system of the State uniform. I feel satisfied, gentlemen, that if I can get from this body, or from anyone present here, a copy of the Federal laws that have been introduced, and also the city ordinance proposition that will be in conformity with such Federal regulations, if passed, I can secure the aid of some of the best men in public office in Michigan, as well as the grocers' association. The Retail Grocers' Association of Michigan and the local institution of the same kind are heartily in favor of such a movement, and I know they will give all the aid within their power to bring about those conditions. I thank you for your attention.

Mr. Thomas. Mr. President, I would like to ask one question. How is the work of the city sealer at Detroit done—on the fee basis, or salary basis, or a mixed basis?

Mr. Austin. I beg pardon; I should have mentioned that. The sealer is appointed by the commissioner of police. Both the sealer and his assistants are appointed from members of the police force, and receive compensation as such. There are no fees or other charges for any work performed by the weights and measures department of the city of Detroit. That same thing is true of Grand Rapids, Pontiac, Flint, and Port Huron. I think the system is rather inadequate in the other few cities that have established a system, but I can not say as to their method, whether they charge a fee or not; but as to Grand Rapids, Flint, Detroit, Port Huron, and Pontiac, they have no fee system; they are all paid as regular officers of the city. The department is maintained through appropriation, and there is no charge to the person whose scales we are testing or examining, unless he has to make corrections.

The Secretary. In connection with the statement just made by Mr. Austin it may be interesting to members to know that the results of our investigations seem to indicate that in the matter of weights and measures Detroit, if not the best, is certainly one of the best cities in the United States so far as we have investigated. I think that perhaps the fact that they do not charge fees may have something to do with that.

The CHAIRMAN. The next State is Mississippi. We will be glad to hear from Mr. Hand.

Mr. Hand. Mr. Chairman and gentlemen, nothing has been done up to this time in Mississippi looking toward an effective administration of any laws which we may have on our statute books concerning weights and measures. I believe this is a very opportune time in which to bring the matter up, because I happen to know that our present governor is very much interested in this matter; and but for the fact that it was brought to our attention through Director Stratton, perhaps our conditions would have remained as they are for many years to come.

We have in our State an inspection of fertilizers, cottonseed meal, and so on, as maintained in other States of the Union, and we maintain inspectors for this purpose; and I believe it will meet with the governor's approval, and that he will urge it upon the attention of the legislature, if we can propose some suitable bill by means of which the organization now maintained for general police work with regard to food, fertilizers, and feeding stuff can be used in this work with the weights and standards. For this purpose I hope that we may receive the assistance of the director and the helpful cooperation of the association, because Gov. Noel is, I am certain,

very anxious to bring this matter to the attention of the lawmakers. Up to this time disputes between the electric-power consumers and those who generate electric power have been adjusted largely by the school of electric engineering of the agricultural college, and the State chemical laboratory is also connected with the agricultural college. We have there also supervision over the weights of fertilizers and feeds. At the last session of the legislature we made a very heroic effort, as we thought, in the passage of our pure-food law, to require manufacturers to stamp the weight on the package; and I was very much surprised to find the enormous amount of pressure that was brought to bear from New York City to San Francisco against that provision. We had so much trouble that we were finally advised that it would certainly defeat the bill if we insisted upon that clause, so we eliminated it. But I believe that this is almost the nick of time in which to bring it up, and we are certainly very glad to have the opportunity of receiving your cooperation and assistance.

The CHAIRMAN. That is what we like to hear.

Mr. Austin. Mr. Chairman, if I may be permitted, I have thought of one other matter that I would like to speak of at this time. I just made a note here as to the nature of scales—the manufacture, sale, and use of unjust and defectively constructed scales—and also of tolerances. If that will be touched later on, I will be satisfied to wait.

The Chairman. It will come under tolerances. We have a bill pending before the Weights and Measures Committee on scales, and I think we ought to take that up later.

Mr. Reichmann has asked to be excused at this time. We have with us, from Ohio, Mr. Thomas and Mr. Dunlap. Which of these gentlemen will report for the State of Ohio?

Mr. Thomas. Mr. President, since the last meeting we have both held—or rather I have held and Mr. Dunlap is now holding—the office of State sealer, so I will tell you a few things only about what happened up to the time he took hold.

As I told you at the last meeting, the committee known as the "High-price food probe committee" of the senate was looking into the question of weights and measures with reference to its possible bearing upon questions of high prices of food. They became interested in the matter, and themselves wrote three or four bills and introduced them, for amendments to the weights and measures laws. One of them was a bill regarding the weight of a loaf of bread. It had two provisions; first, that the standard loaf of bread should be 1 pound—16 ounces avoirdupois; secondly, that the baker should put a label not less than 1 inch in diameter on each loaf of bread. At a public hearing on that bill the discussion was divided and

directed to the two points. The bakers were well represented, as the interested parties always are, and the people were not represented at all. They developed in the course of the hearing that the bakers did not want to have the 1-pound loaf requirement. When they got through talking about that they turned to the other requirement, and they were very much against labeling the loaf. They did not want to have the loaf any definite size, neither did they want to be required to state how much there was in the loaf. In other words, they wanted to be left a free hand on the bread situation, and as no effort had been made to organize support for the bill from the people's side, of course the bill died there in committee.

Another bill related to the confiscating of any weighing or measuring device, maintained by any person in business, which had not been tested and sealed officially by some sealer of weights and measures. There was no hearing upon that bill. It simply had the honor of introduction and reading and resting in the committee's hands. And so with two or three other bills. However, the agitation led to an increased awakening of public interest which has been of considerable value.

The only bill introduced from this committee which was passed was a bill making a change in the principal State law regarding weights and measures, and also making the State dairy and food commissioner ex officio State sealer of weights and measures. I had urged some action toward placing the work in the hands of some one who could give his whole time to it, urging, in accordance with the recommendations of this body, that the office of State commissioner of weights and measures should be created and equipped properly for efficient work throughout the State; but I was told in reply that there was a working agreement throughout the legislature that there should be no creation of new State offices during that session of the legislature. But something was needed to be done, and therefore the same committee of which I spoke drew up and introduced a bill transferring the duties of State sealer to the dairy and food commissioner, the statement being made that he had a great number of inspectors already at work, that he had a good deal of money given him for use in connection with his office, and that it was hoped, therefore, that he would be able at least to make a start toward an effective administration of the new law, and get some experience in connection with the matter which would be useful at the time of the meeting of the coming (that is, the present) legislature. I talked against the idea of making the weights and measures matter subsidiary to any other duties on the part of a State officer, but I said that if the tenure of office of the dairy and food commissioner could be made permanent, or at least during good behavior, I should be delighted to have the law passed just as it was, because the dairy and food commissioner was a man whom I knew personally and in whom I had every confidence. Probably some of you know what power his name carries in connection with dairy and food matters in the State of Ohio, and what respect violators of the laws relating to that subject feel for him in Ohio. It was the expectation at the time this law was introduced and passed that Mr. Dunlap would certainly succeed himself, but some funny things happened in Ohio last fall, as you know, and another man takes Mr. Dunlap's place. Regarding the things that happened since the passage of that law, Mr. Dunlap will tell you about those, and I take peculiar pleasure in introducing to the president and the members Hon. A. W. Dunlap, dairy and food commissioner of Ohio.

Mr. Dunlap. Mr. President, I certainly regret to report to this conference that we have not done very much in Ohio since the law was changed. This new law was passed the last day of the session of last year, 1910, and no appropriations were provided for the enforcement of the law, and nothing whatever could be done until we had the wherewithal to do it. However, we discovered a fund at the beginning of this year, January 1, that we were able to use for that purpose, and we began on the first day of this year to compare standards and to work generally along the line of enforcing the law.

The law is not what it should be. It was passed very hastily; it is loosely drawn; and there certainly should be a great many changes made in it. Since we started in, the standards from all the cities have been compared, or will be by the time my term expires next Tuesday. The law requires the city sealers and the county sealers (county auditors) to deliver to the State sealer their standards once every three years. I will say that there have been a great many of these city standards that are practically worthless, and have not been sealed. My chief man in that department, Mr. Anderson, reports that practically all of the city standards will be sealed by next Tuesday.

We made a little exhibit at the National Corn Show, which was held at Columbus in January and the early part of February, of some of the weights and measures that we found used in the markets. They attracted a great deal of attention, and we know the people are back of this matter at this time, and I think that if the bills were introduced and followed up a good law could be perfected at this session. But I regret that owing to the change of administration I doubt whether the new man will have time, owing to the many other duties that he will have in enforcing the present law, getting acquainted with the office, and also looking after the enactment of laws that have already been introduced regarding food legislation. But if it is not done this session of course it will have to be delayed for

two years, as our legislature will not meet again until two years from this January.

There have been three bills introduced in the present session, one of which—half a law or a third of a law, you might say—passed the house, regarding net weight on packages. I have not compared this bill with the proposed Federal law, but it is not too late yet to have it conform with the Federal law, and my experience with food matters is that it would be quite an advantage to have a uniform law. Our Ohio food law does not quite conform to the Federal law, and we find there is a great deal of conflict and more or less trouble in enforcing the law for that reason. So I believe, if this matter were looked into at this time, this law (which is now, as I say, only half a law) might be made to conform. I regret, of course, that I will be compelled to discontinue the active work, but if I can be of any service to my successor or anyone who is interested in getting this law passed, or getting the weights and measures matters adjusted, I will be very glad to do so.

The CHAIRMAN. I am very glad that Mr. Dunlap is with us, and I am going to take this occasion to make a statement, and I am glad to do it in the presence of Mr. Dunlap, and especially since he is going out of office.

This matter that he has just touched upon is a very serious one, and much more serious to you in your work than you suspect. Now, I think that your food law is one of the most important pieces of legislation that have been enacted. It is very far-reaching. Certainly no one can deny that these pure-food inspectors and those who are interested in the administration of that law should be on the continual watch for weights and measures errors as they appear in food products. But that is quite a different matter from the organization and the handling of the weights and measures affairs in the State. It is a problem almost as large as the pure-food work itself. The two things must in the end be separate. What would you think, Mr. Dunlap, if in some State, as in Massachusetts or New York, where the weights and measures are well organized, the pure-food matters should be put in the hands of the weights and measures officials? It would not work at all. And yet the weights and measures officials should be on the continual lookout for errors or transgressions of the law in regard to food. And so the other people can no doubt be of great assistance in weights and measures. But we should look to the future, and we should look beyond the mere weights and measures used in food, important as they are. This weights and measures matter is sure to include all of the measurements of public utilities. Now, would you want the electric meters, and the gas meters, and the water meters, and all that under the pure-food inspectors? It seems to me that both are sufficiently important to be placed under separate officials. The question of food is largely one of chemistry; the question of weights and measures is largely one of physics; and the regulation and inspection of all these measurements of public utilities is coming very soon to command the very highest talent. The regulation of water meters, gas meters, and electric meters is going to be just as important as the pounds and yards of our commodities.

Now, I want to make myself perfectly clear, and I want to make the bureau's position perfectly clear. We are for good weights and measures, no matter how it may come about. It is better to have it in connection with the pure food than not to have it at all, and in any case there should be the closest cooperation, and the pure-food inspectors should assist in every way in carrying out the weights and measures law, and I believe that is what it will come to. But I would like to see the main administration of the great problem of weights and measures put into the hands of men trained for that purpose. I do not want any misunderstanding about the position I take personally and the position the bureau takes.

Mr. Dunlap. Mr. President, I assure you I quite agree with you regarding that matter. But in Ohio our executive has adopted the policy of consolidating as many of the various departments as possible. There is, I know, a movement on foot to consolidate the agricultural department with the dairy and food department and several others, and make one head, and divide it up into bureaus. The legislature would not approve that method of having a separate department, at this time, at least; but I think we should work in that direction and finally have a weights and measures department separated from everything else. My intention was to establish a separate bureau, put a competent man at the head of it, and hold him responsible for the work. In that way he would give all his time and attention to that and nothing else. But as I say, the thing is cut off at this time.

The Chairman. I am very glad to hear you say that. I feel that anyone who goes into the subject will; and that is why I say that both the pure-food officials and the weights and measures officials ought to cooperate with each other, and each try to bring about legislation along the two main lines. If there must be consolidation, it is better to have it than no organization at all. I quite agree with you.

We have two delegates from Pennsylvania. I believe Mr. Wall is the State official.

Mr. Wall. Mr. Chairman and gentlemen of the conference, as I have stated at two or three other meetings, we are in a peculiar situation in Pennsylvania with reference to the sealing of weights and measures, for the reason that the constitution prohibits the creation

of a State office. We are now endeavoring to get around that peculiar situation. We have drafted, and have before the present legislature, a bill for sealing weights and measures, thus bringing the matter up to a certain point. Then we have another bill creating a bureau of standards and putting it in a department, so that we will not create a State office. We want to avoid that; we want to prevent the possibility of the law being knocked out by the Supreme Court, if it ever gets up there, and prevent conflict with the State constitution. That paragraph of the constitution provided that no State office shall be created or continued for the inspection or measuring of any merchandise, manufacture, or commodity, but that cities or boroughs may by ordinance create such an office when authorized by We have several cities that have sealers of weights and measures, but the councils have to make the laws. We have no State law. But we think that that paragraph of the constitution gives us the authority to have a State law as a foundation for ordinances in the cities, and so as to have uniformity throughout the State; and that is our situation now. Two years ago we had an act before the legislature; it passed the house and senate and went over to the governor, and he vetoed it. He vetoed it for the reason that the act provided for the collection of fees and the payment of the inspectors by fees or salary, at the discretion of the council. Now, in the present law we cut that out; there is no mention of fees at all. The bureau of standards, as we have it framed in the act, is to take care of the standards furnished by the Bureau of Standards here—we will have to buy another set, and that law provides for the purchase of another set of State standards—and the "bureau act," as we call it, provides for the appointment of officers to take care of them and standardize the local weights and measures; in other words, city sealers. The present bill covers only cities. Some think it ought to cover boroughs, because we have a good many boroughs that are large enough to become cities, but they say they do not want a city government; they want to hold on to the borough administration.

Now, Mr. Boyer, here, is local sealer of weights and measures at Harrisburg. He has been working for about two years, and I think he can say a few words on what he has found.

The Chairman. If there is no objection, we shall be glad to hear from Mr. Boyer.

Mr. Boyer. Mr. Chairman and gentlemen of the conference, I will not take much of your time, though I would like to add a little to what Mr. Wall has stated in regard to the proposed legislation. I would feel my trip very well repaid if I could go back to Harrisburg with the indorsement of this conference, either by resolution or otherwise, of the bills which have been presented to the legislature, and of which Mr. Wall has just spoken. It seems to me that

it would give us a powerful weapon if we had an indorsement from this end.

There are strange things happening in Pennsylvania, of which possibly some of you have heard. I came very near purchasing the standards that were partly destroyed by fire some seven or eight years ago. I was very close to buying them the other day, but the city solicitor suggested that I had better leave my fingers off of them. I understand there are several of them in possession of the bureau of municipal research in Philadelphia. But there is one of the greatest misfortunes that could have possibly occurred. I doubt very much whether it would be possible to replace the standards that have been taken away from the State. The bushel, the half bushel, and several other of the smaller dimensions of the dry measure were made of the prettiest brass I ever laid my eyes onof such a nature that it could not be corroded; it was unnecessary to put time and labor on it to keep it in a polished condition; it had a natural finish that stayed there under all circumstances; and those standards had been in use since 1845. Of course, we can get standards nowadays that will answer the purpose very well, but it is a great pity to see the material going to waste, as that did when it was melted up for junk.

In the city of Harrisburg we have 2,157 market places and over 1,100 grocery stands, including meat, etc., and if you gentlemen will consider that each of those has anywhere from three to a dozen weighing and measuring instruments, you can imagine that a single individual like myself has his hands quite full. I have absolutely no law to work under except the ordinance which created my office, and I have stretched it to its elastic limit. As Mr. Fischer can tell you, I sent him a photograph some time since of the confiscation I had made, and upon every one of them I am threatened with suit for taking somebody's property.

I have had some intensely interesting experiences that are contributing very much to the good of the cause. The members of the legislature, in session at Harrisburg at the present time, spend quite a little time at my workroom, which is in the cellar of the county courthouse, and my exhibit has proven quite a novel one to them. So I would request, gentlemen, that I may have your support for my resolution and my measures, which I will let you see after a while. I thank you for your attention.

The CHAIRMAN. Mr. Boyer has called attention to a very important matter, and one which I think is quite proper for this association to take up, namely, the indorsement of proposed State legislation. I do not believe that question has ever come up here before, but I see no reason why it should not be done. I hope you will bring that up later.

Mr. Boyer. Mr. Chairman, let me add just a word. I was instructed to get that support if I could. You see, we have an uphill fight. As Mr. Wall told you, a splendid bill was vetoed by Gov. Stuart on account of the objectionable feature of fees. Now, my ordinance carries a fee feature, but I do not touch it. I have not collected a fee since I have been in office.

Mr. REICHMANN. Have you got the bills?

Mr. Boyer. Yes; I have them with me.

The Chairman. Are there any questions? If not, we would be glad to hear from Mr. Goodwin, of Rhode Island.

Mr. Goodwin. Mr. President and gentlemen, my report will be very brief. I was disappointed in not receiving the report of last year's conference, as I expected to formulate some data and write up some briefs that would be of advantage to me to present at this meeting. As it is, I can make only a very brief report regarding conditions in Rhode Island.

It is a satisfaction and pleasure to me to say that the sealing laws of the State of Rhode Island are being enforced, and I think that our system in that State is nearly perfect. There are many matters that I want to introduce into our legislature in the near future, pertaining to foodstuffs and the regulation and inspection of gas and water meters and such devices as that which would interest our public. I was very pleased to-day to hear that subject discussed, as it is something that is being agitated in our legislature at the present time; but not being able to get any data on it I could not help it along, which I want to do, of course. There are several matters of importance that I hope will be discussed, so that I may take back to the State of Rhode Island some data that I can lay before our legislators.

One of my great objects is to find out what my neighboring States are doing, and what the conditions are in Massachusetts, Connecticut, and, in fact, all over New England. Now, I find, by comparing the standard weights of different commodities in the States adjoining Rhode Island, that we have a variation in the weights of different articles, bushels, etc., and I am very sorry that such is the condition. In reading one of the old reports of this organization—I think it was the report for 1907—I saw where Hon. Oscar Straus had advocated a national law to govern this subject for all the States alike. I would ask you, Mr. President, if any legislation has ever been passed by the National Congress regarding this matter.

The Chairman. I think, perhaps, you had better defer that until we come to the discussion of Federal bills introduced, etc., which is on the program here. That will come up then.

Mr. Goodwin. Very well. I do not know that I have anything else to offer at the present time. I am pleased to be here. There is one

thing which gives me pleasure to state. My appropriation for traveling expenses as State sealer of weights and measures was very small. I had a resolution offered to the legislature last year for an increase, and it was graciously given to me, and has been of great assistance to me in enforcing the sealing laws throughout the State of Rhode Island. It has given me an opportunity to get in touch with every sealer in the State, and has been of great advantage in furthering the interests of the sealing laws. I have great pleasure in saving that our governor is a man who is deeply interested in the subject of our sealing laws, and is very anxious at all times to further anything that is in the interest of the people, which, of course, is deeply appreciated. He is now elected for the third term, and has given good service. I do not know that there is anything more that I can say to-day that will be interesting to the members here, but I hope to be able to get some data on the subjects I have mentioned, so that I may be able to get some legislation passed regulating these matters. I thank you, gentlemen.

The CHAIRMAN. If there are no questions you wish to ask the gentleman from Rhode Island we will be pleased to hear from Mr. Henry, of Vermont.

Mr. Henry. Mr. Chairman, in Vermont the law is both new and old. It is old in the sense in which the subject of weights and measures is old in all the other States, because we had the State standards, of course, a great many years; and, besides, we had on the statute books laws to provide for a working system in the counties and in each town. There is a provision for a full set of standards for each county and for each town and city, and it is made mandatory upon the county treasurers and city and town treasurers to provide their offices with these standards, and to act as sealers. That law existed a good many years in the State of Vermont without anything being done. There was a very little work done in the city of Burlington and in the city of Rutland, but I do not know of any other place where anything has been done. At the last session of the legislature a new weights and measures bill was passed, and most of the old law was repealed. This law was passed with the help of Mr. Fischer, of the bureau; Dr. Reichmann, of New York; and Mr. Palmer, of Massachusetts; and I think, as has been said by Dr. Stratton, that it is a good law, because it is a general and elastic sort of a law. I presume it is very incomplete; and yet, of course, I am very incomplete, because I am the first commissioner up there, and it is really a new subject to me. I have only been in office since the first of the year. As yet we have not done any active outside work. But there is one point I want to bring out that is a little unique, you might say, in our State. The system there will probably be different from the system in the other States, as far as I know. In a great many States there

are active local sealers and active local ordinances or laws, without any State organization, and in the rest of the States there are active State organizations in combination with active local organizations. In Vermont it was the pleasure of the legislature to leave on the statute book the law requiring each city and town to have a full set of measuring standards, and making the city treasurer ex officio sealer of weights and measures. I talked with several of the members who were most urgent to pass this law, and as I understand itand that is the way I shall treat it at the start—that simply remained on the statute book as a matter of form. The idea is to have in our State a State department, and to have all the inspection and sealing under that department except as it seems to be expedient to have the local sealers in some of the larger places. Of course, the conditions in Vermont are a little different from those in most of the States, in that we have not any very large cities—that is, large from the census point of view. We have some cities that feel large enough, but they are not large in population. It seems to me that the scheme which is apparently laid out for me to follow, and which I think best to follow—that is, of having this work all under the State department would be the most uniform and most economical scheme. If there are any suggestions from anybody on that, I would like to hear them.

There are several good points about the flexibility of our law there. As I say, it does not go into detail; it simply provides for the general inspection of weights and measures and leaves it to the department to decide how often the inspection shall be made. It gives the department full police power for making such inspection, allows inspection at any time, and allows a certain scope for the commissioner to make rules governing the sale of commodities. It deals wholly with the subject of commodities, as I interpret it at the present time, and on the statute book there is very little special law in regard to commodities. We have a State which is noted mostly for its agricultural products, but we have no butter law, which seems a strange thing. But I suppose that will be regulated, and that a rule for butter and for similar products will be made by the department. If anybody would like a copy of the laws I shall be glad to furnish them. I have taken the addresses of all the delegates whose names are given there, and I will send them copies of the law as soon as the revised edition is out. I have some copies of the law here, which are almost correct, but there have been a few minor changes. I will send everybody a copy of the law as soon as they have it out, which will be in about a week.

Dr. Reichmann. Mr. Chairman, I would like to state that three or four times the State of Vermont has been mentioned as enacting legislation, and no one has mentioned the name of the one man who

is more responsible for the enacting of that legislation in Vermont than all the others put together. That man is Mr. Clement, of Vermont. To be sure, a formal action was taken by Commissioner Prouty, but those formal actions do not amount to much unless some one man puts his shoulders to the wheel and pushes it through. Now, Mr. Clement had an exhibit at the State fair, and I saw Mr. Clement at least once a week for about eight weeks. He went over all the details of that bill, and that man worked night and day for that bill; and if it had not been for Mr. Clement's efforts that statute in Vermont would never have been passed. I think the commissioner of Vermont will substantiate that statement.

Mr. Henry. I would like to substantiate that statement. I think it is wholly true; certainly Mr. Clement used a great deal of energy; he is a very energetic sort of fellow, anyway, and he devoted a great deal of time without, I imagine, much remuneration.

Mr. Reichmann. With absolutely no compensation. It was all at his own expense, and the bill particularly provides, at his request (because the accusation was made that he was working to have the position himself), that none of the commissioners appointed by the governor should be appointed. It was one of the most unselfish philanthropic pieces of work I have seen in a good many years—the work that Mr. Clement put on that statute.

Mr. Henry. Yes. That provision was in the other bill but was not in this bill; but Mr. Clement gave it out that he would not accept the position under any consideration. Before I allowed myself to become a candidate for the position I had a talk with Mr. Clement, and he said he would not take the position under any consideration. I think also that Ex-Gov. Prouty's name should be mentioned, because he did a great deal, I think, in fathering the bill.

Mr. Reichmann. Yes; he did a great deal in fathering the bill and appointing the commission; but, as I said before, the mere formal act of appointing a commission does not pass a bill. It was the one man who was back of it, and who spent time and money, devoted all his time, night and day, to pushing that bill, who actually put it through.

The Chairman. I wish we had Mr. Clement in several other States.

Mr. Reichmann. That is exactly what you need in every State. If you can not get one man in every State to push a certain measure, and keep right after it night and day, and make life miserable for the persons who are opposed to it, you will never get it through. I think that is the history of practically every bit of legislation.

The CHAIRMAN. It is not only true of State legislation.

Mr. Reichmann. No; it is true of all legislation.

The Secretary. Mr. Chairman, I think that Mr. Hazen's name should be mentioned in connection with that matter.

Mr. REICHMANN. His name was mentioned.

The Secretary. While he did not, perhaps, put as much time on it as Mr. Clement, he is a very influential man in the State, and I think he had a great deal of influence in having the legislation enacted. But I quite agree with Dr. Reichmann that Mr. Clement is the man who really did the work.

Mr. REICHMANN. I do not take any credit away from Mr. Hazen; far from it. Mr. Hazen is a man who by the influence of his word could help it, but he did not, like Mr. Clement, devote time and money, night and day, to push the matter along; and the mere fact that Mr. Clement's name had not been mentioned at all was what led me to make this statement.

The Charman. I think Mr. Hazen's part in this matter illustrates very well what I said we hoped to get from those members who are not weights and measures officials. Mr. Hazen had a great deal to do with the movement which resulted in the establishment of the State inspection service in Vermont. The first time he came down here he confessed that he was not greatly interested in the matter. He very soon got the spirit of the meeting, however, and when he went back he did all he could. I am very glad you brought this up, Dr. Reichmann. I think the association ought to recognize such men.

Dr. Reichmann. Give credit to whom credit is due.

The CHAIRMAN. We still have a few to hear from. The next is the District of Columbia. We have heard Mr. Haskell quite often, and are always glad to hear from him.

Mr. Haskell. Mr. President and gentlemen of the conference, I merely desire to say that we are carrying out a careful system of inspection of weights and measures in the District of Columbia daily, and that I would be pleased to have any member of the conference call at our offices, where we can explain our mode of doing business a great deal better than I can here. Our office is in the District Building, at the corner of Fourteenth Street and Pennsylvania Avenue.

Mr. Goodwin. Mr. President, I want at this time to impress upon the gentlemen whom we have present that it would be an advantage, I believe, for each and every one to visit Mr. Haskell's office and have him explain his methods of doing business. I called on him yesterday, and he certainly gave me a great insight into the admirable method that he has of doing the business of sealing. I think such a visit will encourage every member who is not thoroughly posted. Of course these old war horses, such as Mr. Reichmann and Mr. Palmer, do not need encouraging, but generally speaking, the majority of us do; and Mr. Haskell has such a very nice system that I think it would be of advantage for each and every member, the new members

especially, to visit his office and look into his methods of doing business. I hope they will take advantage of the situation.

The Chairman. We have with us a representative from one of the latest States to come into line, one from which we hear so many good things. And we can say this, that when Wisconsin does take up any progressive movement it goes right ahead and does it well. So we are all very anxious to hear from Wisconsin.

Mr. Janssen. Mr. Chairman, I have not very much to say about Wisconsin at this time. Mr. Smith, our State sealer, who has been very active since your last meeting, has drafted a bill, with the assistance of your office, and has introduced it into the legislature; and we have every reason to believe that he will get very favorable action on it. I am the sealer of Milwaukee, and there are a good many points which we would like to have brought out that Mr. McIntyre will take up for me. I thank you.

The CHAIRMAN. We will be glad to hear from Mr. McIntyre.

Mr. McIntyre. Mr. President and gentlemen, I had not intended to take any part in the reports of State delegates. The matters to which Mr. Janssen has just referred are matters which will come up under other heads of this program, and I would much rather take them up then. The bill which has been drafted by Mr. Smith is substantially in the form in which it was drafted in this office. There were some changes; one in particular, placing the State superintendent of weights and measures under the department of the dairy and food commissioner. We have already had some discussion on that, and I presume later in the conference we will have more. Is that correct, Mr. President?

The CHAIRMAN. It will naturally come up under one of these items, "Discussion of Federal bills and other legislation."

Mr. McIntyre. There are quite a number of points which are raised in that law, and I think will be raised in connection with the other States generally, which will all come up, I think, under the discussion later on. I do not care to say anything on them at present.

Mr. Janssen's work in Milwaukee is pretty well known, and he has copies of his annual report, which will speak for itself. We have in Milwaukee, of course, a socialistic administration, which makes it somewhat different from any other large city in the country. I am not a socialist, and neither is Mr. Janssen. We have a large number of officials who are not. They have shown a great deal of liberality in making appointments outside of their party, and it is very interesting to note the attitude they have taken toward progressive legislation in the city, and the efforts they are making in the State. The progressive legislation has certainly received most hearty support through the efforts of their party, without its being carried to the extent of radicalism; and that has been true in our department of

weights and measures. They have conceded, with the exception of raising salaries, practically all the points which we have asked, and we are getting their hearty support—so much so that when the matter of sending a delegate to this conference came before them they immediately agreed to it. We put in the resolution only last Monday, after the council meeting had been called, to have a delegate from the city attend this conference, and it was passed unanimously.

The CHAIRMAN. I want to add that Mr. Smith not only stirs things up in his State, but also with the Wisconsin delegation in Congress. We find them calling up every once in a while and wanting to know what they can do to help things along. When Wisconsin does get after a thing, it moves.

Mr. Janssen. They have been to my office in Milwaukee and made inquiries.

The Chairman. Several of the Wisconsin delegates have been of the greatest assistance to the bureau. They are taking the keenest interest in this work and following it right up.

Now, we have still one State to hear from, and I am sure we will not be satisfied to let Mr. Reichmann go without hearing from New York.

Mr. Reichmann. Mr. Chairman and members of the conference, the weights and measures matters have made great strides in the State of New York since the last meeting here. We had one bill passed last year which was in the line of constructive work; that is, we abolished 826 different positions, all the town sealers. We abolished all fees, and every county and every city has a sealer, all upon a salary basis. Every one of these sealers has to make a sworn report to me, and I have general supervision of all the weights and measures conditions in the State. As I reported at the last conference, the conditions in the city of New York were deplorable, and it was impossible for me to interest the city administration of New York in the matter until Mr. Gaynor became mayor. He immediately became interested in the subject, and the question was how to get rid of the head of the bureau then existing. The head of the bureau was a man who simply took no interest in the work, and consequently nothing was done. It was a comparatively simple matter; it only took five minutes to get his resignation. I recommended to the mayor that the department in New York City ought to be made an independent department, and that the salary should be \$5,000 a year instead of \$2,500; and he followed those recommendations and appointed a newspaper man, Mr. Driscoll, as commissioner of weights and measures of the city of New York, changing the title from chief of the bureau to that of commissioner of weights and measures of the city of New York. Mr. Driscoll was

a typical newspaper man of the sensational type, and for two months he collected all the data possible, and then immediately corralled all the newspaper men and all the hack magazine writers and gave them information from which to write sensational articles. You have probably noticed some of the articles in the magazines: they were very much of the sensational type and very full of inaccuracies. Those had been preceded by a number of other articles—I think one was written in the Saturday Evening Post; I know I wrote an article for one of the newspaper correspondents at Albany some time ago about "Good Housekeeping," and another for the American Magazine. There was an article in the Saturday Evening Post on the work of Mr. Kjellander in Chicago, and some one wrote a very dignified and proper article in the Atlantic Monthly on the work of the Bureau of Standards. Although a lot of that sensationalism is to be deplored, particularly from a scientific standpoint, yet at the same time it had its good effect in arousing popular sentiment. Muckraking articles of that kind you always have to discount about 75 per cent. You know the commission men got theirs about two years ago; saying that the commission men were all crooks, and so it was a good time for Mr. Driscoll to give out that all dealers were crooks. However, that opened the eyes of a lot of people, and in that sense it had its good effect. Of course he did little or no constructive work. His position was changed to that of deputy commissioner of police and a new commissioner of weights and measures was appointed. The present commissioner of weights and measures, I firmly believe, is a man who is going to straighten out the situation in New York City, because he is a man of ability and integrity, and a man who is always in favor of doing constructive work from the bottom up. It is going to take some time, but in the course of two years I think New York City will be as clean in weights and measures as any city in the country, if Mr. Walsh, the present commissioner of weights and measures, remains in the city of New York. Mr. Walsh hoped and expected to be down here to-day, but he telephoned me yesterday that he was very sorry he would not be able to be here.

Throughout the rest of the State every city has shown progress, phenomenal progress, in the last year, and the type of men that are being appointed as local sealers in the counties and cities are of the very highest grade. The old political ward healer and the old fellow who went around and collected his graft is rapidly being eliminated. I think I can safely state that there has never been anywhere a collection of as able men, as local sealers, assembled in one place as we had in Albany last week—all men of the highest caliber—as I say, with two or three of the survivals of the old régime, who are rapidly being displaced. Some of those, of course, it is a slow process to

replace; you simply have to let them go and give them enough rope to hang themselves, and they have very rapidly hung themselves.

Our present governor is a business man and is thoroughly in sympathy with the weights and measures proposition, because he knows that weights and measures is the fundamental basis of all business. One of the neatest talks on weights and measures that I have ever heard was the one that Gov. Dix made to the sealers of weights and measures of the State last week.

Our present law is broad enough to cover the whole of the instrumental side of weights and measures. We can absolutely take care of all the weights and measures as such. What we are going to attempt to do this year, and what we are going to do without any question, is to pass legislation which will regulate the manner of sale of certain commodities—not in any reckless manner, but after due consideration and consultation with all the business interests concerned. I have never taken a step in the matter of weights and measures in the State of New York without consulting the interests concerned. When we brought out our specifications on weights and measures in New York State, and the only specifications for tolerances that have ever been published in the United States, I called on every manufacturers' association in the United States and held a series of six meetings, which were reported stenographically, and based upon that and subsequent correspondence we established our specifications. Now, in connection with our present bill regulating the manner of sale of certain commodities I have consulted every association of retail grocers, a great many individual retail grocers, a number of individual wholesale grocers, the wholesale grocers' association, the commission men, the coopers, the drug interests, and so on, to see how it hits them. In a number of places, of course, you find people that object, and it is simply a matter of finding out why they object. I think that bill will pass without any question.

The work throughout the past year has been rather strenuous because there has been a great deal of interest taken by the people throughout the State, and I have been called upon very frequently to give talks on these subjects. From the first of March to the first of December I made 76 different talks to various organizations. In many of these cases I took the organization as a whole and prepared them to take up the matter themselves. For instance, when I left here last year I went straight to New York to speak at a banquet of the Rainy Day Club. This club is composed of women—600, I think, in number—who are interested, first, in getting every woman to wear short skirts on rainy days. They themselves do not wear them, but they are interested in everybody else wearing them. [Laughter.] They are also interested in many other things, such as the question of feeding babies and giving the poor people what they pay for.

Last January, at my suggestion, they appointed a weights and measures committee and wanted to know how they could do effective work. This weights and measures committee have gone around to the various settlements in New York City and to the various tenementhouse districts and given talks on weights and measures, illustrated with that bunch of tin cans and stuff that I had here at the last conference; also with a large series of photographs and charts which I sent them—of course, I could not give them to the club, but I lent them to them indefinitely—and they have been making any number of talks, at least 20. They are going to have another talk Monday night at some church. The first few times I went down there and talked for them and helped them out; the next two or three times I went down there and insisted on these women talking for themselves, and I listened to them and told them what points they should bring out. A great deal of good can be accomplished by a club of that kind by giving talks in the different sections on matters that affect those particular sections. A great deal of that kind of work has been done throughout the whole State.

I have brought with me some copies of my last report and of the previous one. In this last report is embodied the report on the conditions in New York City which opened the eyes of Mayor Gaynor. I will be glad to have you take some of those with you, and I will submit to the stenographer these documents as part of my report.

I do not know that there is anything else that I can say, except that the work in New York State has certainly been of a constructive kind, starting from the bottom up.

I am absolutely opposed at all times to having statutes enacted of the kind that are enacted by a great many of the agricultural departments, which makes the person who has the thing in his possession the one who is guilty. If he can show a guaranty signed by the person higher up, hold the person higher up responsible. That is the kind of legislation we want all the way through. We have had very few prosecutions. In the whole past year we only had about 35 prosecutions. I do not even mention them in my report, because I do not want to emphasize the fact of prosecutions. We want to get at the man higher up in every instance, and although we found a great many people who under the strict letter of the law could have been prosecuted, we waited patiently until we got the man higher up and got him with the goods; because he is the man who is responsible, and that is the only way a weights and measures official or any kind of official is going to get the support and cooperation of the people affected. It is a fair assumption, I think, that at least 95 per cent of the people want to do the right thing, and it is the 5 per cent that are crooks that you want to get after. I think

Mr. Bahrenburg is of the same opinion. It is the 5 per cent of the commission men that he wants to get after; otherwise he would not care for an apple-barrel law at all.

There has been a great deal of correspondence from my office with numerous other States. Wherever possible, as in the case of Vermont, I have helped other States. I had a number of conferences with people in New Jersey in reference to their bill, and I think there is no question that the bill will pass. At least 16 States have written me relative to their bills. Mr. Smith sent me a rough draft of his bill and I went over it and criticised it. I have not seen the final copy of the bill. As to Pennsylvania, I did not know they had a bill until to-day, but it was so good that it did not need any criticism.

I have brought with me some copies of the book of specifications and also instructions to sealers. I will bring up later, under "Tolerances," the question of those specifications, and see if this conference can not adopt those same specifications, because it is primarily of great importance to have uniformity, and we can get the cooperation of all these manufacturers. For instance, the Fairbanks Co., the Buffalo Scale Co., and a number of these other scale companies are living absolutely up to our specifications. It is only necessary to give them a reasonable time to change their forms. The Fairbanks and Buffalo companies are changing all their patterns simply to comply with these specifications, because they see the reasonableness of them. I thank you very much.

Mr. Boyer. I want to say to Dr. Reichmann, and a whole lot of others within the sound of my voice, that they do not need to think they are going to get away without helping Pennsylvania to make laws. What we want to do is to get the thing started. We will have to start at the bottom, with the establishment of the bureau that is provided in the bill that our secretary has before him. It will be the duty of that bureau for at least two years to make investigations. Then at the next session of the legislature the laws will be presented, and I would not be at all surprised if Dr. Reichmann would be called in.

Mr. Reichmann. Let me add just another word about these magazine articles. It is very desirable to have all these articles appear, but I do think, from a sense of fairness, that it was not proper and not fair to the Bureau of Standards to leave out its name. The only case where its name was mentioned was in an article in the last Metropolitan Magazine which starts out with "Mr. Louis A. Fischer, of Akron, Ohio." [Laughter.] Statements were made in a number of those magazine articles relative to an investigation of the condition of weights and measures by the bureau of municipal research.

The bureau of municipal research of New York City never made an investigation of New York City, and how those writers all got hold of that proposition I don't know.

Mr. Boyer. Dr. Reichmann, they did make another investigation in Philadelphia.

Mr. Reichmann. Yes; they made an investigation in Philadelphia and made an investigation all throughout New Jersey. Two of my inspectors took their vacation time in making that New Jersey investigation, which was carried on in conjunction with the investigation which the Bureau of Standards made in the western part of New Jersey. They have made a most complete and elaborate report of that investigation, and a most fair report. The municipal research bureau in Philadelphia has been making an investigation also over there, and has been making investigations in other places; but, as I say, they have never made an investigation in New York City.

The CHAIRMAN. So far as the bureau is concerned, we do not feel hurt at all if these articles do not mention us. We try to keep in the background in these matters. I, for one, have never enjoyed popularity of a certain kind. But back of that our effort has always been to put the local official forward and to stand back of him and help him as far as we could, and we feel that the State official and the local officials should have the credit for the work they do. It is largely a local matter. We have always pursued that policy, namely, that we did not want to go into a neighborhood and claim the credit for stirring up an investigation, the credit for which should go to the local authorities. The investigation that we have been conducting has been a very thorough one as far as we have gone. We are perfectly satisfied with it. We have obtained information that we could not have gotten in any other way. Perhaps we have erred on the side of avoiding the States which have already good organizations, but, as I stated last year, we have done that purposely and intentionally, for fear we might be accused of trying to interfere in the local matters.

At this point a recess was taken for luncheon.

## SECOND SESSION (AFTERNOON OF FRIDAY, FEBRUARY 17, 1911).

The conference reassembled at 2.30 p. m., Mr. Palmer presiding. The Acting Chairman. The next item on the program is the report from the Bureau of Standards. I will ask Mr. Fischer to report for the bureau.

The Secretary. This is the continuation of the reports of the delegates to some extent.

The most important thing we have to report on, I think, is the work done during the year by our inspectors. Since the 1st of July, 1909, up to the present time, the bureau has gone into 33 States and 117 cities. That makes an average of a little less than 4 cities to a State. I do not think I need to enumerate these States, but most of them are in the northern half of the country, although we have made some inspections in some of the Southern States, for instance, Louisiana, Mississippi, Tennessee, and Georgia. The results that we have found there are practically the same as those found in other parts of the country. There are some differences, but, at the same time, the conditions seem to be pretty bad everywhere. We have not investigated any State that could be considered as perfect by any means. The percentages of erroneous scales seem to vary from about 35 up to 60, and I believe in one case as high as 75 per cent.

Our standard for calling a scale erroneous is 3 per cent; that is, half an ounce on the pound.

The results of this work have been furnished to the officials of a number of States on request, and a number of States have been moved to action as a result of the conditions disclosed by our investigations. Other people had a great deal to do with creating interest in the subject, but the results obtained by the bureau have been of inestimable value in creating interest in the States where the investigations have been made. I have already read the list of States that are either considering or have enacted legislation, and I need not do it again.

The bills that have been introduced in these States are practically the same. There, of course, are variations, but in all essentials the bills are similar. Those that were not drafted by the bureau we have had a chance to criticize, and a number of others here have had the same opportunity.

During the year we have also been engaged on a new compilation of State laws. It is an enormous task to get those laws absolutely correct and up to date. The first compilation was used as a basis, but a great many old laws not in the first compilation were discov-

ered, and a great many new laws passed in recent years will have to be included. This volume was practically ready for publication a month or two ago, and would have been in print by this time; but on account of the activity of a number of States, which was to some extent unexpected, we decided to wait until they had finished legislating, or else our volume would be obsolete as soon as it appeared. I think that most of the legislatures will adjourn in a month or so, and then we expect to get the new laws and to include them; so that there is no reason why we should not have this new compilation in a month or two.

We have adopted a somewhat different policy in regard to the information we have obtained in the last six months, especially in the West. There are no State inspectors out there except in North Dakota, and this information that we have obtained has been given a great deal of publicity, partly because the bureau has given the information to the local newspapers, and partly because our inspectors have been asked to advise State and city officials as well as representative bodies of citizens, as to what steps should be taken to correct the bad conditions found. These statements have been copied by the various newspapers and somewhat magnified, and, as a result, we have received a few protests and requests for reports, which have been furnished. They seem to be satisfying to most of the people who get them. Some of the more important facts brought out by our investigation are as follows:

The total number of scales tested at the present time including 269 not classified is 6,648, of which 4,031, or 60.6 per cent, were correct.

Total number of weights tested, 8,210, of which 6,747, or 82.2 per cent, were correct.

Total number of dry measures, 3,681, of which 2,404, or 65.3 per cent, were correct.

Total number of liquid measures, 1,008, of which 754, or 74.8 per cent, were correct.

Spring scales of all kinds, except spring computing scales, 1,892, of which 814, or 43.7 per cent, were correct. This does not make a very good showing for spring scales.

Computing scales of all kinds, 2,253, of which 1,174, or 52.1 per cent, were correct.

All other scales (that includes of course equal-arm scales, counter scales, etc.), 2,234, of which 1,871, or 83.7 per cent, were correct. The percentage of correctness in the equal-arm and ordinary counter scales, you will see, is very much higher.

The total number of stores visited is estimated at about 2,427, and the total number of pieces of apparatus of all kinds tested is about 19,790.

In addition to furnishing copies of the reports of our inspectors, we have carried on an enormous correspondence with all sorts of people, who are interested in the movement, or who have heard of our work in one way or another; and we have, of course, given what information we had and distributed copies of the proceedings of former conferences and other publications on weights and measures.

That, I think, is about all I have to report on the work that has been done. If there are any questions that any one would like to ask, I would be very glad to answer them or have Mr. Holbrook do so.

Mr. Boyer. Mr. Fischer, would you kindly tell me, with reference to the computing scales, what basis you used in estimating the accuracy—the computation or the weighing?

The Secretary. The weighing.

Mr. Hand. Mr. Fischer, I would like to ask one question. In testing those scales do you sometimes find them over?

The Secretary. Oh, yes.

Mr. Hand. You put that down as incorrect?

The Secretary. As incorrect. I can say right now, though, that I think it is safe to say that 80 per cent of those that are incorrect are against the consumer.

Mr. Hand. Now, could you give me a general idea of the percentage of inaccuracy? Would you say 60 per cent of some of these scales were incorrectly graduated?

The Secretary. Yes.

Mr. Hand. About what percentage are under weight?

The Secretary. I could not give you that at the present time. Most of them, of course, are off 3 per cent, say; a considerable proportion are off between 3 and 6 per cent; and it is not an unusual thing to find them between 3 and 9, and 9 and 12, and we have found some of them beyond that.

Mr. Reichmann. In other words, counting that New York City report—I believe Mr. Holbrook stated to me that that average came very close to that same percentage.

Mr. Holbrook. I do not know about the errors themselves. The general percentage was much the same.

The Secretary. Most of them, of course, have the smaller correction, but it is a common thing to go into any of the markets almost anywhere in the country and find these scales half an ounce or an ounce off. That has been my experience in just causually looking at the scales, sometimes with Mr. Connors and sometimes with others; and most of you will have that experience if you look.

Mr. Haskell. Not in the District of Columbia, Mr. Secretary. If we find a scale that is an ounce or 2 ounces—

The Secretary. Two ounces is a little more than you will find, of course.

Mr. Haskell. No, we do not allow them now. We do not allow anything of that kind at all.

The Secretary. I think that is very probable. You understand I am speaking about the States now.

Mr. Haskell. Yes.

The Secretary. But in speaking of single cities, I think, Mr. Austin's city, Detroit, showed the highest percentage that we have found in any large city. I believe we found about 95 per cent of the scales correct. Chicago is very good for a city of its size, but Detroit—

Mr. Holbrook. Detroit is 88 per cent.

The Secretary. We have all these reports, and we would be glad to show any particular report to any one who is interested.

Mr. Goodwin. What are the figures for Rhode Island.

The Secretary. I could let you look at that report. I do not recall what the percentage was. We have those reports and you will be supplied with them some time. At the present time we are doing everything we can to furnish them to those States that are considering legislation.

The Acting Chairman. You have heard the reports of delegates, including the Bureau of Standards. Are there any additions under this head, or remarks that you desire to make? If not, we will pass that.

The next seems to be State weights and measures laws. Had you anything in mind under this head, Mr. Fischer?

The Secretary. We have a law that we have been working on that we would like to get the opinions of the delegates on.

Mr. Reichmann. Mr. Chairman, I move that copies of those laws be furnished to the delegates; that they be asked to read them over carefully and submit their criticisms in writing to the Secretary within 10 days; and that they then be acted upon by the executive committee. I do not think it is feasible to act upon each one of these bills, section by section, now. It would take a long time.

The Secretary. It would take a long time; there is no question about that.

Mr. Goodwin. I second the motion.

Mr. Thomas. I would like to ask one question, and that is whether the replies that are received in accordance with this motion will be printed and sent to the several delegates. I imagine that most of the delegates in attendance here are more interested in hearing what other people have to say on that topic than they are in talking on it them selves or writing about it. If it seems best to do the work by writing, then I think we ought to have the benefit of the opinions expressed after we get home.

Mr. Reichmann. Mr. Chairman, I see no reason why that could not be made an order of business for the next meeting. In the meantime any delegate here who wanted a copy of the law, amended to meet any objections or criticisms, might be supplied with a copy of it, and then at the next meeting we could take up each individual letter. Because practically all of those legislatures which are now in session this year either have introduced their bills or are not going to introduce any, and if they do introduce a new bill they will not have time to introduce it according to the form we propose here. As a matter of fact, in many States it is impossible to do that sort of thing.

Mr. Hand. Mr. Chairman, I believe it would be a very difficult matter to reach a general agreement with regard to this uniform law through correspondence. It would produce an immense amount of detail, and I do not believe anybody is going to take the trouble to consider all these things; whereas if we could make this an order for some time to-morrow, we could all read over this bill to-night, and we could then hear the criticisms of other gentlemen on it, and we would all become more familiar with it, and perhaps we could agree in large measure now. Besides which, the Legislature of the State of Mississippi meets next January, and we would like to have as much information as possible. But if we wait and allow this to come forward in the form of correspondence, we will have a great mass of detail that will never be sifted out, in my opinion.

The Secretary. Mr. Chairman, I might say that the experience of the bureau, and I think of every man present, is that when you send a thing around and try to get an opinion on it you don't get much. You do a lot of fishing, but don't really get very many results. That has been our experience; and while I do not care especially about pressing the consideration of this matter, what we are going to do if we do not get the opinion of this body on that is to publish this, anyhow, because there is too much of a demand for it. We can not put it off any longer. We have been furnishing this thing as it is. All these States in the West have got it. Perhaps 15 States are now considering a measure based on this particular bill.

Mr. Haskell. Mr. Chairman, I think the suggestion of the gentleman from Mississippi is a good one. That will give us an opportunity to look it over to-night and express our opinions on it, and it can be closed up to-morrow.

Mr. Goodwin. Mr. Chairman, I think that is the proper thing to do—to take the copies of this law and look them over carefully and to thrash this thing out to-morrow. It will not take a great while

to do it. I believe delay is dangerous, and if this is going to be of advantage to us we want to consider it at once.

Mr. Reichmann. Mr. Chairman, I believe that if every one of the delegates had a copy of this bill, and were instructed to submit his criticisms in writing within the next 10 days, he would do it, if sufficiently interested; and if not sufficiently interested, I do not think his criticism would be worth much. Furthermore, Mr. Chairman, we can judge somewhat from past experience. We have in the proceedings of one of our conferences a proposed model law, and of all the hodgepodge, ill-considered propositions that I ever saw in my life, that bill is it. That was considered in detail, and if I remember correctly it took four hours and a half to go over it.

The Secretary. I must say that I take an exception to that statement of Dr. Reichmann. I think that this particular bill, which he has had more or less to do with, embodies practically all those suggestions. They may not be arranged in the best order, but I think the suggestions contained in that bill were almost all of them very good suggestions indeed. I do not think that this particular bill is much of an improvement on it, except in so far as the wording is concerned. As a matter of fact, the things that ought to go into making up a bill have never been brought to the attention of the public before—of those interested, you might say.

Mr. Reichmann. Mr. Chairman, I withdraw my motion with the consent of my second, and I make another motion to the effect that we do consider this to-morrow.

The motion was seconded.

The Acting Chairman. It is moved and seconded that the matter of the consideration of the model State laws be laid over until tomorrow, with the understanding that each delegate will be provided with a copy of the laws for his consideration over night.

The question was taken, and the motion was carried.

The Acting Chairman. The next number is shipping containers, a subject in which I know several of the gentlemen present other than the delegates are very much interested. I will have to rely again on Mr. Fischer as to whether he has made any program as to how this discussion shall be conducted.

The Secretary. I haven't any special program about that. Has anyone any suggestion to make?

Mr. Reichmann. Mr. Chairman, there has been introduced in the Legislature of the State of New York a bill which, as I stated this morning, is being considered by the commission men, the retail grocers, the wholesale grocers, and the manufacturers of containers; and I will read that one section which refers to containers:

Where not otherwise provided by statute no person shall manufacture, sell, offer, or expose for sale containers for vegetables, produce, or fruit that are not of the capacity on one barrel, half-barrel, third-barrel, or multiples of the

barrel or submultiples of the bushel divisible by two: *Provided*, *however*, That fruits, vegetables, and produce may be sold in other-sized containers if the net capacity in terms of measure is plainly and conspicuously marked, branded, or otherwise indicated in the English language on the outside or top thereof, or is marked in accordance with the provisions of section seventeen: *Provided further*, That a barrel within the meaning of this and the ensuing sections of this article shall represent a quantity equal to seven thousand and twenty-six cubic inches or a barrel having the following dimensions: Head diameter, seventeen and one-eighth inches; length of stave, twenty-eight and one-half inches; bilge, not less than sixty-four inches, outside measurement; distance between heads, not less than twenty-six inches; and to be known as a standard barrel: *And provided further*, That a reasonable variation of the capacity specified shall be allowed.

The following section, to which it refers, is a section which provides that when a standard-size container is not used the outside of the container shall be marked with the quantity of the contents, either in terms of weight, measure, or numerical count. That bill establishes a standard barrel of a certain size, and also legalizes the half barrel and the third of a barrel, the third of a barrel corresponding with the apple box used by the Oregon shippers. It also establishes boxes and crates of a bushel or submultiples of a bushel divisible by 2. I think that every fruit growers' association in the United States has practically adopted that sort of barrel. There are, to be sure, a few in those sections where they ship pears who advocate a smaller-sized barrel, and that smaller-sized barrel is always a confusion for every shipper and every receiver of goods; and, furthermore, a barrel bill is applied in nearly all the States to certain commodities only, like apples, pears, or quinces, and sometimes potatoes.

Our present apple-barrel law is absolutely vicious, because it states that the barrel shall have a certain dimension, and if it does not have this dimension it shall be marked with the word "short." If it is marked with the word "short" it is a legal barrel, and you are immune under the law. As a result the shippers mark every barrel "short," and no one except the trade knows all that the word "short" means. Furthermore, they are not marked in a conspicuous manner.

I think, Mr. Chairman, we would like to hear from Mr. Bahrenburg and Mr. Cummings. I have gone over this bill with Mr. Bahrenburg on this same matter. Mr. Bahrenburg has had a great deal of experience in this line with the National League of Commission Merchants, and is right in with Mr. Kimball, the president of that league, and has also had a great deal of experience before Congress on the Lafean bill and some other bills.

The Acting Chairman. The conference will be very glad to hear from Mr. Bahrenburg and Mr. Cummings; and it gives me pleasure to ask Mr. Bahrenburg to say a few words on this matter.

Mr. Bahrenburg. Mr. Chairman, speaking on Mr. Reichmann's bill here, I want to say that it is just what we as commission mer-

chants are looking for—just what we want. In the early part of 1909, here in Washington, there was a conference held of all the different apple interests—growers, consumers, dealers, middlemen, and commission merchants—and at that conference, after considerable discussion, they adopted the standards that Mr. Reichmann calls for in his bill. Speaking for the standard barrel I think that there is absolutely no objection to the barrel for apples, although there is a little objection in regard to pears. But taking it from a practical standpoint, and as a handler of pears and quinces, I personally have always found that this standard barrel was the barrel best adapted for both pears and quinces. The trade take to it better and it is just what is wanted.

I want to say that I am very glad to have had the opportunity to attend this conference and to note the work that has been done up to the present time. I think that we can see where the cooperation of you gentlemen here will result in our getting national legislation; and I think that is what the ultimate aim should be. While we want State legislation, as dealers we want to be protected by Federal laws so that we are not hampered. For instance, if a bill of this kind goes through and another State comes in with a smaller package we are compelled to refuse those goods or else take the consequences of the law. And I can see where cooperation on the part of all you gentlemen will mean that the different States, working together, will remedy this condition of affairs and that we will finally secure Federal legislation.

Mr. Goodwin. Mr. President, it seems to me that this thing is all wrong. I believe that this thing should be regulated by the National Congress. This should be a universal thing for all the States. When we make independent laws in the different States we are liable to conflict. We do conflict. Even in my neighboring States—Massachusetts and Connecticut—the standards vary from those in use in Rhode Island. Therefore I think that the only proper way to get this thing absolutely right is to have a national law passed by which all of the States shall be governed.

Mr. Bahrenburg. Mr. Chairman, I want to say here that the National League of Commission Merchants of the United States are heartily in favor of what Mr. Goodwin says. We want national legislation. Of course, as long as there is State legislation coming out, that is just what we are looking for; we certainly can not object to that; but we want national legislation by all means.

Mr. Reichmann. Mr. Chairman, I would like to call Mr. Goodwin's attention to the fact that of course it would be an ideal proposition if we could get national legislation to govern all these things, so that we could ship to the Fiji Islands, if necessary, and always use the same container; but you are never going to get Federal legis-

lation until you get some State legislation first. Make your State legislation right and your Federal legislation is going to follow. The whole history of legislation will bear out that statement. You can not start with Federal legislation and follow with State legislation.

Mr. Goodwin. Mr. President, I believe it is within the province of every delegate here to go before the legislature of his State, and go to his representative in National Congress and take this matter up at both ends and thrash it out and get the result that we desire—that is, a universal law to govern all the States alike. I believe that I can do it, and if I can do it, in my humble position, I believe others can do it.

Mr. Reichmann. I think Mr. Goodwin is just right. I think all of us appreciated seeing Mr. Goodwin down here in Washington at that committee meeting when they discussed that net-content-of-container law.

The Acting Chairman. I take a great deal of pleasure now in presenting one of the citizens of my own State, a man who I know has done a great deal of work on standard packages for food, etc., and I will ask you to listen for a few minutes to Mr. Cummings, of Boston.

Mr. Goodwin. I thing I have national legislation as much at heart as any one here, and I believe that is the only solution. But I feel with Dr. Reichmann that it must be based on State laws in a way. I think Dr. Reichmann has done more work in getting this bill formulated in the right way than any other man in the United States. He has got the opinion of more people and more practical people than almost any one could, except one in his position and with his energy. And I will assure Mr. Goodwin on another point, as a member of the committee of which Mr. Bahrenburg is chairman, that we are instructed to prepare a bill for national regulation on these very lines—that is, for control of the barrel and box proposition—and we have both been in touch with Dr. Reichmann in preparing this bill.

There are some things which I would like to ask Dr. Reichmann. For instance, under the wording of that section, would it not allow the stricken bushel to be used in place of the third of a barrel?

Mr. Reichmann. Yes, that is true. Perhaps it would be better to cut out that bushel altogether and simply say "submultiples of the bushel divisible by 2." I would simply say "that are not of the capacity of a barrel, one-half barrel, one-third barrel, or multiples of the barrel or submultiples of the bushel divisible by 2." That would eliminate, of course, the 2,200-inch bushel crate.

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Mr. Cummings. And it would also, interpreted in that way, prevent the 67.20-cubic-inch box; it would bring it up to 70.26?

Mr. Reichmann. No, no; absolutely not. It would retain that 67.20-cubic-inch box. Following your suggestion we simply cut out that word "bushel" and substitute "one-third barrel." We eliminate the bushel crate; that is, what would be used for a bushel crate would be one-third of a barrel, and that is what everybody wants. Every retailer gives short weight every day simply for the reason that he assumes that a barrel is 3 bushels.

Mr. Cummings. Now, there is another point, and that is the guaranty which is handed down from the manufacturer through the commission man, or jobber, to the retailer. I can not in my own mind see how that will work out to any great advantage, especially in interstate shipments. If that can be embodied in a national law, thereby regulating interstate shipments and the marking of the capacity of the package by the manufacturer, it will serve its great purpose. On intrastate shipments it does not particularly matter, but I do not see how a State regulation can embody that clause with any great degree of safety.

Mr. Reichmann. You notice the way that is worded there; it only takes in those that are within the State—the manufacturer, jobber, or seller in the State. We go as far back as we can within the State; our police power does not extend beyond the State. Assume that this bill became a law, and you received from a manufacurer in the State of New York some goods that were not marked within the provisions of this act. Your State could not touch it, you see; but you or your State officer could notify me, and it would be my duty as a State officer to investigate that case in my State. Then, if I found that shipper sending the stuff out, I could easily reach him. In other words, our first duty is to protect those in our own State, and then we take care of our neighbors.

Mr. Goodwin. How would you apply the law to people who send small or short measure commodities into his State?

Mr. Reichmann. We can reach them very simply, very easily. Take for another concrete example a man sending some potatoes in a barrel outside of the legal standard of barrel. Suppose that dealer buys that barrel from a commission man. Under one of the provisions of this law he will get a guaranty from that commission man that those are marked within the meaning of the act. Now, the commission man, if he has bought them from outside the State—we can not get the man outside of the State, but we can get the commission man that sold it to him—that commission man, knowing that this is the law, is going to make the man from whom he buys the goods ship them to him in standard-size crates or else he won't buy them; and the commission man will send them, for the very simple reason

that he can not cut out the market. Now, the Norfolk people, on that potato proposition, wrote me a letter and said: "If you don't want to take our barrels we will cut out the New York market." I wrote them: "Thank God; I am glad you will." Then they wrote a polite letter and said: "We can't cut out the New York market; we will comply with the provisions of your law."

It is certainly within the police power of every State to establish its own regulations irrespective of what the Federal law may be. But if you want to get a uniform Federal law, the thing to do is to get uniform legislation among some of the large States, and then you will get the Federal legislation; and you will never get it the other way. I think that is the experience of all legislation.

Mr. Goodwin. I was going to suggest that I think it would be a good idea to let the great State of New York take this matter up at the present time and try to formulate this legislation. I think it would be an entering wedge and a good lever to use in the interest of all the States hereafter. How would that suit the gentleman from Ohio?

Mr. Maroney. Mr. Chairman, may I ask a few questions, if you please?

The Acting Chairman. If Mr. Goodwin will give way.

Mr. Goodwin. Certainly.

Mr. Maroney. How would you bring in poultry and eggs—by net weight or numerical contents?

Mr. Reichmann. We are talking about the whole bill now. We started with a discussion of the standard barrel. That bill reads "no person shall manufacture, sell, or offer or expose for sale containers for vegetables, produce or fruit," etc. Poultry and eggs would hardly come under the head of produce, fruit, or vegetables. Now, under another provision of this same bill poultry would have to be marked either in terms of weight or numerical count; and advisedly so. It would have to be numerical count in that case; you can't sell poulty by weight.

Mr. Maroney. You can't?

Mr. Reichmann. No, sir; because people buy a pair of squabs or a pair of spring chickens, or two or three, or one. But if the person wants it weighed, then weigh it for him.

Mr. Maroney. That is just what I am getting at. Does the same case hold good in eggs?

Mr. Reichmann. Certainly. All eggs to-day are graded and bought at wholesale by weight, as every commission man will tell you—gross weight, unfortunately. Practically all eggs sold in crates are sold by weight and they are graded by weight. Then when they are sold at retail they are sold by numerical count, very properly.

Mr. Maroney. Let me ask another question: Do you think it would be constitutional or held good in law if I should agree to buy from you a quantity of goods, such as a pile of stone or a pile of apples or a pile of potatoes? Do you think that anybody can stop us, or any laws that you make?

Mr. Reichmann. Absolutely not. You can never pass a law to violate the right of contract. But at the same time the question of its constitutionality is not a matter for us but for the courts to decide. We have no right to discuss that. We do not care whether it is constitutional or not. When we draw that bill and that bill is passed and receives the consideration of the governor and becomes a law, then we can find out whether it is constitutional, and the only way that you can find out is to try a case under it and carry it up to the highest courts.

Mr. Maroney. That is just what I am getting at. This same proposition came up to me a short time ago. As you probably know, the city where I live makes 95 per cent of the cartons made in this country. I put this carton proposition up to a friend of mine who is a professor in the Yale Law School. He said, "There isn't any court in this or any other country that will declare any law constitutional that prohibits the buyer and seller from dealing in any known commodity as to pile or quantity."

Mr. Reichmann. In my State, for instance, if it is an agreement made between you and me, and if it is less than \$50, and you take the case up to the court, it is simply a matter of veracity between you and me. If it is more than \$50, under the Code of Civil Procedure that agreement must be in writing. That, of course, varies with every individual State.

Mr. Maroney. That was one of the things that I had incorporated in the local ordinance that went into effect in my city this week, which says that all goods shall be sold by Winchester bushel or avoirdupois pound, except by special agreement.

Mr. Reichmann. That is all right.

Mr. Maroney. That covers it.

Mr. Reichmann. Only that it is not necessary to add "by special agreement," because that is always understood.

Mr. Maroney. Well, it covers it in the constitutional part of this law by saying——

Mr. Reichmann. It does not affect it in the least. The only thing is the point we had in this bill here; Mr. Bahrenburg called attention to it. The only thing it does is to call the attention of the fellow who wants to make the agreement to the fact that he can do it.

Mr. Maroney. I do not know anything about it myself, but I got this advice from a very learned man in the Yale Law School, who said that by putting "except by special agreement" in there you covered the constitutional part of the agreement between you and me as individuals. In other words, if I went to you I could dicker with you for a certain pile, but if I went to you and said, "Give me a quart of this" or "a pound of that "or "a barrel of that"—a barrel of potatoes for instance, which in my State is 172 pounds—I had to get that 172 pounds; but if I went to you and said, "I will take that barrel of potatoes or that lump of potatoes and pay so much," you and I could make that special agreement and it would be allowable. There is no law to prevent it.

Mr. Cummings. I want to ask one question right on that line. It has been a contention in Massachusetts for some time that no sealer had any right to come down and claim that we sold a short box; that we did not sell it by the quart; we sold it by the box, and under that clause which the gentleman from Connecticut has spoken of, that might be sold as a box without any difficulty whatever and no prosecution would take place.

Mr. Reichmann. That is all right unless there is a specific provision in the law which says that that box shall be a quart, and so on. In that case it does come within the police power of the State, because there is a berry-box law. I asked the opinion of the attorney general on that point, and he gave me a long opinion, substantiated by any number of judicial decisions—for instance, in the matter of the sale of vinegar, and similar instances. As soon as the State provides what the established standard shall be, then if the man sells it as a box, that box must be of a certain size because the law says it shall.

Mr. Cummings. Then that applies to the barrel of potatoes?

Mr. REICHMANN. Exactly the same.

Mr. Maroney. I do not think my friend Cummings heard what I said—that the local ordinance had taken care of it. All goods must be sold by avoirdupois or Winchester bushel except by special agreement.

Mr. Cummings. I understand; the special agreement covers the sale of one barrel of potatoes.

Mr. Maroney. It covers anything, if we want to buy anything in a lump sum. If I ask for a barrel of potatoes from you direct there must be 172 pounds in that barrel, but if I ask for the quantity of potatoes that is in the case or barrel you and I have a right to make that special agreement.

Mr. McIntyre. Dr. Reichmann, is it the intention of that law to prescribe the size of the package for interstate shipments?

Mr. REICHMANN. Certainly; "any person that sells or offers for sale"; and that has been held in a number of cases. For instance, we had a case in the State of New York which was carried to the court of appeals, on the matter of the sale of some vinegar which was

manufactured in the State of New York and was sent to the State of Michigan. The quality of that vinegar violated the State pure-food law. The man was prosecuted and the case was carried up to the court of appeals. The court of appeals held that it was within the police power of the State to regulate how everything should be sold in the State. You know the Supreme Court has practically upheld the contention that the State has police power to regulate the price of commodities if it wants to. That was the case with the 80-cent gas bill in New York City.

Mr. McIntyre. I was wondering if that objection had been raised. Mr. Reichmann. Yes; I fortified myself on that objection by an opinion from the attorney general.

Mr. McIntyre. Perhaps you have on the other one. You stated that if a commission man imported goods from another State in small-sized barrels and sold them you could come back on the commission man. Where he has sold them in the same package in which he imported them?

Mr. Reichmann. Yes. I could come back on the commission man.

Mr. McIntyre. The original package?

Mr. Reichmann. Yes; that does not make any difference as soon as he offers it for sale in the State, you see. We can not stop his receiving it, but we can prevent him from selling it.

Mr. McIntire. There is a grave question with reference to original packages which we have met in Wisconsin.

Mr. Reichmann. I think that case has been covered in a number of very similar cases in the court of appeals in our State. I do not know whether the matter has ever been carried to the United States Supreme Court or not.

Mr. McIntyre. There are a large number of United States decisions, very strong decisions, which have never been overruled so far as I know. That is one of the difficulties we are up against in trying to bring in such a law—those decisions upon original packages in interstate commerce.

Mr. Thomas. We have had some experience in Ohio with this constitutional question, and I went to the attorney general of Ohio in my capacity as State sealer and raised the question with him. He said that you can not prevent the sale of commodities in any sort of package without prescribing a general law such as this now before us, because if you attempt to do so you violate the constitutional provision of freedom of contract—a ruling that is contrary to the opinion which Mr. Reichmann said he had received from his attorney general. But he also said that you can get around that difficulty in a very simple way, namely, if you have your law worded in such a way as to throw it distinctly under the police power of the State. For instance, it would be perfectly lawful for the State to pass a bill

providing that "in order to prevent misunderstanding, fraud, or deceit in the purchase or sale of articles of food "—you can make it go further than that, of course, but articles of food are under consideration—"it shall be unlawful to sell articles for human food in any other way than in packages which are of standard weight or measure." That was given by the attorney general of Ohio, who stands pretty well in the legal fraternity.

There is another question I want to raise here in connection with the general proposition in this law, and I am concerned principally in the proposition—for such it comes to—to get eventually a United States law containing such provisions as those in this bill. In Ohio at present there is a bill pending before the legislature which has been talked of for some two or three years—it is prepared and presented and backed by the retail grocers' association of the State and has also the support of a commission merchants' organization—providing that articles for human food shall be sold only by weight, The bill is not a perfect one, but and enumerating certain things. the main provision which is aimed at is the securing of the sale of food commodities by weight, except in case of a few commodities which can not very well be handled by weighing without damage to the commodities themselves, such as the soft fruits, which are damaged by too much rehandling. That method of sale is now in force in some of the cities of Ohio on the initiative of the grocers themsclves. We have been told in previous conferences that that rule also applies in the far West, and it applies—I can not name the localities just at the moment—at places between the extreme West and Ohio. It prevails to my personal knowledge in certain parts of the East. One great good that is secured by sale in that way is the preventing of what I believe to be the most frequent sort of fraud in the handling of foodstuffs, namely, the sale of vegetables and some other commodities in the markets of the cities. I know that in our own city, Columbus, where a pretty efficient inspection of weights and measures, under the circumstances controlling, is in force, I have seen, myself, in the markets measures which have been tested and sealed by the city sealer of weights and measures, presumably filled, but really not half filled. Dr. Reichmann has shown us here some fraudulent measures and methods which would be impossible in the selling of such commodities by weight; and personally I am inclined to feel that that really is the best method to secure the interests of the purchaser. Now, I would like to see our discussion broadened a bit, and see whether other representatives here present have not some experience or at least some views upon that subject. This bill, if it becomes a law, will not prevent that class of fraud in the markets to which I allude—the designedly improper use of a proper standard measure.

Mr. Reichmann. I would like to say for Mr. Thomas's information that that is only one section of the bill. We specify in that bill certain commodities which must be sold by weight. I was just bringing up the question of containers because that was the subject that was on the program.

Mr. Cummings. Speaking of retailing, I would like to ask of Dr. Reichmann if he considers that this one-third of a barrel, making a box of 2,342 cubic inches, and the multiples of it, will apply to the retailing of all commodities, and define specifically the term "heaped measure"?

Mr. Reichmann. No; this will apply only to containers, it does not specify anything about heaped measure. We are encouraging the people to sell at retail by weight. It is an impossibility to sell at wholesale by weight altogether, on account of the difficulties engendered by the way in which the commodities are grown, and all that sort of thing. But a retailer who starts to sell by weight never goes back to selling by measure. We have any number of cities in the State of New York where I have consistently encouraged the men to sell by weight, and they will never go back to selling by measure.

Mr. Cummings. We all know that the ultimate end of the package is in the hands of the retailer, where it is distributed to the consumer. One of the greatest troubles we have had in Massachusetts has been through the retailers selling stricken measures, and we have never been cursed with the term "heaped measure" so far. Mr. Palmer has a bill before the legislature now compelling the retailing of all goods by weight, as weight is specified on our statute books, which is 60 pounds of potatoes, for example. Therefore, if a man sells a peck of potatoes it has got to contain 13 pounds. That specifies what "heaped measure" means, and to my mind is the only way in which sale by weight can be applied to the retailer. I believe in that thoroughly, although there is one amendment to which I am obliged to call Mr. Palmer's attention, and that is that we have apples, pears, peaches, and quinces designated by weight on our statute books, which would prevent their sale by numerical count; and of course that has got to be embodied in this bill of Mr. Palmer's.

Mr. Reichmann. Do you not also specify that the weight per bushel of pears is the same as that of apples—48 pounds?

Mr. Cummings. Fifty-eight in pears, 48 in apples. Now, there is a matter in connection with our weights which has got to be gone through and revised, because we all know, who handle apples, that a bushel of large Kings, Ben Davis, or Alexanders, or any large apples will weigh not over 35 pounds, whereas Baldwins, being a solid, heavy apple, will weigh 48, a tolerance is allowed for. The word "tolerance" is all right; I never could object to it at all where applied

under the jurisdiction of the sealer of weights and measures. I object to tolerance when allowed to the manufacturer. Applied to the manufacturer of strawberry baskets it results in the producer or the speculator requiring his baskets to be made of smaller capacity. It is the same in barrels; it is the same in any container where tolerance is allowed, except when it is in the hands of the sealer of weights and measures, who is presumably a just man, a man of good judgment, and who knows where fraud is intended and where deceit is not practiced. It is a simple matter for him, but if it is allowed to the manufacturer I do not believe in it.

Mr. Austin. Copies of these laws, as I understand it, are to be presented for passage to the various States?

Mr. REICHMANN. Yes.

Mr. Austin. If it should not obtain that result and different laws should be enacted in different States, would there not be serious confusion in trade regulations between different States?

Mr. Reichmann. There is now; and the more confusion there is

the sooner you are going to get a national law.

Mr. Chairman, I move that it is the sense of this conference that it is necessary to establish certain uniform standards for containers for various commodities that enter into trade where such commodities are sold in containers.

Mr. Austin. I support that motion.

The ACTING CHAIRMAN. Is there anything to be said on the question?

Mr. Goodwin. Mr. President, I think that a resolution of that character passed the last conference a year ago.

Mr. Reichmann. We passed a resolution last year favoring the McKinley bill.

Mr. Goodwin. It was, practically speaking, to the same effect as the resolution just offered. Now, has our executive committee done anything in regard to this matter? It was left in their hands. As I understand it, it was the sense of this meeting, of the delegates here assembled, that a bill of that character should be introduced in the National Congress to govern this subject. I believe they should introduce it at the proper time and place and see if we can have some national legislation passed regarding this matter. I want to call the attention of the delegates here present to that fact—that there was a resolution of that character introduced here.

The Secretary. As a matter of fact, I have no other information to give than what was given this morning. Reports of the various committees were called for and they were given. There was a special committee appointed to draw up that bill, and nothing was done about it; but it is easy enough to adopt resolutions, of course.

Mr. Goodwin. What is the use of making resolutions on these subjects if they are not going to be carried out?

The Acting Chairman. We have one other man; that is Mr. Wescott, a man who is very familiar with this subject, and I know that he can tell us briefly something that will be of interest.

Mr. Wescott. Mr. Chairman and gentlemen, I represent a cooperative association of about 3,000 producers of Irish and sweet potatoes. They market their product exclusively in truck barrels with burlap heads. Our interest in this matter, primarily and very highly, is for uniformity. We market our product in perhaps 40 States, and at present, owing to the newly awakened interest in the subject and the agitation in a great many States, we find ourselves up against a very difficult situation. We aim to meet the requirements of each State into which we ship. We have had within the last month or so, at the general offices of our association, two meetings of perhaps 50 of the local manufacturers of barrels. Those gentlemen have attempted to find a common ground on which the requirements of the several States, some prescribing a fixed weight and others a fixed standard of cubical contents, could be met; and, of course, it is a practical impossibility, except by the adoption of a maximum standard which would meet the requirements of the strictest State and exceed those of the other States. Of course, all that is extremely inconvenient, expensive, and wasteful for us. We earnestly hope that uniformity, by agreement in State legislation and, if possible, now or later, by some Federal enactment, at least so far as interstate commerce goes, will be attained.

There have been one or two suggestions made as to which, I think, our experience as producers of these commodities may be suggestive.

First, with reference to making the weight of the package the standard, making the requirement a weight requirement. Of course, the advisability, perhaps the absolute need, of a weight requirement is obvious in the case of the retailer, who sells in a small package which is very easily stacked. For the producer, however, who sells his goods in a barrel, a little reflection will show that that reason for a weight requirement does not exist. The barrel is too large a receptacle to be stacked; and if it could be stacked at the shipping point, the stacking would soon get shaken down in transit. So that the necessity for a weight requirement, I think, does not apply in the case of the barrel as it is filled by the producer.

Now, there are very serious practical objections from the standpoint of the producer to a weight requirement in prescribing a minimum barrel. In the first place, if the contents of the barrel must be weighed, you impose, theoretically at least, upon the farmer the necessity of providing himself with scales to weigh the contents of the barrel; while if you make your requirement one for cubical contents, for capacity—and that is what we very earnestly hope to see adopted—the package itself becomes a measure. The burden is thrown on the manufacturer of the barrel, who need only at the beginning of the season see that he complies with the rule, and the farmer who probably fills and shakes down his package can be assured that he is on the safe side of the law.

Another consideration in that connection is that a weight requirement makes for diversity and confusion in State laws. We find at the present time considerable difference in the requirements of the various States which have adopted a weight rather than a capacity standard; and then, too, the necessity for a different weight for each different commodity brings in an element of confusion as between different commodities. A package of sufficient size to meet the weight requirement on Irish potatoes, for instance, may be too large or too small for the weight requirement on sweet potatoes, whereas if you make your capacity——

Mr. Thomas. Mr. Chairman, may I interrupt? Mr. Wescott, I think, was referring to remarks I made. He is under a misapprehension. The proposition in Ohio is not to require a barrel to contain so many pounds of potatoes, but that the sale shall be done by weight, so that whether the barrel is full or not, whether it contains one commodity or another, the purchaser shall receive so many pounds. In the Columbus markets, in the wholesale and in the retail trade, chickens are sold entirely by the pound.

Mr. Wescott. I believe that in the copy of the suggested model for uniform State legislation, as it has been distributed, the cubical contents of a barrel of the suggested dimensions is not given. I understand that the equivalent in cubic inches of a barrel of the dimensions prescribed is 7,026 cubic inches. I think it would be extremely beneficial if all these copies that are in circulation could be amended by the insertion of the equivalent which Dr. Reichmann gave in his reading of the copy which he has, because varying local conditions will make it necessary, I think, for a great many sections to depart from the exact dimensions suggested there while retaining the same holding capacity. In my own section, for instance, the barrel is manufactured from rather a cheap grade of pine timber, and the elasticity of that material is not sufficient to give a bulge to the barrel that the dimensions there require. In other words, our manufacturers would have to make a straighter barrel, with a larger head, to get the same holding capacity. It would, I think, very greatly facilitate compliance with the law, and make it a very much easier matter for the barrel manufacturer, if the capacity of the package in dry quarts or cubic inches were stated in the statute.

I thank you very much, gentlemen, for your attention.

Mr. Goodwin. Mr. President, may I ask a question? Provided there was a Federal law, would it not be necessary also to state the weights per barrel of the different commodities?

Mr. REICHMANN. No.

Mr. Wescorr. I think that would introduce a very great element of confusion. We find that our products vary in weight according to the season or the weather.

Mr. Goodwin. We know they do; we know that Irish and sweet potatoes vary in weight, and the sweet potatoes are sold by weight exclusively in our markets. Now, if that is the case, and they were bought by the barrel and sold by weight, would it not be a hardship on the buyer or the seller, one way or the other? Would not one or the other be selling at a loss, or buying at a loss, as the case might be? I have inquired in New York, Massachusetts, and in my own State, and retailers are selling sweet potatoes by the pound. Now, if they buy them in bulk and do not get their weight, they are selling at a loss, naturally.

Mr. Bahrenburg. I would like to say one word here, Mr. Chairman. Take the potato proposition, where there are a million barrels of potatoes or more handled by the people that Mr. Wescott represents, and as many by the people that Prof. Johnson represents— Prof. Johnson's people are on the Norfolk side and Mr. Westcott's are on the Eastern Shore side—there are conditions, especially weather conditions, which affect potatoes very materially. For instance, if it is rainy to-day, potatoes will be much heavier than they will be to-morrow, when the sun is shining and it is dry. Another thing: The man that is putting up potatoes can hardly weigh these potatoes on the farm where the wet dirt is around them at the time. The retailer who is buying these potatoes can draw his own conclusions when he is buying them as to whether the potatoes are wet or dry, and how much moisture there is in them. He is there to guide himself. He can judge for himself how much shrinkage there will be there on account of dirt or moisture.

Mr. Reichmann. Mr. Chairman, the matter of specifying exactly the size of the barrel, and exactly what a barrel of each commodity shall weigh, introduces an inconsistent set of specifications, and to regulate that matter I think we should address the Lord in our prayers rather than expect it to be decided by the legislature.

The Acting Chairman. I know that we all appreciate having these gentlemen who represent the growers with us, because they have given us very valuable information on this matter. I find that we have two more whom we will be very glad to hear from. I will ask Prof. Johnson, of the Agricultural College of Virginia, if he has anything that he wishes to add on the subject.

Mr. Johnson. Mr. President and gentlemen, all I wish to say is that what Mr. Wescott has stated in regard to selling potatoes by weight is extremely important to the growers in the southern section of the country especially. In addition to selling potatoes, we sell in the Norfolk region kale, spinach, cabbage, and other commodities of that kind which are harvested and put into those barrels. Now, we have found by actual experiment that we can vary the weight of a barrel of cabbage from 10 to 15 or 20 per cent, depending upon the weather conditions when we cut that cabbage. We can make the same variation in a barrel of spinach or in a barrel of kale. For that reason it is obviously improper for us to try to sell these commodities in a wholesale way by weight, whereas we are perfectly willing and anxious to have a uniform barrel. In the Norfolk region, as in Mr. Wescott's region, we pack those barrels for shipping all over the country. To give a concrete example: We go to Baltimore and we find one set of specifications for barrels; we go to New York and find another specification for barrels; we go to Massachusetts and we find still a third specification for barrels. Now, the question comes up with us, What kind of a barrel are we to pack in our fields when we are harvesting that crop to fit the conditions in those three States, to which we ship hundreds of thousands of barrels? It is really a hardship on those people. Now, those people are not complaining so much about the size of the barrel, but it is the uniformity that they want; and if this organization, or some other organization, can get the Federal authorities to see the importance of enacting some legislation that will enable them to pack a uniform barrel, then I think the object will be accomplished.

The Acting Chairman. We would like to hear from Mr. East, who, I believe, represents the Farmers Manufacturing Co.

Mr. East. Mr. Chairman and gentlemen, I can only start my talk from a manufacturer's standpoint. I just want to say that the growers' and manufacturers' interests are identified. What we both need and what we both desire is a uniform package. The size is what we want to regulate. I think that the question of weight would mix matters up and make it very difficult and very objectionable all around. What we do want is a uniform standard package down the line, from the berry box to the barrel. I just want to say that Dr. Reichmann was the one that got warm on the trail of all the berry-box manufacturers, and I do not think he has much trouble with them now. The barrel also has been improved the last year. The manufacturers have been getting rid of the old product and have adopted a universal standard. Now, whether it measures up to the standard as defined in this bill I do not know,

but it holds and will carry a little more than the previous barrel used on the eastern shore by the Produce Exchange; I can say that. I have read over the bill coming from Dr. Reichmann, of New York, and I think that will come nearer to filling the requirements of all concerned than anything else that you can get up, and if the Empire State of New York can adopt that as a standard package down the line there will be no trouble with national legislation. We can just take that as a model for all the States in the Union.

Mr. Reichmann. The motion was that it is the sense of this conference that it is necessary to have uniform sizes of standard containers for shipping commodities.

The question was taken, and the motion was carried.

Mr. Bahrenburg. Mr. Chairman, speaking for the four gentlemen who have appeared, I wish to thank you for the opportunity of having been with you here and listening to what has taken place. And speaking as the chairman of the committee on standards for the National League of Commission Merchants of the United States, as a member of the legislative committee of the International Apple Shippers' Association, and as a member of the legislative committee of the conference held here in Washington in 1907 (the result of this conference being the Lafean bill, which is in the hands of the Agricultural Committee at the present time), I wish to say that we will heartily cooperate with you in any work that is done with reference to the motion that has just been passed. [Applause.]

The Acting Chairman. I just want to say that I trust the trade organizations themselves will become active in this thing and take the initiative, and let us weights and measures officials follow along with you. I think it will be much more effective if the trade associations such as you represent—the growers, manufacturers, etc. will come forward to Congress and say: "We want this"; and without intending any criticism whatever I would suggest that the matter, if it is brought in a different form, or a new form, be referred to the Committee on Coinage, Weights, and Measures, rather than the Committee on Agriculture. The Committee on Coinage, Weights, and Measures is one which we keep a little closer in touch with, and if the association has any influence at all I think we can exert it there to better advantage than we can in the Agricultural Committee. Also, the Agricultural Committee is a particularly busy committee, and has a large variety of things to consider, and the Committee on Coinage, Weights, and Measures probably has not so many; and therefore the bill would be given earlier and, I believe, better consideration than if it went to the Agricultural Committee. If the trade interests who are affected by this legislation come forward and make a united demand for this thing, it is a great deal better than if the State officers asked for it, because, while we do everything we

can, we are accused sometimes of being cranks and having our hobbies, etc. And as I say, I think if the trade interests ask for these things first, every weights and measures man in the country will be right there with you and will help you to push the ball along.

Mr. Bahrenburg. Mr. Chairman, I just want to take issue with you on that. I do not think you are valuing your own influence highly enough. I think it is just the contrary—that if a movement were started by you gentlemen here in your convention, the committee, knowing that you are in a position to act wisely on a move of this kind, would carry more weight from being furthered by you and backed by your association.

I also wish to state on the part of Mr. Johnson and, I think, Mr. Westcott, that their organizations also will cooperate with you in this movement.

Mr. Westcott. I wish to indorse that statement, Mr. President, and I think possibly it might be at some time of some practical value if the name of the Eastern Shore Virginia Produce Exchange, of Onley, Va., were included in the minutes as a permanent ally in any cooperative movement to get uniformity and satisfactory standards as to these containers.

The Secretary. Mr. Chairman and gentlemen, I want to emphasize just what Mr. Palmer has said. While we are treated with every courtesy at the Capitol Congress is very much more apt to act if you gentlemen get after them. You are their constituents, and they are very much more apt to listen to what you say than to what some official says. What they want to hear is what the man who is actually losing money, or having a great deal of trouble in dealing with a situation, has to say about it. Take, for example, the committee that considered this net-weight container bill not long ago. We could not get any action out of them until the packers and grocerymen got interested in the subject. They had a very large meeting at the Capitol, and it was entirely because these associations had interested their members and members of the committee in the matter. We can do a good deal, but you must not think that we can do everything.

Mr. Reichmann. Mr. Chairman, I had intended to make a few remarks along that line later on, and I do not know but what it may be just as well to mention a part of them right here.

I do not believe that this conference is going to do anything about that matter. The great trouble is that there are a great many commercial organizations that are working for a certain thing, but they are not all cooperating; and neither this conference nor any place in the United States to-day is a clearing house where you can go for information or cooperation. What we ought to do, in my opinion, if we are ever going to be effective, instead of coming here year after

year, sitting down and listening, and having lunch, and going home again and forgetting about it, is to have an association (and this conference ought to be the nucleus of it) with a head office (and the proper place for it is right in New York City), with a paid secretary, whose duty it shall be to gather together all the weights and measures laws, information as to pending bills, etc., so that whenever the apple growers, or the drug interests, or any other organizations or individuals want to find out what is being done they can go there and get it right off the reel. The Bureau of Standards can never become a clearing house of that sort; and no governmental office, either State, city, or Federal, can ever become a clearing house of that sort. As a matter of fact, the secretary of this conference would not have time to do it, because the work would be purely incidental to his official duties. It ought to be his main business—and that is exactly what I am driving at—to form a weights and measures association, and get parties to put up enough money, so that we can have a secretary whose business it is to keep a record of those things; and if I want a record of the people interested in this thing, he can give it to me, and if necessary send out the correspondence. If I want to get a list of the sealers of weights and measures in the United States, where can I get it? Nowhere. There is not a place. I can not get it at the Bureau of Standards. The only thing I can do is to send a letter to every city and find out who the sealer is. I ought to have some place where I can go and say, "Give me a list of the sealers of weights and measures." If I want to get the commercial organizations interested in weights and measures, I ought to be able to go to that secretary and say, "Give me a list of such organizations and of their secretaries."

I wrote the secretary of the League of Commission Merchants, Mr. Hanley, who used to be in Buffalo. Mr. Hanley had long been out of business, and they had a new secretary. The letter went to Chicago and New Orleans and finally went to Mr. French's office. I wrote to the secretary of the Retail Grocers' Association, Mr. Tuttle, and after three months I got a letter saying, "Mr. Tuttle is now the agent for shredded-wheat biscuits in New York." If you had a secretary to keep track of all that business you would know where you were at; and this conference is never going to do anything, nor will the commercial organizations do anything, until they get together and have some central bureau. I do not care what you call it—Central Weights and Measures Association, or Conference of Weights and Measures, or what you wish—but if you do not have an effective office, whose primary business it is to give information, you are never going to get results.

Now, I do not know whether these gentlemen from the commercial organizations agree with me or not, but I believe they will; and I

believe it would be a benefit to every commercial organization. Certainly it would be a benefit to every official; it does not make any difference whether he is a weights and measures official or an official interested in some related or allied subject. That sort of bureau could be spread out, no doubt, to take in more and more subjects if necessary, and it would be extremely important; and I say that the office of the association should not be located in Washington, but should be preferably located in New York, because there you have the centralization of more interests than in any other place.

The Secretary. Mr. Chairman, I beg to differ with Dr. Reichmann on a good many statements he has made. The pure-food bill was a bill that encountered a great deal more opposition than anything we are attempting to have passed by Congress, and those interested in the passage of that act did not require an office in New York or anywhere else. The various interests concerned were brought together

right here in Washington by the Bureau of Chemistry.

Mr. Hand. It seems to me that we are consuming a great deal of time on this matter. I believe all of us recognize the fact that as long as this subject is before the American people the Bureau of Standards will bear a relation toward the administration of weights and measures in the United States comparable to that now maintained by the Bureau of Chemistry toward pure food, and that after awhile, as Dr. Stratton said this morning, this association will consider technical matters very largely, and that this should be, and will be. Of necessity the bureau will be the source and fountainhead of all information pertaining to weights and measures in this country. I believe that this matter is receiving more attention than, as a matter of fact, it really deserves. What we are after, as I understand Dr. Reichmann, is to receive the cooperation of these people; that is, we want their ideas and all that. But, as a matter of fact, the Bureau of Standards—and I agree with Mr. Fischer thoroughly—will remain, by virtue of circumstances, the center of information pertaining to weights and measures in this country.

Mr. Reichmann. If I, as a representative of a commercial organization, wanted to get a lot of information about food and food products, there are a good many places I could go and get the information other than the Bureau of Chemistry, and where the commercial organizations do go.

Mr. Hand. Reliable information?

Mr. Reichmann. Yes, sir. But for an administrative officer of a State, the necessary place to go is to the Bureau of Chemistry. As an administrative officer of a State, in the matter of weights and measures, the only place for me to go is to the Bureau of Standards. But there are 10,000 other details which you want to get, which it is

clearly not the function of the Bureau of Standards to keep up with, because it is a purely commercial and business proposition that could not be handled here.

Mr. Goodwin. Mr. President, as I understand this question, our sole object should be the protection of the public at large, not the favoring of any particular organization of buyers or sellers; and any resolutions that we adopt, and any work that we do, should be in the interest wholly of the public, not in the interest of individual corporations or organizations. If it is for the best interests of the public at large—of our country, you might say—to favor laws regulating the sizes or the weights of commodities sold, we should do so, and we should be careful, because that is, and should be, in my opinion, the duty of any sealer or inspector of weights and measures.

Mr. Maroney. Mr. Chairman, I move that we extend a vote of thanks to the gentlemen who are here representing these associations,

whose troubles, I hope, we will be able to rectify.

The Secretary. Mr. Chairman, before that motion is put I hope this matter will be discussed a little more. We have not drafted any law; we have not passed on any law. We are no better off than when we started, it seems to me. We have simply declared ourselves as being in favor of uniform containers. That is not accomplishing very much; we did that several years ago, and so I do not think this is the time to pass a vote of thanks—that is, I hope these gentlemen will remain with us longer; but I want to interrupt the discussion at this time so that we may hear Mr. Epright. Mr. Epright, who was invited down here in the name of this conference, must leave to-night, and I would like to postpone this discussion long enough to have him give us his paper.

Mr. Haskell. Mr. Chairman, I move that a committee of three be appointed by the president of the association to take up this matter of containers and report, if possible, to-morrow—if not, at a future meeting, but, if possible, to-morrow—so that we may act upon it. I agree with our secretary that a very important talk will be given to us regarding scales, which I think we all ought to hear.

The Secretary. I second the motion.

Mr. Reichmann. Mr. Chairman, I am opposed to the motion. We have already adopted a resolution favoring uniform containers, and I do not think a committee appointed here to-day could intelligently discuss the question of uniform containers and make a report on it to-morrow. Did you say to-morrow, or some future day?

Mr. HASKELL. I said, if they could, to-morrow.

The Secretary. Mr. Chairman, I certainly hope that they will be able to report to-morrow. So far we have not accomplished anything. I do not think this sort of action is going to be very satisfactory to Mr. Cummings or Mr. Bahrenburg. They knew we were

in favor of this before they came here; everybody knows that we are in favor of uniform containers. That is not a matter for discussion at all, or for resolution. I should certainly like to see something drafted along the lines suggested by Dr. Reichmann. I am perfectly willing to accept that if that is agreeable.

Mr. HASKELL. With the consent of the second, I move that this committee report to-morrow before the adjourning of this conference.

The Acting Chairman. If there is no objection, that amendment will be accepted.

The question was taken and the motion was carried.

The Acting Chairman. I will ask Dr. Stratton, the president of the organization, if he will keep the matter in mind and appoint that committee.

Now, Mr. Secretary, I would like to consult with you in regard to the rest of the program.

On motion of Mr. Reichmann, section 7 of the program was voted the order of business for the next day, together with the State laws.

The Secretary. Mr. Epright has kindly consented to give us a talk on railroad scales. He came down here especially for that purpose, and I think it will be a very interesting talk, indeed. He is chief scale inspector of the Pennsylvania Railroad and as such has constructed, I believe, what are the largest railroad scales in the world. I do not know of any other scales that are any larger. I heard him give this talk in Albany and was so impressed with it that I immediately asked him to give it here.

Mr. Epright. Railway service requires continuously accurate scales, but at present there are very few companies which have a thorough system for maintenance and for making the proper tests and corrections, and it is a regrettable fact, speaking generally, that many track scales are never tested and are always believed to be correct until decayed and condemned as being unsafe in the roadbed.

The Pennsylvania Railroad seems to have been the pioneer, in this country at least, in establishing an efficient scale organization, and as most of the other companies who have gone into the subject have adopted, in most part, the plan of supervision as outlined by this company, we thought it advisable to present our methods of construction, test, and maintenance of railroad track scales.

A careful analysis of the lever systems of track scales in use today has established the fact that those of the 4-section type are superior to those of any greater number of sections. For this reason the Pennsylvania Railroad Co. has adopted as their standard a 4-section, 52-foot track scale having a capacity of 300,000 pounds and embodying the most modern ideas of scale construction, the features of which will be considered in detail. In this type of scale the wooden substructure has been eliminated; in fact, no wood whatever is used on the scale proper except in the ties supporting the rail columns. These ties are placed on the platform to absorb the shock caused by the wheels of the car when they first strike the platform and to protect the scale in case of derailment.

With the old type of track scale generally in service the overhanging portion of the platform has an opportunity to tip, as when the first pair of wheels strike the platform the other end is caused to rise, and as the movement proceeds an accelerated, powerful return occurs. The intensity of this force is very destructive to all parts of the scale. In the new type of scale the "overhang" has been eliminated, which reduces the destructive effect of the entering car to a minimum.

The lever system has been scientifically worked out and 100 per cent allowed for impact and live load, so that the stresses are entirely within the margin of safety established by experience. Heretofore practically no consideration has been given to this point by the manufacturers of this type of scale.

The surface of the platform is supported independently from the scale mechanism. This form of construction renders the scale immune from the effects of wind pressure, rain, snow, or ice on the platform.

The suspension bearings, introducing what is known as the "Cradle principle" in this scale, differ materially from the rigid type of bearings formerly used in that they get rid of the movements of the knife edges across the faces of the hardened steel bearing planes when oscillations of the platform occur. This design also provides greater freedom of action and greatly reduces the dependance put upon the check rods to retain the platform in its proper position. The design of this bearing is intended to preserve the accuracy of the scale, and the various details have been worked out with a view of specially adapting it to the relieving gear.

In designing the knife-edges a maximum load of 4,000 pounds was set for each linear inch of contact, whereas in most of the older types each inch of knife-edge was under a maximum load, which in some cases amounted to as much as 10,000 pounds.

Notwithstanding the fact that the weight of the levers have in some instances been increased three or four times, the sensibility has not been materially affected. This is due in a measure to the fact that more machine work is being done on the scale, and it is also partly due to the fact that a more uniform distribution of the load in the lever system is obtained.

All the knife-edges and bearing planes and corresponding contact points in this scale are made of vanadium steel, it being claimed for this steel that it is less susceptible to corrosion and wear and that consequently it will give longer life to and preserve the sensibility of the scale.

The independent alignment of each individual lever has been made possible by an improved connection of the levers. Leveling pads are also provided on all levers with faces machined, so that in all adjustments the original plane of the knife-edges is preserved.

The scale is provided with a full capacity beam reading to 300,000 pounds and is equipped with a poise operating on specially designed ball bearings, which reduces the frictional resistance of the poise to motion from about four pounds to about three or four ounces.

The large weight of the movable poise causes a slight displacement of it to correspond to a relatively large weight on the platform. This makes it imperative to have the teeth cut accurately in the beam and to have the latch engaging in the teeth to seat accurately at all times. This proper seating is secured by the design of spring and latch provided, one of the features of which is the spring and its adjustment, which enables a firm pressure on the latch to be maintained.

Probably the most radical departure from the old form of construction is the introduction of the relieving gear. This takes the place of the rigid dead-rail system with its cumbersome supporting columns that fill the vault practically full of metal and prevent proper inspection, operation, and maintenance of the bearings and other parts of the scale. All the metal parts of this scale present easy access for inspection, cleaning, adjustments, or renewals.

The fundamental parts of the relieving gear consist of a series of eight toggle jacks supported in pairs by universal bed plates. These jacks are operated by a torsion shaft with suitable link connections at each of the four sections. The shaft is in turn operated by a double-ended cylinder controlled by the weighmaster in the scale office, the controlling power in a few cases being water, but air has been found to be preferable.

When it is desired to make a dead rail out of the scale rail the weighmaster operates a four-way controlling valve causing the toggle jacks to be operated so that the vertical pistons (or plungers) travel upward against the I-beams forming the metal bridge. This action raises the platform from the suspension links and takes the weights off the knife edges without causing them to be disturbed, so that the operation of the relieving gear (which is done in about one-half second's time) is accomplished without disturbing the contacts of the knife edges on the bearing planes, which preserves the alignment of the lever system.

When the jacks are operated, making a dead track out of the scale track, semaphore arms at either end of the scale platform are automatically actuated, indicating that the dead rail is set for the use of engines.

The total weight of the platform is about 38,000 pounds, and, with 80 pounds per square inch in the cylinder, the bridge can be raised so that an H-6 engine, loaded, imposing a maximum load of about 283,000 pounds, will not show any weight on the beam when going over the scale. It is of course impossible to work the operating gear under a superimposed load, but this is not necessary, as the average interval between cuts of a car is about eighteen seconds, and the relieving gear can be operated in this time.

It is desirable to provide simple and effective means by which, with a minimum of attendance and skill, the cars may be passed rapidly and without stopping over the platform of the scale with the proper velocity to permit each car to be weighed as it passes, regardless of the usual variations in the length of successive cars.

To accomplish this the track over which cars pass to the platform is provided with an elevation or hump, the height and distance being so proportioned that when cars are pushed at a uniform rate up one side of the hump (being uncoupled from each other before or while being pushed up the hump) each car will pass over the top and run down the other side and so on to the scale platform with the proper velocity to be accurately weighed.

The design of the hump is such that the elevation of its apex above the scale platform can be adjusted. In winter when everything is taut the apex of the hump should be somewhat higher than in summer when cars form less rigid structures. In winter the lubricant also becomes stiff, affecting the free running of the cars.

With reference to yards at which necessity demands that loaded cars should be weighed and empty cars classified over the same hump a compromise may be made in its height.

For rapid and accurate weighing it is desirable to have the scale platform and adjacent side of the hump as short as possible, and in practice it has been found advisable to make this side of the hump about equal to the distance between the centers of the wheel trucks of the cars having the shortest wheel base.

It is a matter of common knowledge that cars passing over a rail-way-track scale located at the head of a classification yard are not of one pattern, and the distances between the front and rear wheels vary.

The time in which a moving car may be weighed is that elapsing from the moment the rear wheels pass on to the scale platform to the instant the front wheels pass off, and in order to keep this time down to a desired minimum, cars having a short wheel base should move more rapidly across the scale platform than cars having a longer wheel base.

With the advent of the hump the effect of this variation in the wheel-base length is in a measure automatically compensated for. Other things being equal, when the side of the hump adjacent to the scale platform is short, as it should be, the velocity acquired by the cars running down the side of the hump varies inversely with the length of the wheel base of the car.

Standard plans have been carefully worked out which not only provide for the electric lighting of the vault under the scale but also for the scale office inside and the vicinity of the scale outside. This insures the proper grading of light for night weighing. A standard bay-window front in the scale office is also provided which gives an unobstructed view for the weighmaster in both directions. The designs also include plans for the artificial heating of the vault during winter months, the temperature being controlled automatically.

Any scale should be tested with correct weights approaching nearly the capacity of the scale. A four-section railroad scale of 100 tons capacity should be tested with a weight of 25 tons, which when placed consecutively over the different sections should give an indication as to the performance of the scale at full capacity. For convenience in transportation, this weight may be made in the form of a car with a short wheel base, built in a substantial manner to stand the wear and tear of service.

The design of our regular test-weight car, known as the class "YB" car, is superior in every way to the type of test-weight car formerly used and is now being copied by most railroads. The car is specially low and squatty, with the wheels projecting up into the casting which forms the body of the car. There is no shifting load inside to change the center of gravity; however, there is a pocket for carrying 100 pounds of 50-pound test weights, which are neatly fitted into place, and there is a small receptacle to retain the extra weight made necessary by the fluctuation in the weight of the car.

The underside of the car is provided with snow shields and is entirely free from projections which can collect material picked up by the whirl when traveling at a high speed and which would necessarily change the weight of the car.

In addition to this car which is used in regular service, we have a special design of test-weight car for carrying 50-pound weights for testing wagon scales or stockyard scales up to their full capacity. The construction consists of eight compartments, four on each side of a central passageway running the length of the car, each compartment holding 5,000 pounds of 50-pound test weights, or a total of 40,000 pounds. The weight of the car alone is about 20,000 pounds and with the test weights makes a total of 60,000 pounds for the combination. As the wheel base is suitable for a four-section 46-foot

track scale, the car is often sent out as a heavy test-weight car for testing the regular track scales.

To insure results and in order that the work may conform to the United States standard of mass, the Pennsylvania Railroad Co. has in its possession a set of master weights, which at intervals are returned to Washington to be verified and have their values corrected if necessary. The last time these weights were returned for verification the 50-pound master weight was out less than 1 part in 350,000, or less than 1 grain in 50 pounds.

When the master weights have been verified and returned from Washington, the values of our working or shop standards are derived by comparison with the master weights on a specially constructed balance of high sensibility, the sensibility being less than 2 grains in 4,000 ounces.

After the shop weights are made to conform with the master weights, our 50,000 pounds of 50-pound test weights are checked and resealed, this work being done on a shop balance which has a sensibility of about 2 parts in 350,000, and the practice has been to seal these weights as close as the balance will weigh.

After the values of the 50-pound test weights referred to above have been corrected, they are used to try out the master scale upon which the test cars are proved.

This master scale was specially designed for the purpose by the Pennsylvania Railroad Co. and is of all-steel construction, with a capacity of 120,000 pounds. Under a load of 50,000 pounds, the weight of our heaviest test car, it shows a sensibility of about 1 pound.

After the regular test-weight cars are "proved" on the master scale, they are placed in charge of a competent scale inspector and started on their various routes covering the entire system.

Special instructions have been issued that no work of any nature whatever shall be done on the cars in transit unless the scale inspector is present, and then only such repairs are made en route as will eliminate any possible element of danger. We have found these precautions necessary to insure the value of the weight of the test car at all times, and by this system the actual variations of the cars between trips can soon be ascertained and a compromise made if necessary.

The various test-weight cars ordinarily require from six to eight weeks to make a complete circuit, after which they are returned to the master scale at Altoona for correction, if it should be necessary. While admittedly an unusual record, we will say that a car has been known to make as many as seven trips, aggregating as much as 10,000 miles, without varying more than 10 pounds in weight, notwithstanding the fact that a great deal of this travel was made during the winter months.

When the cars are returned for test they are examined and any repairs needed are made. The boxes are sponged, etc., so that little, if any, work will be required on the trip.

As in other callings of life, in the construction and testing of railroad track scales ability is required, the importance of which fact is appreciated by some railroads, while others are apparently indifferent to it.

It is highly desirable to indicate the principles and method of testing and adjusting track scales, as it is a procedure that must be successfully carried out before the scale is reliable.

In order to bring out the fundamental features, simplifying assumptions will be made and a diagram will be used.

We first will assume that flexure of the parts does not occur and that the bearings and levers are mechanically perfect, and that when a test-weight car is placed immediately over any point of support that the load is carried by that support alone; and we will further assume that the load is always equally divided between the two main levers of a pair, so that their separate effects do not need to be considered.

Referring to diagram (p. 75), the weight of the platform and load is carried on the main levers M,  $M_1$ ,  $M_2$ ,  $M_3$ , etc., at the points marked with W. One end of each of the main levers is supported on a supporting post mounted on the foundation at the points marked  $P_1$ ,  $P_2$ , etc., and the other end transmits the force of the load to the extension levers,  $E_1$ ,  $E_2$ ,  $E_3$ ,  $E_4$ , at the points  $m_1$ ,  $m_2$ ,  $m_3$ , and  $m_4$ . The extension levers run parallel to the track and are supported on piers at the points marked F. The ends of these levers are connected by links, marked  $n_1$ ,  $n_2$ ,  $n_3$ , and  $n_4$ , by means of which the pressure of the load is transferred from the points  $m_1$ ,  $m_2$ , etc., to the fifth lever "5" at L. The fifth lever conveys the combined force from all of the levers to the shelf lever S, from which it is conveyed to the beam. To assist in following the action the arrows are placed to indicate the direction of the force produced by the load.

The operation of the scale depends upon the multiplying power of the levers in transferring and reducing the force produced by the load from the point of application to the beam. For this to be done correctly it is necessary that the lever arms be correct. In order to make it possible to adjust the lever arms to the correct value the end knife edges are mounted on adjustable nose irons as mentioned previously.

Let us now fix our attention upon the effect on the multiplying power of changing the nose irons at different points. If the lever length at  $n_1$  is changed it alters the apparent weight, as shown on the beam, of a load applied at  $m_1$ , loads at other points being unaffected. If  $n_2$  is changed it alters the apparent weights of loads applied at either  $m_1$  or  $m_2$  the same proportional amount. The same conditions

obtain for  $n_4$  and  $n_3$  of the right-hand set of levers. Therefore, by changing  $n_1$  we can cause the apparent weight of a given load to be the same when applied at  $m_1$  as when applied at  $m_2$ . In a similar manner we can change  $n_4$  so that loads applied at  $m_4$  produce the same effect as when applied at  $m_3$ . Now, by changing  $n_2$  or  $n_3$  we can make the two right-hand extension levers produce the same results with a load as the two left-hand levers. In this way all levers are made alike, that is, a load has the same apparent weight when applied at  $m_1$ ,  $m_2$ ,  $m_3$ , or  $m_4$ . However, this apparent weight may not be the correct amount. To illustrate, a load may weigh apparently 20,200 pounds at every point when the true weight is 20,000. This is easily remedied, by moving the nose iron on the fifth lever at  $n_5$  or at the end of the shelf lever at  $n_5$ . By this means the combined effect of all levers is altered as a whole so that the balance now shows a weight of 20,000 pounds and the scale is therefore correct.

The process has then consisted of two parts:

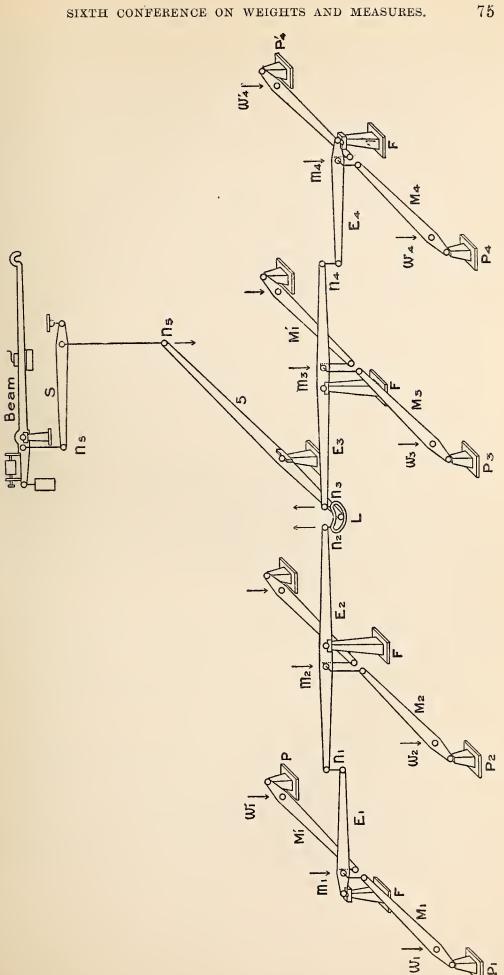
- (1) Make all levers read alike;
- (2) Make the readings correct.

The preceding will serve to fix in mind the principles involved and the relations of the parts.

In practice the adjustment of the scale is not so simple a matter as might be inferred. One important point should be mentioned. When a test-weight car on the platform is placed over any point of support, as  $m_1, m_2, m_3$ , or  $m_4$ , that point of support does not carry all of the load. This distributing effect is due to the rigidity of the platform. This fact makes it impossible to place the test-weight car over each section and then compute with certainty the amount of nose-iron movement necessary to correct the scale. Other things that tend to cause uncertainties are mechanical imperfections.

For instance, when a 25,000-pound test-weight car is placed successively over each of the sections at the points  $m_1$ ,  $m_2$ ,  $m_3$ , and  $m_4$ , the resultant weighings may be 24,990 pounds, 25,000 pounds, 25,100 pounds, and 25,600 pounds, respectively, and it may be found that on changing the nose irons at  $n_4$ , changing the last section, the scale can be corrected so that it will now show 25,000 pounds over each section. This last section being off would make all of the levers appear off as when the load was placed over  $m_1$   $m_2$ , or  $m_3$  part of the load was carried over  $m_4$ , which contributed its error.

From this it is obvious that the adjustment of track scales is reduced to an empirical basis, and that the actual procedure in a given case depends upon information obtained from previous experience with that type of scale. That is, while the law of the levers may hold perfectly, full advantage can not be taken of the fact on account of other uncertainties. Thus a large part of the correction has to be done by an intelligent use of a method of trial and error.



With these facts in mind let us now take a more general case. We will assume that a test car weighing 25,000 pounds is placed over  $m_1$  of a four-section track scale and after an accurate balance is struck a reading of 25,020 pounds is obtained over  $m_1$ , 24,950 pounds over  $m_2$ , 24,900 pounds over  $m_3$ , and over the last point,  $m_4$ , 25,010 pounds.

We will now tabulate the differences from the desired value, as follows:

Levers	$\mathrm{E}_{\scriptscriptstyle{\mathtt{1}}}$	$\mathrm{E}_{\scriptscriptstyle 2}$	$\mathrm{E_{s}}$	$\mathbf{E_{{\scriptscriptstyle{4}}}}$
Points	$m_1$	$m_2$	$m_3$	$m_{\scriptscriptstyle 4}$
	+20	<b></b> 50	-100	+10

Adopting the shop terminology the differences have the signs given above. This corresponds with the adjustments that have to be made on the lengths of the corresponding levers to correct plus to increase length minus to decrease length of the levers could be handled separately.

However, the levers can not be handled separately so that the procedure in this case is to shorten  $E_4$  at  $n_4$  to make it agree with  $E_3$ .  $E_3$  can then be shortened at  $n_3$  changing both  $E_3$  and  $E_4$ . In the same way  $E_1$  should be shortened so that its errors agree with  $E_2$  by alterations at  $n_1$  after which the effect of  $E_1$  and  $E_2$  can be changed alike by changes at  $n_2$ .

The movements of the nose irons at the various points  $n_1$ ,  $n_2$ , etc., can all be made before the load is reapplied and can be based upon the formulas of the levers. The results of the simple formulas will have to be multiplied by certain factors depending upon the levers E and the design of the scale. These factors will have to be obtained from experience. After the changes are made the test-weight car can be placed on the platform again and the test repeated until this part is satisfactory.

By having experience and exercising intelligence, the number of trials necessary to make the final adjustments can be markedly reduced.

It yet remains to test the action of the beam and poise and other important details, which is beyond the scope of the present paper. However, these last tests are simple and obvious to anyone acquainted with the general principles of scales.

In testing and adjusting railroad track scales the design and construction, as well as the condition of the scale at the time of the test, have a great deal to do with the results obtainable. The workmanship is to be considered, as from this serious and endless varieties of errors can arise which need not be here enumerated.

Pivots and bearings in a scale are the most important and perhaps the most neglected parts. Friction between the pivots and bearings cause serious errors in weighing. By friction, pressure, and corrosion the knife edges may be flattened and the bearings may be worn, permitting an endless variety of leverages in place of the original definite ones.

It is good practice to make the bearings slightly harder than the knife edges of the pivots to avoid cuts and indentures.

As railroad track scales are usually built in freight yards, without a roof to protect them, and often they are without proper drainage, it will be seen that rust is a very active agent in destruction. Oil has been applied to the working parts and vertical connections, and when indiscriminately used is worse than the corrosion. Experiments have been made with lard oil and petroleum, but the results were not satisfactory, as the oil, spreading over the pivots, loosened their hold in the levers and sockets, and the arched loops, when oiled, were found to slip freely into new positions, altering the vertical connections to the extent that rebalancing was necessary. Furthermore, the accumulation of dust on a moist surface does not improve or maintain ideal scale conditions.

Proper oil should possess great viscosity, be nonhardening in air or dampness, and should be free from acid. Its application should only be in places where its bad effects would not cause serious results. A comparative test between the eight main levers in one scale, four of which were lubricated, has shown that the destruction by rust is greater than by wear. However, scales located in a dry place and not affected by moisture require very little attention along this line.

Deflection of materials is another source of errors. When the levers or other parts assume a set under a load an error has been developed. However, it is difficult to set a tolerable limit for deflection, as it increases with the velocity with which the load may be applied.

On motion of Mr. Haskell the remarks of Mr. Epright were ordered incorporated in the proceedings of this conference and the thanks of this body extended to him for his kindness.

Mr. Epright. Mr. Chairman, I have a lot of photographs here, and if you have no objection I will pass them around.

The Acting Chairman. Yes; I know the conference is very much interested.

On motion of Mr. Reichmann section 9 of the program was postponed and made a special order of business for next day, to be discussed with sections 5 and 7.

The Chairman (Dr. Stratton). The next on the program is the question of tolerance. In considering these measures that have come up, that have been introduced in Congress and discussed here and elsewhere from time to time, the question has always arisen as to whether or not tolerance should be allowed. There have been those

who believe tolerance should be stated in any legislation, and those who think that if tolerance is stated it will be taken advantage of. Now, it is at your pleasure to discuss this or not. If it is not sufficiently important to discuss, drop it out; if it is, then discuss it.

Mr. Reichmann. It does not mean that we are to discuss the size of the tolerance or that sort of thing?

The CHAIRMAN. No, unless you can do that. We do not wish to tie you up in any way.

I might state what suggested it to my mind. When the amendment to the pure-food bill was discussed some weeks ago, which was informally, by the chairman and members of the different associations, this question of tolerance arose, and there seemed to be a divided opinion. I believe this amendment finally went in, and the question of tolerance appears as a paragraph, or rather a sentence. Our opinion was asked in regard to that. I said that the bureau would favor a tolerance being stated, provided that tolerance was specified in a proper way. It is of no use whatever—I think, perhaps, you will all agree with me-to say that any given capacity or weight shall be correct within a certain amount. We stated that if the tolerance was 1 ounce they could arrange it to weigh in all cases 15 ounces if they chose to do so; and the compromise was upon this basis, that is, I stated that I thought there would be no objection to the sentence in regard to tolerance remaining in this law provided the framing of the regulation was left to the board—the ordinary board which frames the regulations; in other words, that the tolerance could be framed so that it meant as much above as below.

Mr. REICHMANN. Mr. Chairman, I do not believe anybody will take issue with that. I move that we accept that statement of the chairman as the sense of this conference.

The motion was seconded.

Mr. Goodwin. Mr. Chairman, I object to this resolution being passed. I believe if there was 1 ounce of tolerance allowed, either on the maximum side or the minimum side, that the minimum side would be taken advantage of. I do not believe in tolerance. In case there was a tolerance allowed of 1 ounce, we will say, taking that as a basis, it would soon become universal, and all we would get for a pound would be 15 ounces. Therefore I say that I think it would be a dangerous law, because I think the majority of the dealers would take advantage of it, and they would give the people 15 ounces for a pound, which means 16.

Mr. REICHMANN. Mr. Chairman, I think Mr. Goodwin misunderstood your proposition.

The Chairman. I think so, too. Mr. Goodwin, I do not think that you will get any legislation whatever that does not provide for reasonable tolerance.

Mr. Reichmann. And Dr. Stratton's statement was to leave that to the administrative officer—the administrative board.

The Chairman. In other words, it was the opinion of all those at that meeting at which I spoke—and my object in bringing this up here was to make sure that you agree with us in that—that if this tolerance was stated as 1 ounce and could be so regulated that as many went over as under, they were all right. That is a matter of regulation.

Is there any further discussion?

Mr. Goodwin. Mr. Chairman, I hate to take up the time, as I want to hear from others. But we have no tolerance allowance in the State of Rhode Island. That subject is left entirely in the hands of the local sealers. They are to be the judges of what they shall allow and what they shall not, and it seems to me it works well in dealing with all the subjects that we have to do with.

The CHAIRMAN. How do you know, Mr. Goodwin, when you have an exact pound?

Mr. Goodwin. There is nothing perfect, you know. We understand that. But there should be somebody——

The Chairman. Every time you touch a weight you are using tolerance, and you can't get around it.

Mr. Goodwin. That is very true. That is a broad way to look at it. But I believe that the man who is making the test should be the judge as to whether the thing will pass or not. That is the way we are in Rhode Island, and we get very satisfactory results; and I believe it is better to leave it in the hands of intelligent men who are familiar with that business—and that is what we feel we have got—than to have any regulation to govern us. Of course I am only giving my humble opinion of the matter, and I am a man that has had no great experience, but from the results that I have got and observed in the State of Rhode Island I think our law without the tolerance works very nicely.

Mr. Reichmann Question, Mr. Chairman.

The CHAIRMAN. The question is called for.

Mr. Reichmann. The question is that the conference is in sympathy with the statement made by the chairman, that the question of tolerance should be left to the administrative board, instead of being prescribed by statute.

The question was taken and the motion was carried.

Mr. Palmer. Mr. Chairman, if we have closed this part of the discussion I would like to break in here with the question of the advisability of having the annual conference held at some other city than Washington. I did not mean to bring this up with any reflection at all upon our treatment at the Bureau of Standards, because it has always been the very best and nicest, and I know the officials are not

thin skinned enough to believe that that is the reason I bring it up. But I know that they as well as myself and others want to do the thing which is best for the conference, and as that matter has been brought to my attention I thought I would bring it before the conference so that we could discuss it—perhaps briefly, as the hour is late—and get the opinion of the organization as to what we want to do. I personally believe that it might be a good thing, inasmuch as wherever we go we naturally bring the cause of weights and measures more prominently before the people in that section; but I do not want to do anything which does not meet the approval of the rest of the delegates, and I would like an opinion on this question.

Mr. Reichmann. Mr. Chairman, is not that a matter proper to be decided by the executive committee? It is within the province of the executive committee to call the meeting, and they can call it wherever they want to. Of course I think Mr. Palmer's idea is simply to have an expression of sentiment from the conference.

The Chairman. Mr. Reichmann, I think it is within the function of the executive committee, but I feel sure that the committee would rather take that step after having an expression of opinion. I should like to have it discussed to a slight extent at least.

Mr. Palmer. I am a member of the executive committee, but I did not think I wanted to vote on that question without some expression from the conference.

The Secretary. Mr. Chairman, I have talked this matter over to some extent with Mr. Palmer and also with you, and so far as the bureau is concerned we have not the slightest objection to having the meeting anywhere else; that is, we do not feel that we have any particular right to say that it shall be held here. As a matter of fact, I think we have considered in previous years the advisability of holding it at some more central place, occasionally at any rate. I must confess I do not know whether we would get more of an attendance if we did change the place of meeting, but I think it would be a good thing to discuss. The reason I am doubtful about that is that many people will come to Washington that will not go to some other city, and in addition to that most of the people that we are liable to get at the present time are in the East. I am not using that as an argument why we should meet here. I simply state that that is the only thing which makes it doubtful. If we were thoroughly organized and had every State represented, I do not think there is any question but what we would meet at other places occasionally.

Mr. Reichmann. Mr. Chairman, I am thoroughly in favor of that proposition. I have been talking to Mr. Palmer a good deal about it, and I asked him, as a matter of fact, to bring it up, because I was afraid if I brought it up the secretary might not be in favor of it.

I think there is no question in the world that if we had this meeting at a different place we could get as much of a crowd as we can here; and, as a matter of fact, so far as the State officials are concerned, there are very few here now-a smaller number than have ever attended any of these conventions. I think you will find that just as many people would come to New York City and just as many people would come to Chicago. Then there is the point that the chairman raised this morning. There is no particular advantage in coming here at this time of the year when Congress is about to adjourn; whereas if we met here every other year or every three years, at a time when the conference wanted to bring something to the attention of Congress, it would be all that is necessary; and I think that if we had the other meetings in some other section we could get a lot of local sealers. For instance, take the case of New York. would be a very easy matter if we had the meeting in New York City to get the majority of the local sealers in New York State, Massachusetts, Connecticut, Rhode Island, and that whole section, and, moreover, many people from civic organizations. I have not the least doubt that we could have a meeting with an audience of at least 2,000 people; as a matter of fact, I would be willing to guarantee that audience.

The Chairman. Let me suggest a plan that I think will satisfy both needs. We must not break away from the bureau altogether, because one of the prime objects in calling this convention in the first place was that the sealers should occasionally come to the bureau and keep in touch with the bureau; that we could gain a good deal from them and they gain something from us. Now, if we could meet at the bureau, say every other year, at the beginning of the long session of Congress, and let the alternate meetings be at other places, that might be a good plan.

Mr. Reichmann. I move you, Mr. Chairman, that we leave this discussion in the wise hands of the executive committee.

Mr. Austin. I support that motion.

Mr. Goodwin. Mr. Chairman, in favoring the change of location, I think it would be nothing more than just to the western, southern, and southwestern delegates to hold a meeting occasionally—let it be at the discretion of the executive committee—in some central location. We had delegates here last year who came from remote sections of the country, showing their great interest in this work; and some of them were stalled—endeavored to get here and did not reach their destination. I believe that we people in the East should show a like interest in our work, and that we should be willing to go West and give those people a chance to get to the place of meeting without so much hazard, trouble, and expense. I hope this matter will be left in the hands of the executive committee, and that the next meeting—

or the one after it, if they so decide—will be held in some more central section.

Mr. Wall. Mr. Chairman, Pennsylvania, I believe, has been represented in every conference since it started.

The CHAIRMAN. I think it has.

Mr. Wall. I do not see any reason at all for changing from Washington and the Bureau of Standards, and I am in favor of meeting here every time the conference meets. Washington is the Capital of the United States; it is east of the center of the United States quite a good ways; but considering the geographical location you would have to go west of Omaha to get to the center of the United States. The first conference was held here through the kindness of this bureau, and I think that this bureau has been a great inspiration; and until we get together in better shape on uniform legislation I can not see how we are going to gain much by changing the place of meeting. We may possibly get more people together, but I doubt it. It is a privilege to everyone to come to Washington, and if I had a vote I would vote in favor of continuing our meetings here.

The CHAIRMAN. The question is called for.

Mr. Goodwin. Mr. President, I would like to hear from some of the western delegates.

The Chairman. That question of the geographical distribution in my mind does not amount to anything, for the reason that travel is quick and convenient. But the other is a very great and very important question, as there is a very great deal to be gained sometimes by mixing with different sections. We appreciate what has been said by the gentleman from Pennsylvania, but at the same time we do not want you to think that the bureau is trying in any way to run this thing. We were instrumental in getting it started, and we think it is sufficiently well started to run along. We want to assist it; we want to do all we can for it, and we want it located at the place where it will do the most good.

Mr. Austin. Mr. Chairman, it has been suggested that we hear from the West. I think Michigan is the farthest west of the States represented here.

The Secretray. Nebraska is represented by Mr. Jackson.

Mr. Austin. I will make that exception. However, on the subject of changing the location, I feel, so far as my observation goes (this is the first convention I have attended), that it is the wise provision to leave the matter in the hands of the executive committee and let them fix the place of meeting where they think it will do the most good. However, if you want to go west, I do not know that you can find any better location than Detroit, Mich., where life is worth living. [Laughter and applause.]

Mr. Thomas. Mr. Chairman, since the West is giving its views (although we do not call ourselves the West out there) I would like to say a few words on the matter. As to the choice of the place of meeting I have no preference in particular, though I enjoy coming to the Bureau of Standards very much. But it happens that the expenses of the delegate from Ohio have to be met by a special item in the general appropriation bill. Request has been made for the expenses of a delegate to the conference of next year, on the supposition that it will be held in Washington. Now, if we go farther away than Washington the estimate will not cover the expense. [Laughter.]

The question was taken and the motion was carried. The Chairman. Is there any further new business?

Mr. Reichmann. Mr. Chairman, Mr. Boyer, of Pennsylvania, asks for an expression from this conference as to the bills now pending before the legislature in Pennsylvania. I wrote a resolution, but I suppose before we have a resolution it will be perhaps better to have a committee appointed to look over those bills. I have looked over them and I see that they are all right, but a lot of others may not think so, and it would perhaps be best to have a committee of three appointed to look over those bills and then introduce a resolution to-morrow morning—unless there are three that have already looked over the bills.

The Secretary. I would suggest that we make this resolution a little more general, and not approve bills 482 and 483 especially.

Mr. Reichmann. Mr. Chairman, my experience with State legislation (and I imagine the experience in Pennsylvania is very nearly the same) is that a resolution, unless specifying very definitely a certain bill, has very little effect with the committee, because that only expresses a general sentiment. I would not give 5 cents for a general resolution, but I would give a great deal for a resolution on one specific bill.

The Secretary. The only question is, does the conference favor this bill. I for one do not, and yet I would vote for the general proposition to establish such a bureau as that contemplated by the bill, if that is the best that can be done.

Mr. Reichmann. That is what I say; and I move that a committee of 3 be appointed to look over that bill and prepare a resolution to that effect.

The motion was seconded.

The Secretary. I would like to make one statement in regard to this bill. As I understand, it is intended to get around a certain feature of their constitution. Now, out in California they had the same experience, and when they put in a weights and measures bill they put in at the same time a bill to amend the constitution so that

they could appoint a State sealer. Now, why can't that be done in Pennsylvania?

Mr. Reichmann. For the very simple reason—I believe I am right in that proposition—that in Pennsylvania an act to amend the constitution has to pass two sessions of the legislature and then be submitted to a vote of the people.

The question was taken, and the motion was carried.

Mr. Palmer. Mr. Chairman, you had another committee to appoint, you know.

The Chairman. Yes; I had that in mind. We still have a little time. Are there any other items of new business?

Mr. McIntyre. Mr. Chairman, in connection with this motion to refer the Pennsylvania bills to a committee, I would like to state that we have here a bill from Wisconsin, modeled very closely after this model bill, the one that emanated from this office, and we would like to have some expression of opinion on that. This will be considered before our legislative committee about the time we return, and we want, if possible, to go back with some expression of opinion on that bill. If that could be referred to the same committee—

The Chairman. If there is no objection, we will understand that that will be referred to the same committee.

It was voted to proceed with the next heading.

The Chairman. We will proceed to the next item of business, No. 12, which is the election of officers. The officers are the president, vice president, and secretary. You will note that we never have had any treasurer of this meeting, because we have never had any funds to take care of. If it suits your pleasure, nominations for president are in order.

Mr. Goodwin. Mr. President, I feel that the duties of president of this organization have been admirably performed by the present official, and I would move his reelection.

Mr. Maroney. I second the nomination.

The Charman. Gentlemen, I want to say that while I appreciate your compliment very much indeed and will be glad to do all I can, I do not want you to feel that it is my desire or the desire of the bureau to hold the offices. I shall not feel at all offended if you desire to elect someone else. I do not know but I should prefer it. I want to bring about a condition in this meeting that will always permit of the freest and most open discussion. I do not want my presence in any way to hamper you or to be a detriment to the freest discussion. I should be more than pleased if you would nominate some one in my place. On the other hand, I shall be pleased to serve in my humble way if that is your wish.

Mr. Hand. Mr. President, I believe that just at this time, in the organization of this work, it is very important to have some one in

the office of president who takes a great interest in the work and who is familiar with it; and I therefore move you, sir, that the secretary be instructed to cast the vote of the association for Dr. Stratton as president.

Mr. Boyer. I second the motion, Mr. Chairman.

The question was taken and the motion was carried.

The Secretary. I take great pleasure in informing the chairman that the convention has unanimously elected him president for another year.

The Chairman. Gentlemen, I appreciate this very much. I think there is quite a future before the association. Some things have been very gratifying to us, and some have not, and we must try to forget those that have not. I hope you will always feel free to make suggestions and criticisms, and that in the end we will all be pulling together for the thing that seems to be for the greatest good.

The next in order is the election for vice president. Nominations

are in order.

The Secretary. Mr. Chairman, I nominate Mr. Palmer to succeed himself.

Mr. Henry. Mr. Chairman, I second that nomination.

Mr. Boyer. Mr. Chairman, I move that nominations be closed.

Mr. Palmer. Mr. Chairman, I would like to say a word on this question. The responsibility of the vice president is very small, of course, but it seems to me it would be a good plan to have somebody else this year, and shift these little offices around. It might be of some advantage to the representative of some other State to be able to say that he was vice president of the national conference. It has been a great pleasure for me to say so. But I have had it two years, and I would prefer to see somebody else nominated. Of course I will do all I can, as I have in the past, whether I am vice president or not. I would suggest that somebody else who has not been active in the work be brought forward, like our good friend Dr. Reichmann here. He has always been very modest about the offices, and I know he would be a good man for vice president.

Mr. Reichmann declined.

Mr. Boyer's motion was seconded, the motion was carried, and the secretary was instructed to cast a ballot for the present vice president.

Mr. REICHMANN. Mr. Chairman, I would like to nominate Mr. Fischer for secretary, and move that the nominations be closed and that he be elected by acclamation.

Mr. PALMER. I second the motion.

The question was taken, and the motion was carried.

Mr. Reichmann. Mr. Chairman, I move that we proceed with the election of the other members of the executive committee.

The Chairman. The executive committee consists of four members—Mr. Haskell, Mr. Kjellander, Mr. Thomas, and Mr. Quist—in addition to the officers. How shall we vote for these?

Mr. Palmer. Mr. Chairman, I nominate Dr. Reichmann, of New York, as a member of the executive committee.

Mr. Reichmann. Mr. Chairman, I am sorry, but I would rather not serve on the executive committee. I personally am not in sympathy with an executive committee that meets down here the day before a conference and fixes up a little program. We want to do more active work. I would rather not serve on the executive committee unless I felt that more could be accomplished by it.

The Chairman. In order to correct that situation, would not the best way be to put your shoulder to the wheel and help out?

Mr. Palmer. Mr. Chairman, I nominate Mr. Henry, of Vermont, on the executive committee.

The Secretary. I second the nomination.

Mr. Henry. Mr. Chairman, I thank Mr. Palmer and Mr. Fischer for the nomination and for the second, but this is my first year here and I have had very little experience, and for the executive committee I should think it would be better to have some one who has had more experience in weights and measures and has attended the conferences before.

Mr. Palmer. Mr. Chairman, I think that is just the way Mr. Henry will get experience—by meeting with the executive committee and talking matters over. He is active, and he has one of the best State laws there is, and I think he will keep prodding us right along all the time.

The Secretary. I nominate Mr. Haskell, of Washington.

Mr. MARONEY. I nominate Mr. Goodwin, of Rhode Island.

Mr. Goodwin. Mr. Chairman, I beg to be excused. I am not familiar with these subjects, and I would prefer to have some other gentleman elected in my place—the gentleman from Pennsylvania, Mr. Wall, for instance. In declining to serve, I would nominate Mr. Wall.

Mr. Wall. Mr. Chairman, I fell a kind of modesty about this. If we were actively in the harness it would be a different matter, but handicapped, as we are, without a State law, I prefer that you nominate some gentleman from some other State where there is active inspection. We are trying to get that, but we haven't the law.

Mr. Palmer. Mr. Chairman, I move that the nominations be closed. Mr. Maroney. I second the motion.

The CHAIRMAN. I may be mistaken, but I have five names.

Mr. Reichmann. Mr. Chairman, I decline to serve, and that leaves only four.

The CHAIRMAN. If you do not go on the executive committee, then you will have to quit criticizing its actions.

Mr. Reichmann. No, sir.

Mr. Maroney. Mr. Chairman, as I nominated Mr. Goodwin and he declined, I will withdraw his nomination.

The Chairman. That leaves four—Mr. Reichmann, Mr. Henry, Mr. Haskell, and Mr. Wall.

Mr. Palmer. Mr. Chairman, I move that the secretary be instructed to cast a ballot for the four members of the executive committee for the ensuing year.

Mr. Goodwin. I second the motion.

The question was taken and the motion was carried.

The Secretary. It gives me great pleasure to announce that the convention has elected Messrs. F. Reichmann, H. H. Henry, W. C. Haskell, and J. S. Wall as members of the executive committee.

Mr. Palmer. Mr. Chairman, I would like to ask if the bureau has made any plans in regard to the publication of the summaries or the details of the work of the United States inspectors and their visits to the different States. I know they are probably not yet completed, but I would like to know if you intend to publish them at some time. You have authority to publish them, have you not?

The CHAIRMAN. Oh, yes. No doubt a great deal of good will come from the publishing of those reports, and it is our intention to publish them. I could not say exactly as to how extended they will be. We will have to make up our minds as to that after they are all in. We have done this, however: We have felt that it was not right to wait until they could be published in order that any definite locality might get the good of them. We have been furnishing to the various localities the information that concerned those particular localities. It has been rather a difficult matter in some cases for us to bring this before the locality and to place the actual condition before the principal officials without giving offense. We can not always do it, but at the same time we try to be as diplomatic about it as we can. Our desire is to give the proper officers always the first chance—that is, to furnish them their reports first, and let them have ample opportunity to take advantage of them. That we have done from time to time without waiting for the final publication. Now, it is our intention to publish the results of this investigation, but I could not say as to how far it would be wise to go into the details until we have all this matter in hand and have thoroughly digested it and considered its bearing upon the work.

Mr. Palmer. My reason for asking was that it seems to me that in some of these Western States that are attempting to pass legislation and create an interest in this particular work, those reports would be of a great deal of assistance to them if they could be pub-

lished, so that they could have access to them. I know I have tried to get our reports for Massachusetts and have not been successful, but I have been promised. But I am not asking for that reason. I thought some of these western delegates who are interested and who want to get State legislation on this subject would find these reports almost invaluable, because they could make a comparison, or even without making a comparison, could show the true condition in their States as found by Government inspectors.

The Chairman. We have been furnishing them, and we have been very free in furnishing them; but we do not feel just at present like furnishing to the officer of Wisconsin the data collected in your State or some other State.

Mr. REICHMANN. Mr. Chairman, if I asked for the results of the investigation made in New York City by the Bureau of Standards some two or three months ago, could I get that; and if so, how long would it take for me to get it?

The Chairman. There is no question but what you could get it as soon as it can be typewritten. I can not say just now whether the inspector has made his report.

The Secretary. My clerks have been busy for the last two or three months typewriting the results obtained in the Western States. They are long reports, and the men are doing all they can to get them out. In Mr. Palmer's case I did not consider it urgent compared with other States now considering legislation. There is no reason why you should not get them as soon as the Western States are supplied—those States that are considering legislation—I think we will all admit that the States that are considering legislation are the important States. Pennsylvania is coming into line. That would mean that if there is no change in the program we will have to get busy getting those reports out. California has not yet had its report.

Mr. Palmer. We have 26 matters before our legislature which are to be considered in the next three weeks, and it would have been of very great assistance to me before I came here if I had had my report on the conditions in Massachusetts.

The Chairman. Let me ask the gentleman if they object in any way to giving the material found in their States to other States?

Mr. Palmer. I do not.

Mr. REICHMANN. Not at all.

The Chairman. Suppose we do make a thorough investigation of the State of New York; would you be in favor of our publishing that?

Mr. Reichmann. Absolutely.

Mr. Austin. Will they be furnished to representatives here without request, or will it be expected that they will request the reports for their States?

The Chairman. We have been waiting for requests for these advance copies. That is, after making this inspection it takes considerable time to get it in order. It must be done by the inspector; it is not a thing that the stenographers and typewriters here can do. The inspector himself must do it. Now, if you want a report on the inspection in your particular locality, make a request for it and we will get it to you as soon as possible.

Mr. Austin. While I am inspector in the city of Detroit, I have been delegated by the governor to represent the State of Michigan here, and I would like at as early a period as practicable to have the report of the conditions found in the State of Michigan; and I would make a request for that. I am satisfied to wait your convenience, but I certainly would like such a report as soon as I could get it.

The Chairman. You certainly can have it. I assume that your object is to take this material to the governor, or the proper officials, and use it to bring about better conditions?

Mr. Austin. To bring about laws that will be uniform and in compliance with the resolutions here passed.

The CHAIRMAN. As I stated this morning, this inspection was brought about primarily for a different purpose; but it can be used, and we are using it, as you have indicated. The real object of it was this: On several occasions when we have appeared before congressional committees, or when this bureau was asked for advice in regard to legislation (which it is in regard to every bill that comes up on these matters), certain statements were made. These were questioned; especially by the delegates from certain localitics. They said that this was the mere assumption of us scientific gentlemen out on the hill. So our object was to get this information first hand, to get information that we knew was right and that we could say did not come through any one else. It was not that we did not feel like trusting any one else at all. Now, we have learned since then that it is equally useful in the way that you have mentioned. There was a great demand for it, and as far as I know we have always supplied it when we could—that is, in a reasonable time. Is not that the case, Mr. Fischer?

The Secretary. Yes; we have supplied the reports as fast as we could get them ready in the last three or four months. Up to that point our policy really was not——

The CHARMAN. In justice to Mr. Fischer I will say that up to a certain point we did not send these out, simply for fear that they might be used in the way that was not intended—that is, that they would resent any criticisms upon their States, and that it might defeat the very object we were trying to attain. But so far it has not done that. In the cases where we have furnished it we have had

very good results, and I know of but one case where it has been resented.

Mr. Goodwin. Mr. President, I would like to make a request on the lines of that made by the gentleman from Michigan. I think this criticism, as it may be, or the things brought out by the inspectors of the Bureau of Standards, would give us something to work on. If we are not doing our business intelligently and correctly in the State of Rhode Island, I would like to know it. There are a number of things probably that you could suggest, and did suggest to me while in Providence, R. I., that I have lost sight of, and I would like to get in touch with them again, because if there is anything that would improve our system there I would like to know it and would like to use this as a lever in getting legislation passed to better our conditions.

The Charman. Let me ask all of you to remember one thing when we furnish this information: That the investigation was not made at all in the spirit of criticism and was not intended as a criticism; that it was only to get the information first-hand, and that up to a certain point we withheld it for the reason that we were afraid that in those States where they already had inspection they would interpret it as a criticism on the part of the National Government.

Mr. Maroney. I move we adjourn, Mr. President.

The Chairman. Just one moment, if you please. The Chair will appoint as the committee in regard to the net weight of containers Mr. Bahrenburg, Mr. Reichmann, and Mr. Austin; and as the committee to examine and report on these bills that we have before us Mr. Palmer, Mr. Holbrook, and Mr. Maroney. I am appointing these committees now because we want the experience of the men who have had a great deal to do with this matter, and several of them have to leave this evening. I hope these committees will get together and formulate their reports, and if they are not here in the morning leave them with the secretary.

A motion to adjourn is in order.

Mr. Maroney. Mr. Chairman, I move we adjourn.

The motion was seconded and carried; and accordingly, at 6.05 p. m., the conference adjourned until Saturday, February 18, at 10 o'clock a. m.

## THIRD SESSION (MORNING OF SATURDAY, FEBRUARY 18, 1911).

The conference reassembled at 10.45 a.m.

The Chairman. Now, we have several items of business carried over from yesterday, and I think we ought to hear from the two delegates who were not here yesterday. We have New Jersey and Nebraska represented. If it is the wish of the conference, we should like to hear a short statement from each of them. I will call upon Mr. Sullivan, city sealer of Newark, N. J.

Mr. Sullivan. I haven't any report to make. There is a bill before the legislature in Trenton creating the office of State sealer, which I believe will go through next week, with one or two little amendments.

The CHAIRMAN. What are the provisions of the bill?

Mr. Sullivan. I do not know exactly, but creating the office of State sealer is the main feature. It may be amended.

The Chairman. That is the point I wish to bring out. A State official is the thing to be desired in every State.

Mr. Jackson, State dairy and food commissioner of Nebraska, is with us to-day, and I am sure we would like to hear from him.

Mr. Jackson. Mr. Chairman, I am commissioned by the governor as the delegate here because our legislature is seeking at this time to enact some law that will provide for a State sealer of weights and measures and establish standards. Not having anything very definite in view as to what was needed, it was thought perhaps we might well make use of the law that is in vogue in Kansas at the present time, and so that was practically formulated into a bill, with such modifications as seemed advisable and adapted to Nebraska. But it was the hope of certain members of the legislature that at this conference we might get some light upon the subject, such as would enable us, perhaps, to amend the Kansas bill and make it better adapted to our needs in Nebraska. I corresponded with officials in Kansas, and they admitted that certain things should be changed, and so I came here hopeful that I might take back to our State a bill, or some suggestions at least, from the combined wisdom of this conference that would help us to enact something that would not be too cumbersome, but something that would be thoroughly practicable and workable for our State. I am anxious to look over whatever laws I find in other States. This subject is new with us in Nebraska, and so we are here for light; and I shall appreciate any suggestions

and any warnings as to any shoals that we ought to steer clear of in enacting this legislation.

I do not know whether such questions as this would be suitable to raise, but it has been a question in my mind whether there should be fees charged for sealing scales, etc., or whether the State should do this without any special tax upon the man whose apparatus is inspected. So that is one feature. I suppose in general the legislature would like to see an office of that sort self-sustaining, but it is doubtful propriety, it seems to me; but I am here for light.

The Chairman. One of the subjects for discussion is a State weights and measures law, and perhaps some of these points will come out in that discussion, which will follow in a few minutes. I should like to ask to what extent the work is organized in Nebraska. What is the provision in the law for a State official?

Mr. Jackson. The constitution, Mr. Chairman, provides for certain State officers and then provides that no other State office shall be created. In several cases the question of constitutionality has been avoided by appointing deputies; for instance, by making the governor the head of certain departments, and then selecting deputies under him to do the work and be responsible for it. So I suppose the governor would be made the State sealer of weights and measures, and then he would appoint a deputy who would do the work and would be the assistant sealer. That would seem to be necessary, having no authority to create a new State office unless the constitution were amended, and that is a pretty hard thing to do in our State. So it would be necessary for us to enact pretty nearly a whole system of laws. But I think we could repeal just a few sections and make it a straight law from start to finish pertaining to this one subject. There are only a few sections that would need repealing.

The Charman. I do not see but what that is susceptible of producing the same results. It would undoubtedly allow the appointment of a definite official having charge of weights and measures, who might be called a deputy. I believe that is the case in some other States. I never knew why it was so before. But it would allow the governor then to appoint such an official without any change of the constitution, as I understand it?

Mr. Jackson. Yes, sir. There are, I suppose, half a dozen different offices so carried on at present.

Mr. Wall. Why could not you create a bureau and attach it to some department which you already have and let the head of that department appoint a deputy? It would look a little strange to me, from Pennsylvania, to have the governor made State sealer of weights and measures.

Mr. Jackson. It is simply nominal.

Mr. Wall. You could attach it to some other department, could you not? That is what we are trying to do in Pennsylvania.

Mr. Jackson. Mr. Chairman, the bill as it is prepared now provides that it shall be attached to some other department, but that department to which it is proposed to attach it has been created by making the governor the official and then the deputy commissioner under him. It was suggested that that officer be the State sealer of weights and measures. Now, that would be tacking on to an office that was created as a secondary office another, which would be unconstitutional, in my judgment. In fact, I submitted the matter to the attorney general, and he agreed with me that it would not be legal to do that. So we get around that in Nebraska by having the governor made nominally the officer and then calling these others deputy commissioners. For instance, there is a deputy fish commissioner, a deputy oil inspector and his assistants, and several other departments. The governor is nominally the head, and these others do the work, have the responsibility, and make their reports to the governor.

The Chairman. Are there any questions that the delegates would like to ask Mr. Jackson? If not, we will pass on to the regular business.

The Secretary. Mr. Chairman, before we go on with that I would like to get permission to incorporate into our minutes a communication from Mr. William B. Mullen, in which he states that he is very sorry not to be able to be here. He was appointed a delegate from Colorado.

Mr. Maroney. Do you offer that as a motion, Mr. Secretary?

The Secretary. Yes, sir.

Mr. Maroney. I second the motion.

The question was taken, and the motion was carried.

Mr. Mullen's letter is as follows:

DENVER, Colo., February 10, 1911.

Chairman and gentlemen of the Sixth National Conference of State Scalers of Weights and Measures.

GENTLEMEN: If I can not have the pleasure of attending this meeting, I can at least let you know that my heart is with you. I received my appointment from the Hon. John F. Shafroth, governor of the State of Colorado, on the 10th instant, and it was a great surprise, a great pleasure, and a great honor, and I am sorry that I can not attend this conference in person and have the honor of meeting all of you personally, but hope the State of Colorado will have a full-fledged State sealer of weights and measures as the next delegate to the National Conference of State Sealers of Weights and Measures. As I am not the ex officio State sealer, I can not state positively the condition of our State standards, but I have the word of the ex officio State sealer of weights and measures that they are safe and in good condition, for I had him start from the top of the capitol and dig until he finally unearthed them stored away in the basement, and I am in hopes that they will never be put back again, as

I have a bill, which is to be introduced in the present session of the legislature, which, if passed, will create the office of State sealer of weights and measures. Hoping that the State of Colorado will have a representative at the next conference of State sealers, I am,

Very truly, yours,

WM. B. MULLEN,

Sealer of Weights and Measures, Denver, Colo.

The Secretary. I also have a report from Mr. Stimpson, who was appointed to represent the State of Kansas. I merely mention it, and do not ask permission to incorporate it in our minutes, because it is merely his report to the chancellor of the university, who is State sealer of weights and measures.

The Chairman. Two committees were appointed yesterday, one to pass upon certain State laws to see whether they were uniform or contained the main features of desirable national legislation; the other to draw up a shipping container law. Is it your wish that we take up the reports of these committees now? I think it will take but a moment. We might combine this report of the committee on the State laws with the next subject, the discussion of a State weights and measures law.

Mr. Maroney. Mr. Chairman, your committee on State legislation is ready to report and has submitted its report to the secretary. There is a separate report on each State, and perhaps it would be better to present them separately and debate them on the floor.

The Secretary. I think the reports of those committees would be in order now, Mr. Chairman.

The Chairman. I think you will find it difficult to separate the report of the committee and the discussion of the model law. The two naturally go together. Unless there is objection, we will proceed on that basis and ask this committee for its report.

The secretary read as follows:

REPORT OF COMMITTEE APPOINTED TO EXAMINE AND REPORT ON STATE LEGISLATION SUBMITTED,

Your committee has examined a bill submitted to them which is now under consideration in the legislature of the State of Wisconsin, and desires to report as follows:

Otherwise, your committee believes that the sections of the bill are excellent ones and should be passed.

Commissioner D. C. Palmer was not present when this report was made, but we believe him to be heartily in sympathy with this action.

Respectfully,

ED. J. MARONEY. F. S. HOLBROOK.

The bill under consideration is as follows:

Section 1. Sections 1662 and 1664 of the statutes are repealed.

SECTION 2. Sections 1658, 1659, 1660, and 1661 of the statutes are amended to read:

SECTION 1658. The weights and measures and the scales and beams received from the United States under a resolution of Congress approved June 14, 1836, and such new weights and measures and scales and beams in addition thereto or in renewal thereof, and such as shall be made under the direction of the State superintendent of weights and measures in conformity therewith, and certified to by the National Bureau of Standards, shall be the State standards by which all county and city standards of weights and measures shall be tried, proved, and sealed.

Section 1659. (1) The dairy and food commissioner shall be ex officio State superintendent of weights and measures. The superintendent may appoint two inspectors, who shall receive an annual compensation of \$1,800 and \$1,600, respectively, and their necessary traveling expenses.

- (2) He shall take charge of the standards adopted by section 1658 as the standards of the State; cause them to be kept in a fireproof building belonging to the State, from which they shall not be removed except for repairs or for certification; and take all other necessary precautions for their safe-keeping. He shall maintain the State standards in good order and shall submit them once in 10 years to the National Bureau of Standards for certification. He shall keep a seal which shall be so formed as to impress the letters "Wis," upon the weights and measures, scales, and beams sealed by him, and he shall correct the standards of the several cities and counties, and as often as once in 5 years compare the same with those in his possession and shall seal the same when tried and proved to be in conformity to the State standard weights and measures, scales, and beams aforesaid.
- (3) He shall have and keep a general supervision of the weights and measures and the weighing and measuring devices of the State and in use in the State. He shall, upon the written request of any citizen, firm, or corporation, or educational institution of the State, test or calibrate weights, measures, weighing or measuring devices, and instruments or apparatus used as standards in the State.
- (4) He, or his deputy or inspectors by his direction, shall at least once annually test all scales, weights, and measures used in checking the receipt or disbursement of supplies in every institution under the jurisdiction of the State board of control. And he shall report in writing his findings to such board of control and to the executive officer of the institution concerned; and at the request of such officer, the superintendent of weights and measures shall appoint in writing one or more employees, then in the actual service of such institution, who shall act as special deputies for the purpose of checking the receipt and disbursement of supplies.
- (5) He shall keep a complete record of the standards, balances, and other apparatus belonging to the State and take receipt for same from his successor in office. He shall annually during the second week of January make to the governor a report of the work done by his office. The State superintendent,

or his deputy or inspectors by his direction, shall inspect all the standards used by the counties or cities at least once in each two years and shall keep a record of the same.

(6) He, or his deputy or inspectors by his direction, shall at least once in each two years visit the various cities and counties of the State in order to inspect the work of the local sealers; and in the performance of such duties he may inspect the weights, measures, balances, or any weight or measuring appliance of any person, firm, or corporation and shall have the same powers as the local sealer of weights and measures. The superintendent of weights and measures shall issue, from time to time, regulations for the guidance of county and city sealers and the said regulations shall govern the procedure to be followed by the aforesaid officers in the discharge of their duties.

Section 1660. The county board of each county and the common council of each city appointing a sealer under this act shall procure at the expense of the county or city and shall keep at all times a complete set of weights and measures, scales, and beams in exact conformity to the public standards, except that they may be made of suitable materials as the superintendent of weights and measures may direct; all such weights and measures, scales, and beams having been tried and accurately proved by him shall be sealed and certified to by the State superintendent of weights and measures as hereinbefore provided, and shall be then deposited with and preserved by the county or city sealer as public standards for the county or city. Whenever the county board or common council of such city shall neglect for six months so to do, the county or city clerk, on notification and request by the superintendent of weights and measures, shall provide such standards and cause the same to be so tried, proved, sealed, certified, and deposited at the expense of the county or city.

Section 1661. (1) There shall be a county sealer of weights and measures who shall be appointed by the county board of supervisors from a list to be furnished by the State civil-service board and under the rules of said board. He shall be paid a salary determined by the board of supervisors, which shall not be less than \$1,000 a year.

- (2) Where not otherwise provided by law, the county sealer shall have the power within his county to inspect, test, try, and ascertain if they are correct all weights, scales, beams, measures of every kind, instruments or mechanical devices for measurement, and tools, appliances, or accessories connected with any or all such instruments or measurements, used or employed within the county by any proprietor, agent, lessee, or employee in determining the size, quantity, extent, area, or measurement of quantities, things, produce, articles for distribution or consumption offered or submitted by such person or persons for sale, for hire, or award.
- (3) He shall, at least twice in each year, as much oftener as he may deem necessary, see that all weights, measures, and weighing and measuring apparatus used in the county are correct. He may for the purpose above mentioned, and in the general performance of his official duties, enter or go into or upon and without formal warrant any stand, place, building, or premises; or may stop any vendor, peddler, junk dealer, coal wagon, ice wagon, or any dealer whatsoever for the purpose of making the proper tests.
- (4) Whenever the county sealer finds a violation of the statutes relating to weights and measures he shall cause the violator to be prosecuted. Whenever the sealer compares weights and measures and finds that they correspond or cause them to correspond with the standards in his possession he shall seal or mark the same with appropriate devices to be approved by the State superintendent of weights and measures. The sealer shall condemn and seize

and may destroy incorrect weights and measures and weighing or measuring instruments which cannot be repaired; and such as are incorrect and yet may be repaired he shall mark or tag as "condemned for repairs" in a manner prescribed by the State superintendent of weights and measures.

- (5) The county sealer shall keep a complete record of the work done by him and shall make an annual report to his board of supervisors, and an annual report, duly sworn to, not later than the 1st of December, to the State superintendent of weights and measures
- (6) The county sealer of weights and measures shall forthwith on his appointment give a bond, with sureties to be approved by the appointing power, for the faithful performance of the duties of his office and for the safety of the local standards and appliances for verification as are committed to his charge and for the surrender thereof immediately to his successor in office or to the person appointed by the proper authority to receive them.
- (7) Nothing in the above shall be construed to prevent two or more counties from combining the whole or any part of their districts as may be agreed upon, with one sealer and one set of standards, and upon the written approval of the State superintendent of weights and measures.

There are added to the statutes two new sections to read:

Section 1662. (1) There shall be a city sealer of weights and measures in cities having a population of more than 5,000 inhabitants according to the last official State or United States census, to be appointed by the mayor from a list to be furnished by the State or local civil service board and under the rules of said board. He shall be paid a salary to be fixed and determined by the board or body authorized to determine the salaries of city officials, and no fees shall be charged by him or by the city for the inspection or testing of weights, measures, or weighing or measuring devices. He shall perform in his city the duties and have like powers as a county sealer in a county. In those cities in which no sealer is required by the above, the county sealer of the county shall perform in the said city the duties and have like powers as in the county.

(2) Nothing in the above shall be construed to prevent any county and a city or cities located therein from combining the whole, or any part of their districts, with one sealer, as may be agreed upon, subject to the written consent of the State superintendent of weights and measures.

Section 1664. (1) Whoever in any manner whatsoever impersonates or hinders the State superintendent of weights and measures, his deputy or inspectors, or any sealer of weights and measures, in the performance of their official duties shall forfeit not less than \$10 nor more than \$100.

(2) There is hereby conferred upon the State superintendent of weights and measures, his deputy and inspectors, and the county and city sealers of weights and measures, police power; and they are hereby empowered and authorized to make arrests with or without formal warrant of any person or persons violating the provisions of any statute in relation to weights and measures.

Section 4. Sections 1665 and 4432 of the statutes are amended to read: Section 1665. (1) The following shall be the legal standard of weights and measures in this State. The avoirdupois pound to bear to the troy pound the relations of 7,000 to 5,760. Whenever either of the articles as commodities in this section mentioned shall be sold by the bushel, or fractional part thereof, and no special agreement as to weight thereof shall be made in writing, the measure thereof shall be ascertained by weight, and shall be computed as follows:

- (2) Sixty pounds for a bushel of wheat, peas, potatoes, clover seed, or beans;
- (3) Fifty-seven pounds for a bushel of onions;
- (4) Fifty-six pounds for a bushel of Indian corn, rye, flaxseed, or rutabagas; 28145°—12——7

- (5) Fifty-four pounds for a bushel of sweet potatoes;
- (6) Fifty pounds for a bushel of corn meal, rape seed, millet seed, beets, green cucumbers, apples, rye meal, carrots, buckwheat, or fine salt;
  - (7) Forty-eight pounds for a bushel of barley or Hungarian grass seed;
  - (8) Forty-five pounds for a bushel of timothy seed or rough rice;
- (9) Forty-four pounds for a bushel of hemp seed, parsnips, or sea-island cotton seed;
  - (10) Forty-two pounds for a bushel of turnips;
  - (11) Thirty-four pounds for a bushel of barley malt;
  - (12) Thirty-three pounds for a bushel of dried peaches;
  - (13) Thirty-two pounds for a bushel of oats;
  - (14) Thirty pounds for a bushel of upland cotton seed;
  - (15) Twenty-five pounds for a bushel of dried apples;
  - (16) Twenty pounds for a bushel of bran or shorts;
  - (17) Seventy pounds for a bushel of coarse salt or lime;
  - (18) Eighty pounds for a bushel of unslaked lime;
  - (19) Eight pounds for a bushel of plastering hair;
- (20) And two thousand two hundred and forty pounds for a cord of hemlock bark.
- (21) For a fractional part of a bushel a like fractional part of the above weights shall be required.
- (22) All dry commodities not otherwise specified in this act shall be sold only by standard dry measures, standard weight, or numerical count, except where parties otherwise agree in writing.

Section 4432. Any produce merchant, warehouseman, miller, or storage, forwarding, or commission merchant, or any other person who, by himself or by his servant or agent, or as the servant or agent of another, shall use or retain in his possession unless it was so retained without intent to use it or permit it to be used any false weight or measure or any weight or measure or weighing or measuring device to be used in the buying or selling of any commodity or thing which has not been sealed by a sealer of weights and measures within one year; or any person who, by himself or by his servant or agent or as the servant or agent of another, shall sell or offer or expose for sale or keep for the purpose of sale less than the quantity he represents; or who by himself, or by his servant or agent or as the servant or agent of another, shall use any false weight or measure in buying any commodity or thing, or shall sell or offer or expose for sale or keep for the purpose of sale any commodity in a manner contrary to law; or any person who, by himself or by his servant or agent or as the servant or agent of another, shall sell or offer to sell or have in his possession for the purpose of selling any device or machine to be used or calculated to falsify any weight or measure shall be punished by imprisonment in the county jail not more than three months or a fine of not more than \$200 upon a first conviction, but upon a second or subsequent conviction he shall be punished by imprisonment in the county jail not more than one year or by a fine of not more than \$500, or both, in the discretion of the court; or any person who willfully, with intent to cheat or defraud the buyer or seller of electric current, gas, water, or steam, shall make or cause to be made or aid in the making of any electric conductor, gas pipe, water pipe, steam pipe, or other instrument or contrivance or any connection, so as to conduct or supply or intended to conduct or supply electric current, gas, water, or steam to any lamp or motor or machine or burner or orifice or appliance from which such electricity, gas, water, or steam may be consumed or utilized without passing through or being registered by a meter, or any person who shall willfully use a

false meter for the measurement of electric current, gas, water, or steam in the buying or selling of the same, or who shall willfully obstruct or interfere with the working of any meter used for such purposes, so as to cause or be intended to cause a false registration of the amount of electric current, water, gas, or steam consumed, with the intent to cheat or defraud the seller or buyer of such electric current, gas, water, or steam, shall be punished by imprisonment in the county jail not more than one year or by a fine not exceeding \$500; but in case the amount of damages occasioned by such cheat or fraud shall not exceed \$20 he shall be punished by imprisonment in the county jail not more than three months or by fine not exceeding \$100, and in computing the amount of damages occasioned the value of such electric current, water, gas, or steam shall be the regular current price therefor charged to the consumer by the seller thereof.

Section 5. This act shall take effect and be in force from and after its passage and publication.

The Secretary. I would suggest, as a possible explanation, that they were trying to take it out of politics by not making it an even number of years, like all political positions.

Mr. McIntyre. Mr. Chairman, is that intended to be an indorsement of the bill in detail, or merely of the general principles of the bill? It goes at some length into detail, and are not we, in indorsing this as a whole, more or less acting upon the model bill, which is modeled pretty closely upon the same lines; and if there is to be some criticism upon the provisions of the model bill, would it not be well to let the action on this bill await that discussion? I have not had a chance to look over the model bill; I got about half through and the copy was wanted; but if it follows so closely the other bill, then an indorsement of this would in effect be an indorsement of the model bill as it stands; and if there are criticisms of the details we would like to hear them, so that we can have the action of the conference upon them.

Mr. Haskell. Mr. Chairman, in order to get the matter under discussion, I move that the report be adopted.

Mr. Boyer. I second the motion.

Mr. Maroney. Perhaps it would be well to have a word of explanation from the committee as to why they have asked this recommendation. As you all know, at the session yesterday our presiding officer talked of a "side line." In other words, in the original form of the bill the dairy and food commissioner would be using the weights and measures department as a "side line," and your committee agrees with the president that the weights and measures business should not be any "side line;" it should be "it."

Mr. Dunlap. Mr. Chairman, do I understand that this Wisconsin law is set forth as a model law, with the exception that has been taken by the committee?

The Chairman. No, sir. My understanding is that certain laws were presented to the convention yesterday for discussion, and that

an opinion was asked for with a view to bringing them to a uniform basis, so far as possible. That is the object of the convention, as I understand it—to try to secure uniformity of legislation so far as possible.

Mr. Dunlar. I would like to inquire why the term is made an odd number of years rather than an even number.

Mr. Thomas. Mr. Chairman, according to the usual deliberative proceeding, the adoption of this report makes the bill as considered and amended by the committee the model bill of this assembly. I do not know whether that is proper action for us to take or not. I had a copy of the model bill in hand yesterday for a time, and I have not been able to find another one since; and so far as my opinion goes I should be wholly in the dark if I should have to vote on the bill as amended, because I have not read it and do not know what is in it. Another thing, without doubt the Wisconsin bill is drawn with reference to the legal conditions existing in Wisconsin. They are not the same in other States. For example, in Ohio it will be impossible to get an act through the legislature containing this provision for a five-year term. As I understand it, in Ohio the governor has no power to appoint anyone to an appointive office for a term exceeding his own term, because that would interfere with the prerogatives of his successor in office. It would be exceedingly difficult—indeed, I think, as conditions exist, impossible—to carry an appointive provision, such as this, for a term exceeding the governor's. How is that, Mr. Dunlap?

Mr. Dunlap. That is correct.

The Charman. I thought that we would find it very difficult to separate the two questions, but, at the same time, I think the feeling of the convention in submitting this to a committee was that they would look over the bills and call attention to any serious deviations from what we have considered the model bill. I do not understand that the adoption of this report of the committee makes the bill in all respects the one that we would favor as a model bill.

The Secretary. I think, Mr. Chairman, it is just a question of accepting the report of the committee. The committee has considered this bill for Wisconsin, not as a general bill; and it is their opinion that it suits Wisconsin. It is a good bill if it suits the Wisconsin people. In other words, as far as this conference is concerned, it approves the bill for Wisconsin. Of course, if it is modified afterwards by the Legislature of Wisconsin, that is another matter. It seems to me that if we are going to get ahead at all in this matter, we must adopt or reject the report. If we can get this out of the way, then we can consider a bill with provisions that will be suitable for every State in the Union. And the same way with the Pennsylvania bill. I am afraid we will not get anywhere if we take up

the question of considering our model bill and trying to make it fit all the States that are represented here at the present time. It is only intended to be a model, and it is expected that it will be modified just as it is proposed in Wisconsin. On the whole, it follows the suggestions contained in our model bill very closely, and the committee that considered this matter, I think, were very competent to consider it and to pick out anything that was seriously defective. The only question before us now that seems to me of any importance is whether we are willing to go on record as accepting the report of our committee.

Mr. Dunlap. Mr. Chairman, it occurs to me that, if this conference adopts a model bill, that is as far as we ought to go, and the State legislatures can then enact laws as near to it as possible. But if we adopt this, it occurs to me that we are simply adopting the Wisconsin law.

The Secretary. I would like to say this, that this was submitted by the delegate from Wisconsin, who wants to get the opinion of this conference.

Mr. Goodwin. Is the bill a lengthy one?

The Secretary. It is quite a long bill.

Mr. Maroney. Mr. Chairman, as I understand it, the delegates from Wisconsin presented this bill to this conference, and you, as the presiding officer of this conference, appointed a committee to pick flaws in the bill. The committee pointed out one particular flaw in the bill, which was in the nature of substantiating the statement of our presiding officer. The committee does not ask you to adopt this bill; they simply ask you to accept the report of the committee that was sent out by the presiding officer, and I can not see what else you can do with it.

Mr. Thomas. If you change one word we can act upon it all right; that is, if you substitute "accept" for "adopt."

The Chairman. Mr. Dunlap, I think the convention agrees with you, at least so far as I have been able to ascertain, in that they feel that we should adopt the one model law, and that it will have to be modified in the various States; that this is a modification of a general law, and that it was submitted to us for an opinion as to whether or not the variations were serious and whether we considered them important.

Mr. HASKELL. I would be glad to change the wording of the motion to "accept" instead of "adopt."

The Chairman. That would clear the situation a little. Does the second consent to that?

Mr. Boyer. I consent.

The motion was then carried to accept the report.

Mr. Thomas. Mr. Chairman, the adoption of the amendment which the committee proposed to the bill that is under their consideration is to my mind exceedingly important—the most important action that we can take. I therefore move that the conference adopt, as expressing its opinion, the amendment to the bill proposed by the committee; that is, to make the position of State sealer of weights and measures an independent instead of an attached office.

Mr. Haskell. Mr. Chairman, I second the motion for the purpose of getting it under discussion.

Mr. Thomas. I would like to call for the report of the committee again.

The secretary again read the report of the committee.

Mr. Hand. Mr. Chairman, is it not true that this matter is covered in spirit in the model law that we propose to take up in a few moments?

The CHAIRMAN. Yes, sir.

The Secretary. The only point, as I understand it, is that the Wisconsin delegate would like to have some expression of opinion on this particular bill. Are we going to give it to him or not?

Mr. McIntyre. That is the very point; we would like an expression.

The Chairman. As I understand it, the adoption of this motion, Prof. Thomas, is nothing more than an expression of opinion that such a change ought to be made in the bill.

Mr. Thomas. My idea is to make the committee's expression of opinion that of this conference as a whole; that is all.

The Chairman. I understand. You have heard Prof. Thomas's motion, which was seconded. Are there any further remarks?

The question was taken, and the motion was carried.

The CHAIRMAN. I believe there are one or two more bills.

The Secretary. I have the report of the same committee on the Pennsylvania bills. [Reading:]

Your committee has examined two bills submitted to them now under consideration in the Legislature of the State of Pennsylvania, and desire to report as follows:

Inasmuch as the members of the committee are not unanimously in favor of all of the provisions of these bills, and inasmuch as certain contradictions seem to appear, your committee desires to have these bills discussed by the conference as a whole, and be discharged from taking further action upon them.

Respectfully,

Ed. J. Maroney, F. S. Holbrook.

Note.—Commissioner D. C. Palmer was not present when the above report was made and, therefore, did not have the opportunity of expressing his opinion upon this report. It is believed that he was in favor of taking favorable action upon the legislation.

The bills under consideration are as follows:

Section 1. That the establishment of a Bureau of Standards be, and is hereby, authorized in the department of internal affairs of Pennsylvania for the purpose of regulating and maintaining a uniform standard of legal weights and measures in this Commonwealth to conform with the original standards of weights and measures as adopted by Congress and verified by the National Bureau of Standards and to assist in securing the enforcement of laws relating to sealers of weights and measures now in force or that may hereafter be enacted.

Section 2. That as soon as practicable after the final passage and approval of this act the secretary of internal affairs shall appoint a competent person to serve as chief of the bureau of standards whose duty it shall be to have custody of the State standards of weights and measures; shall compare, test, and regulate all weights and measures of all city and borough sealers now in office or who may hereafter be appointed in the Commonwealth of Pennsylvania with the State standards when presented at his office for that purpose; shall certify to their correctness by affixing his official stamp thereto with his name and date of examination clearly marked thereon; shall preserve in his office an appropriate record of services rendered and work performed by him or under his direction in pursuance of this act; shall file in his office annual and other reports received from the local sealers; and shall, on or before the thirtieth day of November in each year, submit a report in writing to the secretary of internal affairs for publication as a separate document in book form, setting forth in sufficient detail the work done in said bureau and the work reported to him by the local sealers, together with such other matters relating to that subject as may be deemed of value and interest to the citizens of this Commonwealth. The chief of said bureau of standards shall receive a salary of three thousand dollars per annum, payable as other employees of said department are now paid, and all necessary expenses incurred in the discharge of his official duties under this act. The secretary of internal affairs shall also appoint one assistant to the chief of the bureau of standards at a salary of eighteen hundred dollars per annum, and may assign such additional assistance from the clerical force of his department to the work of said bureau as he may find necessary from time to time.

Section. 3. That, in order to carry this act into effect, it shall be the duty of the secretary of internal affairs of this Commonwealth to procure, as soon as practicable after the passage of this act, a complete set of standards of weight, length, and capacity, to be verified by the Bureau of Standards of the United States Government and to conform with the standards of weight, length, and capacity established by the National Congress, at a cost not exceeding the sum of two thousand five hundred dollars, to be paid for on warrant of the auditor general out of funds of the State treasury, which sum is hereby specifically appropriated for that purpose, or so much thereof as may be necessary.

Section 4. The board of public grounds and buildings are hereby required to furnish a suitable room or rooms in the State Capitol Building for the safe-keeping and convenient use of said standards of weights and measures and for office use of said bureau of standards.

Section 5. That the sum of three thousand six hundred dollars is hereby specifically appropriated for traveling and other contingent expenses of said bureau of standards for the two years commencing June first, nineteen hundred and eleven, or so much thereof as may be necessary.

Section 1. That the mayor of any or all cities in the Commonwealth of Pennsylvania subject to the approval of the select council may appoint a sealer of weights and measures, who shall be paid out of the city treasury such salary as may be fixed by the councils of the city in which he is appointed, who shall serve for the period of four years unless removed by death, resignation, or otherwise.

Section 2. Each sealer shall be furnished with standard weights, measures, and tests of capacity by the city in which he is appointed, such standards being verified by the National Bureau of Standards of the United States. He shall take charge of and safely keep the standards. Where not otherwise provided by law, the city sealer shall have the power within his city to inspect, test, try, and ascertain if they are correct all weights, scales, beams, measures of every kind, instruments or mechanical devices for measurement, and the tools, appliances, or accessories connected with any or all such instruments or measurements used or employed within the city by any proprietor, agent, lessee, or employee in determining the size, quantity, extent, area, or measurement of quantity, things, produce, articles for distribution or consumption, offered or submitted by such person or persons for sale, for hire, or award. He may, for the purpose above mentioned and in the general performance of his duty, enter or go into or upon and without formal warrant any stand, place, building, or premises, or may stop any vendor, peddler, junk dealer, coal wagon, ice wagon, or any dealer whatsoever for the purpose of making proper tests. Whenever the sealer finds a violation of the statute relating to weights and measures, he may seize, without a warrant, such weights, measures, or balances as may be necessary to be used as evidence in case of violation of the law relative to the sealing of weights and measures, and they shall be held until otherwise directed by the court.

Section 3. 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 measure shall for the first offense be punished by a fine of not more than fifty dollars, for a second offense by a fine of two hundred dollars, and for a subsequent offense by a fine of one hundred dollars and by imprisonment for not less than thirty nor more than ninety days, at the discretion of the court.

Section 4. All acts and parts of acts inconsistent herewith are hereby repealed.

The Chairman. I presume that the convention could hardly discuss this and make an intelligent motion without knowing what some of the provisions are. Will the chairman of the committee state, in a general way, what was the basis of the disagreement or what points were in disagreement in these bills?

Mr. Maroney. Mr. Chairman, if some of the delegates present will kindly bring the matter before the house to accept the recommendations of the committee and also the recommendation that it be discharged from the consideration of this particular bill, then we can thrash it out and state our reasons, but it is not before us in any shape or form. We are waiting for somebody to take some action.

Mr. Goodwin. I move that the report of the committee be accepted and that the committee be discharged.

The motion was seconded and carried.

The Secretary. I am sorry to say that we have not had time to have these bills copied, so that there are only a few of them available.

The CHAIRMAN. It might facilitate business if you would state in regard to each bill just what the point is, if there is a point for discussion.

Mr. Holbrook. Mr. Chairman, one of the main contradictions that appear is that, as I understand it, the bills are correlative, one of which covers the State and one the cities. The city bill requires that every weight and measure used as a standard by a city must be tested and sealed by the National Bureau of Standards. In the second bill a bureau is created, called the State bureau of standards, and the State bureau of standards is required to test and seal all weights and measures used by the cities or boroughs. Therefore, as I understand the bills, both the State bureau of standards and the United States Bureau of Standards are required to test the weights.

The CHAIRMAN. That is, it is a confliction?

Mr. Holbrook. Yes. One other objection is that a State bureau of weights and measures is established, and we believe that the powers and duties of that bureau might with profit be more clearly defined. They are very general in their terms, and are defined in such a way that it is very doubtful what the powers and duties of the State bureau shall be.

Mr. Boyer. Mr. Chairman, I will endeavor to answer both the criticisms in a very few words. In the first place, the bill empowering the appointment of sealers of weights and measures in all cities of the Commonwealth of Pennsylvania was prepared and presented to the legislature before the presentation of the bill creating the bureau of standards; so, naturally, wishing to have our weights standardized by some reliable concern, we put that duty upon the National Bureau of Standards. Naturally, if the bill providing for a State bureau of standards goes through, we will expect the State to do that work, and the bill will be so amended.

I wish to say to the members of the conference that we folk want to creep before we walk. You will agree with me that the law of the State of Pennsylvania in regard to weights and measures is very flimsy; and we wish to get the bureau of standards created in that State for the purpose of making a series of investigations; to form a commission, as it were, to go through the State and find out what we need in the way of laws governing the weights and measures, and possibly at the next conference of the sealers of weights and measures of the country we may present another bill for your consideration. We are not looking for a model bill now; we are trying to get around the constitution, which provides that no office shall be created to superintend the weighing of merchandise, etc., unless otherwise authorized by law. With these two meager bills we are attempting

to get that authority, and I certainly hope, gentlemen, that you will see your way clear to give us the indorsement we ask.

Mr. Holbrook. Mr. Chairman, the reason the committee desired to be discharged was simply to obtain the statements as to the reasons for these things—on the floor—and, moreover, the committee did not see its way clear to recommend the adoption by this conference of two bills which did conflict in their terms, as in that case there probably would have been no discussion upon them.

Mr. Maroney. Mr. Chairman, I think we can straighten this out. One of these bills provides that there shall be a bureau of standards authorized in the department of internal affairs of Pennsylvania, "for the purpose of regulating and maintaining a uniform standard of legal weights and measures in this Commonwealth to conform with the original standards of weights and measures as adopted by Congress and verified by the National Bureau of Standards." The other bill provides that "each sealer shall be furnished with standard weights, measures, and tests of capacity by the city in which he is appointed, such standards being verified by the National Bureau of Standards." Then, in section 2 of the first bill, the National Bureau of Standards is ignored altogether, and this duty of testing the city standards is placed upon the State bureau.

The CHAIRMAN. That is a matter that can easily be corrected.

Mr. Boyer. Possibly there are other things that we will have to alter. Our object is this: We would like to get the sense of this conference in regard to the merit of our endeavor; we want to get some law in Pennsylvania, and we want you to help us.

The Secretary. Mr. Chairman, I would like to state at this point that in all probability there will be a bill introduced into the Legislature of Pennsylvania that will be very much more along the lines that we have in mind here than this bill. Now, if we give this bill our indorsement, what is going to become of the people who are going to try to put in a bill along the lines we have recommended right along in the Western States, and all over the country?

Mr. Holbrook. Mr. Chairman, I would say to Mr. Fischer that, as I understand it, there have been several bills introduced in Pennsylvania already, and another reason for throwing it open to the action of the conference was to determine whether any other of these bills met the requirements of the specifications issued by the conference some years ago.

The Secretary. I know there is going to be a bill introduced by the municipal research people in Philadelphia, and I think Mr. Livingston and some friends of his in Pittsburgh are going to introduce a bill along these lines.

Mr. Holbrook. It appeared to the committee that to accept one bill without the consideration of any other State bills introduced,

especially when the bill was very general in its terms, was rather poor policy on the part of the conference. It seems to me that if all the bills could be presented here, or if some of the delegates from Pennsylvania could tell us in a few words what the other bills contemplated, the conference would be in a better position to act on the matter.

Mr. Boyer. Mr. Chairman, there is only one thing that I can notice in all this discussion. Some representatives here are speaking about something that is going to happen. We folk ask you to take action on something that has happened. These bills were introduced simultaneously into both houses of the Legislature of Pennsylvania by Senator John E. Fox and Hon. William Tunis. Those bills are in committee. You folk are saying here that some bills are going to be presented. There may be some at the next legislature; I do not know. A bill has been presented from the western part of the State which is almost identical with our bill creating a bureau of standards. The only difference is that that bill authorizes the secretary of internal affairs to purchase from the United States Government a set of standards, but does not authorize any person to take charge of them after they come into possession of the State.

The Chairman. There is no question, as I understand it, formally before us. This motion to accept was passed in the other case. I do not see any objection to taking action in regard to this, provided it is perfectly clear that the bill does not disagree seriously with the provisions that you would like to see in a general bill—that is, if it is all right as far as it goes. Certainly the one point mentioned by Mr. Holbrook should be corrected, and that is a simple matter. But is there anything else in this bill that disagrees with the provisions of the general bill? I think we ought to have the freest discussion in regard to this.

Mr. Goodwin. Mr. Chairman, as I understand it, the gentleman from Pennsylvania says that the bill provides that paraphernalia shall be purchased from the National Government. That is not necessary, is it? The Government furnishes standards to each and every State, as I understand it.

The Chairman. It would be necessary, just at present.

Mr. Boyer. That provision is not in the bills that we are discussing now. That is in another one.

Mr. Goodwin. I can not see that this affects any State. If it is any advantage to the State of Pennsylvania to help sealing matters along, I think we had better adopt a resolution.

The CHAIRMAN. Is it the wish of the convention to dispose of this bill in any way? If so, a motion will be in order.

The Secretary. It seems to me that if we take any action on these bills we are committed to them. There has been a good deal of work

done in Pennsylvania, and there are people there, I know, who are going to introduce bills that will be better than this—at least, I feel that they are going to be better. I think they are going to go further and attempt to establish the office somewhat along these lines that we have been working on. The only thing that they have to look out for, of course, is this constitutional requirement. Now, as I stated before, if we indorse this our hands are tied; the Bureau can not take any further action. I would not feel like going up there and talking for another bill if I were asked to do so, and Dr. Stratton gave me permission to go. I am very sorry indeed to appear to be opposing anything that would help matters there in the State.

Mr. Maroney. Mr. Chairman, is there a motion before the house? The Chairman. No. sir.

Mr. Maroney. Then, to be consistent and not be in conflict with the ideas that Mr. Fischer has put forth, and at the same time go on record as favorable to what our friend from Pennsylvania wishes, I move, sir, that our secretary be instructed to write a letter to the judiciary committee of the Legislature of Pennsylvania, stating that this conference goes on record as favoring a State superintendent of weights and measures, and any other provisos that our friend who introduced the bill wants attached to it; I think that covers the ground thoroughly, and we are not committed to any particular bill, and at the same time we stand in line to recommend later the adoption of this model bill that this bureau is trying to put forth.

Mr. Austin. I second the motion.

The CHAIRMAN. Is there any further discussion on the motion?

Mr. McIntyre. Mr. Chairman, that motion as it reads is that we go on record in favor of a State superintendent of weights and measures, and any other recommendations which the delegate chooses to add. Now, the conference can not consistently indorse in advance recommendations which it does not know. Why could it not be amended so as to favor the creation of a State department of weights and measures in Pennsylvania? It will put the conference in a bad light if it indorses recommendations before it knows what those recommendations might contain.

The Chairman. I think you gentlemen both agree. I think we ought not to make that quite so broad.

Mr. Maroney. My only object was to give the opportunity to the gentleman from Pennsylvania to add the assistants or deputies. I did not know how many he contemplated having incorporated in the bill.

Mr. Boyer. Mr. Chairman, that bill is supposed to go through just as it stands; and there are two positions created, a superintendent and one clerk. We expect those two men, within the next two years,

to codify the existing laws and add anything that may be necessary to present to the next legislature.

Mr. Maroney. Then, to satisfy both gentlemen, I will put the motion in the form of "a superintendent and a clerk"—that this conference go on record as favoring a superintendent of weights and measures and a clerk for Pennsylvania—and withdraw the rest of the amendment, with the permission of the gentleman that seconded that motion.

The question was taken, and the motion was carried.

The Acting Chairman (Mr. Fischer). The chairman has been informed that Secretary Nagel is here, and he has gone out for a moment to meet him.

I have a report to make. I was instructed to make a report for the committee on net-weight containers, which met very late last night. I am sorry to say that I have not any copies of the bill that we agreed on, but it is being typewritten. I did not get it in the hands of the typewriter until this morning, but you will be furnished with copies later. I might state that it is along the lines of the three sections of the model State law which Dr. Reichmann presented yesterday. It provides for fixing the size of the barrel, third of a barrel, bushel, etc., and the multiples, and also permits other odd sizes to be used provided they have the net capacity marked on the outside. I would like to take that up later if we have time and when I can furnish the members with copies of the bill. It will necessarily be defective, because it was very hurriedly gotten up, and it will have to be discussed more or less in general terms.

I do not know that we will have time to take up anything else, but it seems to me at this point the next thing in order would be to take up the State weights and measures law. I am sorry to say that, although I had 20 copies of that made yesterday, only a few of them can be found this morning. It is going to be very difficult, of course, to follow this without having copies of the bill. We are having more copies made, but I imagine it will be an hour or so before we can get them. I would like to know what your pleasure is in regard to this matter.

Mr. McIntyre. Could not that be taken up section by section?

The Acting Chairman. I think so, if that is satisfactory. At any rate, we might take it up that way until the other copies arrive; but I thought it would not be very satisfactory for the members to consider it without having copies before them.

Mr. MARONEY. Mr. Chairman, I move that a reading clerk be appointed, and that we take up this matter section by section.

The motion was seconded and carried.

The Acting Chairman. I would like to have nominations now for reading clerk.

Mr. Maroney. I move that the Chair appoint a reading clerk.

The motion was seconded and carried.

The Acting Chairman. I appoint Mr. Maroney, then.

Mr. Maroney. I seem to have got myself into trouble.

Mr. Maroney thereupon read section 1 of the bill, as follows:

MODEL UNIFORM REGULATIONS FOR STATE LEGISLATION ON THE SUBJECT OF WEIGHTS AND MEASURES.

Section 1. The weights and measures received from the United States under a resolution of Congress approved June 14, 1836, and such new weights and measures as shall be received from the United States as standard weights and measures in addition thereto or in renewal thereof, and such as shall be supplied by the State in conformity therewith and certified by the National Bureau of Standards, shall be the State standards, by which all county and municipal standards of weights and measures shall be tried, proved, and sealed.

Mr. Dunlap. Mr. Chairman, I move the adoption of that section. The motion was seconded.

The ACTING CHAIRMAN. Is there any discussion?

Mr. Henry. Mr. Chairman, in that section it states that these State standards shall be the standards by which all county and municipal standards of weights and measures shall be tried, proved, and sealed. Should not that include other measures in the State aside from county and municipal standards?

The Acting Chairman. It does not state that it shall not, does it? Mr. Henry. The way the section is worded, does it not exclude other standards?

The ACTING CHAIRMAN. I do not understand that it does.

Mr. Henry. That is the way it appeared to me. I think it ought to be stated in that section that commercial apparatus may be approved by the State standards. I may be wrong, but from the reading of that section it would appear that all the sealing must be done by the municipal and county authorities.

The Acting Chairman. I think that is covered in another section. At any rate, if you want to introduce another section covering that, it might be introduced later. As a matter of fact, that first section does not prescribe all the duties of the sealer. The bill is just full of duties; and I think that is practically the law that Dr. Reichmann is operating under at the present time.

Mr. Maroney. The State superintendent is de facto sealer of weights and measures in any town where there is no official, if that is what you are getting at; and if he seals standards in a town where there is already a sealer he is going over that man's head, and if he went over mine there would be trouble.

Mr. Henry. Yes; but whether or not there is any conflict between the State and municipal or county authorities, the standard of the commercial apparatus should be legalized by comparison with the State standards; that is the point.

Mr. Maroney. According to Mr. Fischer, that is taken care of later in this bill.

Mr. Holbrook. Mr. Chairman, I should say that the State standards themselves should never be used in the testing of commercial apparatus, which seems to be the point Mr. Henry makes. Copies of the State standards may be sealed by means of the State standards, and these, as is specified later in the bill, may be used in checking up the weights and measures of any county, town, or city. But the idea of using the State standards themselves for the testing of commercial apparatus seems to be a very poor one. Moreover, the State standards are required to be kept in a building belonging to the State, from which they shall not be removed, which would effectively prevent any apparatus being tested by them.

The Chairman. Gentlemen, let me interrupt your discussion at this point. I told you yesterday what I thought of the interest that the secretary of our department is taking in the weights and measures movement. Our secretary could not be with us yesterday, but he has left the many duties that he has (and I can assure you that there are a great many) to come out and be with us this morning for a short time. I take great pleasure in introducing Secretary Nagel.

Mr. Nagel. Gentlemen, I have come merely to testify to my interest in this movement. I did that last year, and to-day I can only say that my interest is in no sense abated. On the contrary, I am more than ever impressed with the significance of what you and this bureau are engaged in doing.

So far as the importance of common standards is concerned I take it that we have passed beyond the field of doubt. That it touches upon a phase of life in which the individual can not defend himself, and in which, therefore, the Government must come to his support, I imagine is beyond question. It is so with the quality of products, and it must be equally true of the quantity of products.

Last year we spoke more especially of the position of the consumer; and of course his relation to and his interest in the subject is manifest. It has seemed to me since then that perhaps in a broader field the insistence upon standards may become more and more important. In other words, they play a part in the general demand for the "rules of the game." If it is just in commerce that every shipper should have equal treatment from a common carrier, then it must be just also that in competition between several industries all of them should maintain a common standard, at least as to quantity. If that quantity is not the same, then there is no such thing as fair competition. And, after all, the rules of the game, which the Gov-

ernment seeks to enforce, make for a fair opportunity and for a fair chance to everyone in the field.

It seems to me that these propositions are self-evident when we state them, and it is not my purpose to detain you here with an argument upon a subject with which you are more familiar than I can possibly be.

I am also more and more impressed with the significance of the cooperation which you are furnishing here between a department of the National Government and the representatives of individual States. To my mind it is a most hopeful manifestation of governmental activity. As you know, since the beginning of our Government there has been continued dispute as to the jurisdiction of the respective sovereignties—that is, the National Government and the State authorities. To my mind, we have wasted much time in seeking to define just where one jurisdiction ends and the other begins. We ought to recognize that large field of governmental action where the two jurisdictions, instead of quarreling for possession, should join hands for intelligent cooperation. Nothing is so essential to the success of the dual system of government for which our Constitution provides; and perhaps few people know that the Supreme Court of the United States, in seeking to help solve these great questions, has again and again pointed out that the only solution lies in an intelligent and patient cooperation of the two authorities in a common field of action.

Now, in my judgment, you are providing one of the most persuasive proofs of the possibility of such cooperation. If you did nothing for the consumer, if you did nothing else than demonstrate to the general public that this thing can be done by patient, tolerant, reasonable discussion, exchange of views, and official cooperation, you would have served, to my mind, a tremendous purpose in this country.

Now, what does cooperation mean? I shall not undertake to define it, but I shall be content to call your attention to the fact that the National Government must not assume to do too much. Very few people appreciate how tremendously the activity of the National Government has grown in the last 25 years. We speak of the enormous extravagance of the Government. You would not think so if you contemplated how tremendously the activities of every department of Government have been extended. It is amazing. And while I am a nationalist, and while I believe that the National Government ought to grapple with every truly national problem, I also believe, on the other hand, that the integrity of State authority is an absolute condition to the success of this common Government; and therefore I would not want the activity of the National Government, through the Bureau of Standards, to exceed its rational and proper

domain. I would want to encourage as far as possible the fearless proceeding on the part of the bureau, in so far as it is called legitimately into action, but I would want to count on the enforcement of the standards that we fix by State authority. So, it seems to me, it ought to be; and that, it appears to me, you are doing. The standard must be common to the whole country; therefore the Government of the whole country must fix it. The enforcement of that standard may well be left to the representatives of the individual sovereignties. It will be so in a larger scope before long.

The relations between entirely foreign countries are becoming closer and closer. The spirit of toleration and exchange is growing. The promise of peace rests upon that foundation, and as that exchange becomes more and more free, all civilized countries will have to agree, by treaty or otherwise, upon common standards. And yet, when those standards have been agreed upon, for competition with each other, the enforcement of those standards must, of course, be left to the respective governments themselves.

Now, of course, to make standards we have to make inquiries. That Investigations and inquiries ought to be made for our information. The results of those investigations must be carefully used. If they are in our possession, and the representatives of individual States want to know what these standards are, they ought to have them, in order that they may pursue the legitimate purpose of their offices. But when it comes to the bureau's use, we must be careful, because the National Government, working with national funds, dare never get into the position of making a report upon one State at the possible expense of another State. That will not do. Whenever we make a report we must make one that covers every State in which like conditions obtain. Otherwise, our report may be partial, subject to criticism and complaint. We dare not get into that position. In other words, we must leave the use of the information, if it is to be employed in individual States, to those representatives of the States who are in a position to employ that information.

That is equally true in other bureaus. I would insist upon that at every stage. We have just spent a large sum in the investigation of woman and child labor. That covered several years. Suppose we had published the results of our investigations in an individual State and had not done it with respect to other States. What would have been the consequence? Complaint and discord. In order to do what the National Government ought to do, we should make a just report as between the several States; a comprehensive report as to all of them. To allow for the institution of comparisons, we should make a report which embraces, at one and the same time, every State in which one kind of condition is common. That is the purpose of national government. We could not do anything else.

We do not single out North Carolina or Massachusetts, but we report upon North Carolina and Massachusetts and every other State of like condition. If we inquire into the cotton industry, we take every State in which there are cotton factories, and make a common report, in order that it may address itself to the patient consideration and the impartial judgment of every citizen of the United States. That is my position, and I should be surprised if Dr. Stratton took any other. Whatever information we have is at the disposal of everybody. My desire is to have this bureau do nothing that is not absolutely necessary, in order that the field of action for the individual States may be left as broad as possible. Because, to repeat, one danger which is confronting us in this country now is that the State activity will be neglected; and the neglect of the State to use its opportunities has been during the last 10 or 15 years the most potent inducement for national assumption of authority. I say that, although I believe in national authority. Still, I advocate it used only for national problems and would insist that wherever the national authority is not needed the State should be left to solve its own problems. In other words, to conclude, I believe to-day what James Wilson said when the Constitution of the United States was submitted. Every State must be left to do everything that it can do. But this is one government, and when the State is not able to meet a problem because that problem assumes a national character, then it is time for the National Government to step in and meet the situation.

The Acting Chairman (Mr. Fischer). We now have a few copies of our so-called "model law," which will be distributed.

Mr. Henry. Mr. Chairman, I misunderstood this section a little, and I would like to know if this section means that the county and municipal standards shall be tried, proved, and sealed by comparison with State standards themselves, and not by comparison with any secondary State standards. If so, then that clears the thing up in my mind.

The Acting Chairman. That is, whether they can be compared with secondary standards or must be compared with the State standards?

Mr. Henry. Yes. If this means that they must be compared with the State standards and can not be compared with secondary standards, then, of course, it should be as it is. As I understand it at the present time, a State office does not necessarily use, strictly speaking, the State standards; it uses secondary standards, does it not?

Mr. Maroney. Certainly.

The Acting Chairman. I do not think the State commissioner ought to be required to use any particular weights when he is comparing standards. It seems to me it ought to be left to his discretion

as to when he uses State standards and when he uses secondary standards, which he may know are just as good. I had never thought of that interpretation being put on it. I see the point that you are raising. You will notice the bill provides for all other standards, for example, secondary standards. While they will not be supplied by us, they will be sealed by our bureau, and they will be the ones, I should think, that might well be used in testing county and municipal standards. I do not think it requires the use of State standards for any specific purpose; that is, when I say "State standards" I speak of the fundamental standards. It reads, "and such new weights and measures as shall be received in addition thereto." That might include a second set, you see.

Mr. Henry. Yes.

Mr. Maroney. Question on the motion, Mr. Chairman.

The question was taken and the section was adopted.

Section 2 of the bill was then read by Mr. Maroney, as follows:

Mr. Maroney. Mr. Chairman, I move the adoption of the second section.

The motion was seconded.

Mr. Boyer. Mr. Chairman, it seems to me that it would be a wise provision if the term of office were eliminated; that is, instead of being five years, and four, in parentheses, there should be a blank, leaving it subject to the conditions of the State wherein the laws are being passed.

Mr. Holbrook. Mr. Chairman, I believe that it is advisable to suggest some term, in order that the conference may go on record as favoring a longer term than the average one, the usual two-year term of the governor of the State.

Mr. Goodwin. Mr. Chairman, the only thing that would prevent me from recommending the adoption of section 2 would be the fact that it says "there shall be a deputy superintendent of weights and measures and inspectors of weights and measures." Now, every city and town in my State, according to the law, has to appoint sealers of weights and measures, and they come under the jurisdiction of the State sealer. The State sealer's term of office is five years and the term of the subordinates is one year. There is nothing in our law that would compel us to appoint deputies, and there is nothing that would give the right to do so.

The Acting Chairman. You do not understand, Mr. Goodwin, that we are trying to enact this in place of any existing State law?

Mr. Goodwin. No; this is a general law for all the States alike, as I understand it.

The Acting Chairman. Yes. If you have an existing law, it may not conform to this.

Mr. Goodwin. That is why I say that I can not consistently support it, because it conflicts with the law in my State, which I believe is a very good and concise law.

The Acting Chairman. This is intended to be a recommendation for the States which are going to adopt laws and those which wish to change their laws.

Mr. Goodwin. Oh, I see. I did not so understand it. Of course, in that case, I will be glad to help it along.

The question was taken and the section adopted.

Section 3 was then read by Mr. Maroney, as follows:

Section 3. The superintendent of weights and measures shall take charge of the standards adopted by this article as the standards of the State, and cause them to be kept in a fireproof building belonging to the State (or in a safe and suitable place in the office of the superintendent), from which they shall not be removed except for repairs or for certification, and he shall take all other necessary precautions for their safe-keeping. He shall maintain the State standards in good order and shall submit them at least once in 10 years to the National Bureau of Standards for certification. He shall at least once in two (five) years try and prove by the State standards all weights, measures, and other apparatus which may belong to any county or city, and shall seal such when found to be accurate by stamping on them the letter "-" and the last two figures of the year with seals which he shall have and keep for that purpose. He shall have and keep a general supervision of the weights, measures, and weighing and measuring devices offered for sale, sold, or in use in the State. He shall, upon the written request of any citizen, firm, corporation, or educational institution in the State, test or calibrate weights, measures, weighing or measuring devices, and instruments or apparatus used as standards in the State. He, or his deputy or inspectors by his direction, shall at least once anually test all scales, weights, and measures used in checking the receipts or disbursements of supplies in every institution for the maintenance of which moneys are appropriated by the legislature, and he shall report in writing his findings to the supervisory board and to the executive officer of the institution concerned, and, at the request of such board or executive officer, the superintendent of weights and measures shall appoint in writing one or more employees then in the actual service of each institution who shall act as special deputies for the purpose of checking the receipts or disbursements of supplies. He shall keep a complete record of the standards, balances, and other apparatus belonging to the State and take a receipt for same from his

successor in office. He shall annually, on the 1st day of ----, make to the governor a report of the work done by his office. The State superintendent, or his deputy or inspectors at his direction, shall inspect all standards and apparatus used by the counties and cities at least once in two years and shall keep a record of the same. He, or his deputy or inspectors at his direction, shall at least once in two years visit the various cities and counties of the State in order to inspect the work of the local sealers, and in the performance of such duties he may inspect the weights, measures, balances, or any other weighing or measuring appliances of any citizen, firm, or corporation, and shall have the same powers as the local sealer of weights and measures. The superintendent shall issue from time to time regulations for the guidance of county and city sealers, and the said regulations shall govern the procedure to be followed by the aforesaid officers in the discharge of their duties. The State superintendent of weights and measures shall forthwith, on his appointment, give a bond in the penal sum of \$5,000, with sureties, to be approved by the governor for the faithful performance of the duties of his office and for the safety of the standards intrusted to his care, and for the surrender thereof immediately to his successor in office or to the person appointed by the governor to receive them. The deputy superintendent of weights and measures and each inspector of weights and measures shall forthwith upon his appointment give a bond in the penal sum of \$1,000, with sureties, to be approved by the secretary of state or attorney general, for the faithful performance of the duties of his office and for the safety of any apparatus intrusted to his care.

Mr. Maroney. I move, sir, that the section be adopted as a whole. The motion was seconded.

Mr. Holbrook. Mr. Chairman, I would say that there seems to be a misprint here. The bond of the superintendent and that of the deputy should be approved by the same official. In one case the bond is to be approved by the governor of the State, and in the other by the secretary of state or the attorney general. It might be any one of those three officers, conforming to the general practice in the State.

The Acting Chairman (Mr. Thomas). I imagine that other States may be in the condition of Ohio, in which the approval of official bonds is under one person designated by law. This section, of course, would be amended to conform to the State laws in that regard.

Mr. Goodwin. Mr. Chairman, I merely wish to state to the delegates that in my State there is no bond required. The responsibility is provided for, but there is no bond required for the execution of the work, and I merely suggest that, in my opinion, it is not absolutely necessary to have this provision of law.

Mr. Holbrook. Mr. Chairman, there is another thing to which I would like to call attention, which is in the nature of a typographical error. The section provides that the superintendent "shall at least once in two (five) years try and prove by the State standards all weights and measures and other apparatus which may belong to any county or city." I would suggest that "standard" be put

before "weights and measures," since there might be a number of sets for various purposes, in the fire department, for example, which would belong to the county or city and yet which would not necessarily be sealed by the State standards. I would say, "any standard weights or measures which may belong to any county or city."

Mr. McIntyre. Mr. Chairman, there is one clause here which carries the power of the State sealer rather far. It reads, "and shall have the same powers as the local sealer of weights and measures." There might arise some conflict of authority from that clause. The authority to prosecute for violation of the law, which is given in another section, ought to cover all the power which the State sealer would require in the city. In Wisconsin, for instance, that law would be unconstitutional. The local duties are protected to the municipality, with the idea that they should be performed by the municipality, and it seems to me that the State sealer's power is pretty fully covered in the section, aside from that clause.

Mr. Wall. Mr. Chairman, in Pennsylvania we have cities, boroughs, and counties. We have boroughs in Pennsylvania larger than some cities for the reason that they have never taken advantage of organizing city governments. I come from a city in Pennsylvania which could not become a city under our new constitution, for we have not yet quite 10,000 inhabitants. When you mention cities and counties, I think you ought to include boroughs. Boroughs have their organizations the same as cities, and with distinctive boundaries.

Mr. Goodwin. Mr. Chairman, regarding that clause about the duty of the superintendent to go into a town or county and have the same rights and privileges as the local sealers, I think it works well. The State sealer in my State has all the authority vested in the local sealers, and it is an advantage, because in case he finds that one of his subordinates is not doing his duty as he should, he has authority to do it himself, if necessary. There is no law that gives him the right to appoint a deputy to do it. We hope to be able to change that in the very near future. It is one of the worst things with which I have had to contend. In remote sections of the country, where there is not much sealing to be done, the sealer is sometimes indifferent to his duties. As State sealer I have the privilege of attending to that duty, and I think that is a very good thing about this law.

The Chairman. Are there any further remarks? The question was taken and the section adopted. Section 4 was then read by Mr. Maroney, as follows:

SEC. 4. The board of county commissioners of each county and the common council of each city required to appoint a sealer under this act shall procure at the expense of the county or city, and shall keep at all times, a complete set of weights and measures and other apparatus of such materials and construc-

tion as the said superintendent of weights and measures may direct. All such weights, measures, and other apparatus having been tried and accurately proven by him, shall be sealed and certified to by the State superintendent as hereinbefore provided, and shall be then deposited with and preserved by the county or city sealer as public standards for such county or city.

Whenever the board of county commissioners of a county or the common council of such city shall neglect for six months so to do, the county auditor of the county, or the city clerk or comptroller of said city, on notification and request by the superintendent of weights and measures, shall provide such standards and cause the same to be tried, sealed, and deposited at the expense of the county or city.

Mr. Boyer. Mr. Chairman, I move the adoption of this section.

The motion was seconded.

Mr. Boyer. I would like to ask a question, please, Mr. Chairman. Why is the term "common council" used?

The CHAIRMAN. I believe that is a term that is used in some places.

Mr. Holbrook. Mr. Chairman, I would say that a large number of these words could be put in brackets, such as "the board of county commissioners." That is a term used in some States for "the board of supervisors." A county auditor will often be called a county clerk, etc. All through this bill we are simply specifying the kind of board that we desire to have mentioned, without reference to its specific name.

Mr. Boyer. I merely wanted the information. In my State all appointments are confirmed by the select council, and I was wondering if there was any good reason for using the other term.

The CHAIRMAN. It is a general term.

Mr. Wall. This would include boroughs in Pennsylvania, would it?

The CHAIRMAN. That could be covered in your law by adding the word "borough" after "city."

Mr. Wall. Yes.

Mr. Maroney. Mr. Chairman, there seems to be a misapprehension here, that we have, in adopting these sections as they are, bound ourselves and bound the whole country, States and everything else, to this law just as it is, without revision by the local people to whom it is to be submitted. In answer to Mr. Wall, section 4 could read "the board of" and anything that he wants to substitute—borough commissioners, county commissioners, or city commissioners. In the East the term "common council" is used, and practically every part of the country has a different idea and description of what their governing board is. It is simply a question of substituting something else for the term we have used. You might leave it blank and fill it in. To facilitate matters, as we have a lot of work to do to-day and have to get through with it, I would suggest that there be as little of this discussion as possible, so that we can get through.

The CHAIRMAN. Are there any further remarks? The question was taken, and the section was adopted. Section 5 was then read by Mr. Maroney, as follows:

Section 5. There shall be a county sealer of weights and measures in each county, who shall be appointed by the board of county commissioners for a term of five years. He shall be paid a salary determined by such board, said salary not to be less than \$1,000 a year, and no fee shall be charged by him or by the county for the inspection, testing, or sealing of weights, measures, or weighing or measuring devices. Where not otherwise provided by law, the county sealer shall have the power within his county to inspect, test, try, and ascertain if they are correct, all weights, scales, beams, measures of every kind, instruments or mechanical devices for measuring, and tools, appliances, or accessories connected with any and all such instruments or measures kept, offered, or exposed for sale, sold, or used, or employed within the county by any proprietor, agent, lessee, or employee in proving the size, quantity, extent, area, or measurements of quantities, things, produce, articles for distribution or consumption offered or submitted by such person or persons for sale, hire, or award; and he shall have the power to, and shall from time to time, weigh or measure packages or amounts of commodities of whatsoever kind kept for the purpose of sale, offered for sale, or sold, or in the process of delivering, in order to determine whether the same contains the amount represented, and whether they be offered for sale or sold in a manner in accordance with law. He shall at least twice each year, and as much oftener as he may deem necessary, see that the weights, measures, and all apparatus used in the county are correct. He may, for the purpose above mentioned, and in the general performance of his official duties, enter and go in or upon, and without formal warrant, any stand, place, building, or premises, or stop any vendor, peddler, junk dealer, coal wagon, ice wagon, delivery wagon, or any dealer whatsoever, and require him, if necessary, to proceed to some place which the sealer may specify for the purpose of making the proper tests. Whenever the county sealer finds a violation of the statutes relating to weights and measures, he shall cause the violator to be prosecuted. Whenever the sealer compares weights, measures, or weighing or measuring instruments and finds that they correspond or causes them to correspond with the standards in his possession, he shall seal or mark such weights, measures, or weighing or measuring instruments with appropriate devices, to be approved by the State superintendent of weights and measures. He shall condemn and seize and may destroy incorrect weights, measures, or weighing or measuring instruments which, in his best judgment, are not susceptible of satisfactory repair; but such as are incorrect, and yet may be repaired, he shall mark or tag as "Condemned for repairs" in a manner prescribed by the State superintendent of weights and measures. The owner or users of any weights, measures, or weighing or measuring instruments of which such disposition is made shall have the same repaired or corrected within 10 days, and they may neither use nor dispose of the same in any way, but shall hold the same at the disposal of the sealer. Any apparatus which has been "condemned for repairs" and has not been repaired as required above shall be confiscated by the sealer.

give a bond in the penal sum of \$1,000, with sureties, to be approved by the appointing power, for the faithful performance of the duties of his office.

Provided, however, That nothing in the above shall be construed to prevent two or more counties from combining the whole or any part of their districts, as may be agreed upon by the boards of county commissioners, with one set of standards and one sealer, upon the written consent of the State superintendent of weights and measures. A county sealer appointed in pursuance of an agreement for such combination shall, subject to the terms of his appointment, have the same authority, jurisdiction, and duties as if he had been appointed by each of the authorities who are parties to the agreement.

On motion of Mr. Boyer, the section was adopted. Section 6 was then read by Mr. Maroney, as follows:

Section 6. There shall be a city sealer of weights and measures in cities of not less than 25,000 population, according to the latest official State or United States census, to be appointed by the mayor from a list to be furnished by the civil service board and under the rules of such board, where such board exists; otherwise he shall be appointed by the mayor by and with the advice and consent of the county council. He shall perform in said city the duties and have like powers as the county sealer in the county. In those cities in which no sealer is required by the above, the county sealer of the county shall perform in said cities the duties and have like powers as in the counties.

Provided, however, That nothing in the above shall be construed to prevent any county and the city situated therein from combining the whole or any part of their district as may be agreed upon with one sealer, subject to the written approval of the State superintendent of weights and measures. A sealer appointed in pursuance of any agreement for such combination shall, subject to the terms of his appointment, have the same authority, jurisdiction, and duties as if he had been appointed by each of the authorities who are parties to the agreement.

On motion of Mr. Austin the section as read was adopted. Section 7 was then read by Mr. Maroney, as follows:

Section 7. Any person who by himself or by his servant or agent or as the servant or agent of another shall offer or expose for sale, sell, or use or retain in his possession a false weight or measure or weighing or measuring device, or any weight or measure or weighing or measuring device which has not been sealed by the sealer of weights and measures within one year in the buying or selling of any commodity or thing, or for hire, or award; or who shall dispose of any condemned weight, measure, or weighing or measuring device contrary to law or remove any tag placed thereon by a sealer of weights and measures; or any person who by himself or by his servant or agent or as the servant or agent of another shall sell or offer or expose for sale less than the quantity he represents, or sell or offer or expose for sale any such commodity in a manner contrary to law (or any person who by himself or by his servant or agent or as the servant or agent of another shall sell or offer for sale or have in his possession for the purpose of selling any device or instrument to be used to or calculated to falsify any weight or measure), shall be guilty of a misdemeanor, and shall be punished by a fine of not less than \$20 or more than \$200, or by imprisonment for not more than three months, or by both such fine and imprisonment upon a first conviction; but upon a second or subsequent conviction he shall be punished by a fine of not less than \$50 or more than \$500, or by imprisonment in the county jail for not more than one year, or by both such fine and imprisonment.

Mr. Austin. I move the adoption of the section as read.

The motion was seconded.

The CHAIRMAN. Are there any remarks?

Mr. Maroney. Mr. Chairman, of course this bill is intended as a State law. There is a good deal of it that can be incorporated as a city or local ordinance for the town or borough; but in incorporating that law, as I have been given to understand, the common council can at any time prescribe a fine in the local jurisdiction, but not imprisonment in jail; that must be done through a State law. I mention that because I have come in contact with that myself within a short while, and I think it is an advantage to know that it is illegal for any common council to include in an ordinance any provision whereby a man can be imprisoned.

The question was taken and the section adopted.

Section 8 was then read by Mr. Maroney, as follows:

Section 8. The superintendent of weights and measures, his deputy and inspectors, and the county and city sealers of weights and measures are hereby made special policemen and are authorized and empowered to arrest, without formal warrant, any violator of the statutes in relation to weights and measures, and to seize for use as evidence and without formal warrant any false weight, measure, or weighing or measuring device or package or amounts of commodities found to be used, retained, or offered, or exposed for sale, or sold in violation of law.

Mr. McIntyre. I move the adoption of the section as read.

The motion was seconded.

Mr. Connors. I would suggest adding after the word "false" the words "or unsealed," so that it will read, "false or unsealed weight, measure, or weighing or measuring device." In the previous section it is made a violation of law for any person to have an unsealed weighing or measuring device in his possession, and I think the word "unsealed" should be put in section 8 so as to give the inspector a chance to seize the unsealed weights or measures.

The Chairman. Has anyone else any opinion to offer on that? It seems to me that that is an oversight. Do you make that as a motion?

The CHAIRMAN. Do you make that as a motion?

Mr. Connors. I make it as a motion.

The Secretary. I second Mr. Connors's motion.

The question was taken and the section was adopted.

Section 9 was then read by Mr. Maroney, as follows:

Section 9. Any person who shall hinder or obstruct in any way the superintendent of weights and measures, his deputy or inspectors, or any county or city sealer in the performance of his official duties shall be guilty of a misdemeanor and shall be punished upon conviction thereof in any court of competent jurisdiction by a fine of not less than \$2 or more than \$200, or by imprisonment in the county jail for not more than 90 days, or by both such fine and imprisonment.

Mr. Austin. I move its adoption.

The motion was seconded.

The CHAIRMAN. Are there any remarks?

Mr. Connors. Mr. Chairman, I would move to add after "any person who shall hinder or obstruct" the words "or impersonate in any manner, by use of seal or otherwise."

The CHAIRMAN. You have found in your experience that that does sometimes occur?

Mr. Connors. Yes; either impersonation or the use of the seal.

The Secretary. We have even been impersonated ourselves. We have received quite a number of notices that United States inspectors had appeared in Arizona, or some other part of the country, when we had had no one there at all. I suppose they read these newspaper accounts.

Mr. Thomas. Mr. Chairman, it seems to me that the offenses are of a very different order. I should prefer very much to see the section stand as it is, and see an additional section placed there to cover the case of impersonation, with a much more severe penalty.

The CHAIRMAN. In other words, you think it is not in the same class?

Mr. Thomas. Not the same class of offense at all.

Mr. Connors. That is a very low fine for impersonation. I think that it should be increased. Therefore, I favor Mr. Thomas's idea.

The CHAIRMAN. Are there any other remarks?

Mr. Connors. I put that as a motion, that a section be added covering the impersonation of the sealer by seal or otherwise.

The CHAIRMAN. Will you suggest a wording for that?

The Secretary. Mr. Chairman, I would like to state that I have just found in my office a letter from Indiana to the effect that the bill that has just been introduced out there had passed the house. It conforms with our model bill in every particular. They are almost identical except that this bill provides that the State food and drug commissioner shall be the State commissioner of weights and measures. However, it prescribes his duties, and he has to perform them; and it seems to me that he is just as apt to neglect his duties as food commissioner as to neglect his duties as State sealer of weights and measures.

Mr. Thomas. As to this bill: Is it intended to cover such things as the testing of gas meters, water meters, and electric meters?

The Secretary. It seems to me that it is open to that construction. It lends itself to the broadening of the scope of these officials whenever necessary. Do you see any objection?

Mr. Maroney. Mr. Chairman, my town, New Haven, last Monday accepted these model regulations, with revisions to make them fit the city instead of the State. They have just gone through the common

council and were signed by the mayor last Monday. Last evening, to make it more binding, there was a public hearing before the board of aldermen. In explanation, I would say that the city water, gas, and electric corporations are private corporations; and there was a bill introduced giving the department of weights and measures supervision over all meters and providing that these meters must be tested and sealed by the department of weights and measures before being put into use. In other words, when either of the three corporations had any meters of any description to put up in public places where their commodities were to be used, before doing so they should submit them to the department of weights and measures, and that department should test them and seal them before they could be put into use.

The CHAIRMAN. We have this new section.

Section 10 was then read by Mr. Maroney, as follows:

Section 10. Any person who shall impersonate in any way the superintendent of weights and measures by use of his seal or counterfeit of his seal or otherwise shall be guilty of a misdemeanor and shall be punished by a fine of not less than \$100 and not more than \$500 or by imprisonment for not more than one year, or both such fine and imprisonment.

Mr. Holbrook. Mr. Chairman, instead of the word "superintendent," the phrascology should be made to conform to the rest of the bill and made to include local sealers, inspectors, and deputy superintendents.

Mr. Thomas. I move the adoption of the section with the suggested amendment.

The motion was seconded and the section adopted.

The Chairman. Now, the bill as a whole has been adopted section by section.

Mr. Henry. Has section 9 been adopted?

The CHAIRMAN. Yes, sir; do you wish to recall it?

Mr. Henry. After it was all gone over, I just wanted to make a motion to reconsider all but section 1 of this bill, on account of the name given the State official. It seems to me that a great many of the States will not agree to call the State official the "State superintendent."

The Chairman. They do not have to do so.

Mr. Henry. No; but we go on record here as designating the name "State superintendent" as the proper name, and it seems to me that we should not. I know of only one State where the State officer is called superintendent and several States where he is called commissioner. I do not mean to say that they should necessarily be called commissioners, but leave it blank or else put in "commissioner" or "State sealer."

Mr. Holbrook. Mr. Chairman, I would suggest that the word "superintendent" be bracketed in every case. I will say, however, that in my own experience throughout the country I find that the senators who are introducing any legislation on the subject of weights and measures prefer the term "superintendent" to "commissioner," especially in the West, and in some of the eastern States also; and that was the reason why "superintendent" was used. A commission is often intended as a temporary investigating committee. Commissions will be appointed to investigate various State departments, and, inasmuch as this is a permanent office, we preferred to use the term "superintendent." I think I may say with safety that the majority of the States would prefer the term "superintendent." But that might very well be bracketed and left to the individual States, since, if the powers and duties of the official are the same, his title--provided persons will recognize him by his title—is of very little importance.

Mr. Henry. Mr. Chairman, I do not want to take up very much time. I just wanted to say that I do not know about the West, but it seems to be the custom in the East—among the New England States anyhow—to give the head of a department similar to this the name "commissioner," and that is my reason for urging that title, so that the heads of departments of the same order may all be called by the same name.

The CHAIRMAN. If this word is bracketed it would answer your purpose, would it not?

Mr. HENRY. Yes; that would be satisfactory.

The CHAIRMAN. It is understood that that will be changed, if necessary. Of course, we have not the power to prevent the States from changing it, even if we wished to do so.

Mr. Holbrook. Mr. Chairman, at the time the New York State bill was being considered I was in the New York State department, and I know there was an objection to the word "commissioner" in New York State. The word "superintendent" was substituted in the original bill.

The Secretary. Mr. Chairman, I understood that there was a reason for that in New York State, namely, that "superintendent" and "commissioner" do mean different things. But I do not believe that applies to other parts of the country.

Mr. Holbrook. It applies to the West almost entirely.

The Secretary. Mr. Chairman, I think the word "commissioner" in the West usually means a member of a commission, a body composed of more than one man. However, the term is a variable one. For instance, we have the commissioner of the general land office. He alone is the head of the land office. Still, I am very much in

favor of putting in the word "commissioner" and the word "super-intendent" in brackets.

The Chairman. The practice of the Government is varied, but it is the general custom, I believe, to use the term "commissioner" to indicate a temporary office; that is, a member of a commission, although we have several instances where men holding permanent offices are called commissioners.

Mr. Wall. Mr. Chairman, in the original form of our State government, the heads of the several departments were called secretaries; for instance, the secretary of the Commonwealth, the secretary of agriculture, and the secretary of internal affairs. Then we have commissioners. There is the commissioner of highways, the commissioner of railroads, the public-school commissioner, etc. Then we have superintendents.

The CHAIRMAN. What is your idea in regard to this particular point? Should this be left "superintendent" or bracketed, or what suggestion have you in mind?

Mr. Wall. I will say bracketed.

Mr. Thomas. In matters such as these regarding local designation of officers, local methods of procedure, and all that, it seems to me that it would be very wise if we would put an explanatory note or paragraph either at the head of the suggested code or at the foot of it, explaining that the purpose of the conference is to secure proper laws regarding the use of standards and to secure thorough inspection regarding their use in commerce; that such matters as the name of the chief officer and that of any of his subordinates, terms of office, salaries, and all those things, are suggestive only, and that the idea of the conference is that they should be changed to conform to the existing lawful practice in the various States of the Union.

The Chairman. That is a very good suggestion.

Mr. Goodwin. Mr. Chairman, I can not see where the names of the officials will affect conditions any. We have different names of officials in different sections of the country. In our town we have a town council; in the States adjoining us they have boards of selectmen. I do not think that the name of the official in this matter should be considered.

The CHAIRMAN. Then you agree with Dr. Thomas?

Mr. Goodwin. Exactly.

Mr. Thomas. Mr. Chairman, it has been suggested that I make a motion to that effect. I therefore move that an explanatory note of the intent which I have roughly outlined be added to this and that the wording of the note be referred, with power, to the president and the secretary of this conference.

Mr. Goodwin. I second the motion.

The question was taken and the motion was carried.

Mr. Maroney. Mr. Chairman, I have some more sections to read. The Secretary. These are sections which were added afterwards and have not been numbered.

Mr. Maroney read as follows:

Bottles used for the sale of milk and cream shall be of the capacity of half gallon, 3 pints, 1 quart, 1 pint, half pint, and 1 gill, filled full to the bottom of the lip. The following variations on individual bottles or jars may be allowed, but the average content of not less than 25 bottles selected at random from at least four times the number tested must not be in error by more than onequarter of the tolerances: Six drams above and 6 drams below on the half gallon; 5 drams above and 5 drams below on the 3 pint; 4 drams above and 4 drams below on the quart; 3 drams above and 3 drams below on the pint; 2 drams above and 2 drams below on the half pint; and 2 drams above and 2 drams below on the gill. Bottles or jars used for the sale of milk shall have clearly blown or otherwise permanently marked in the side of the bottle, the capacity of the bottle, and the word "Sealed"; and in the side or bottom of the bottle the name, initials, or trade-mark of the manufacturer and a designating number. which designating number shall be different for each manufacturer and may be used in identifying the bottles. The designating number shall be furnished by the State superintendent of weights and measures upon application by the manufacturer, and upon the filing by the manufacturer of a bond in the sum of \$1,000, with sureties to be approved by the attorney general or secretary of state, conditioned upon their conformance with the requirements of this section. A record of the bonds furnished, the designating numbers, and to whom furnished shall be kept in the office of the superintendent of weights and measures.

Any manufacturer who sells milk and cream bottles to be used in this State that do not comply as to size and markings with the provisions of this section shall suffer a penalty of \$500, to be recovered by the attorney general in an action against the offender's bondsmen to be brought in the name of the people of the State. Any dealer who uses, for the purpose of selling milk or cream, jars or bottles purchased after this law takes effect that do not comply with the requirements of this section as to markings and capacity shall be deemed guilty of giving false or insufficient measure.

Sealers of weights and measures are not required to seal bottles or jars for milk or cream marked as in this section provided, but they have the power and shall from time to time make tests on individual bottles used by the various firms in the territory over which they have jurisdiction in order to ascertain whether the above provisions are being complied with, and they shall report violations found immediately to the State superintendent of weights and measures.

Mr. Maroney. I move the adoption of this section.

The motion was seconded.

The Chairman. It is moved and seconded that this be added to the bill already acted upon as an additional section. Are there any remarks?

Mr. Connors. Mr. Chairman, while this is under discussion here I might state that there is considerable doubt in the minds of weights and measures officials throughout the country as to the constitution-

ality of any law that prescribes a different standard from the one furnished by the United States Government to the States. It seems to me that is a debatable point, and I would like to see it brought out.

The Chairman. It seems to me this is a decided step in the direction of relieving the city official or inspector of a large amount of unnecessary work. I think this same scheme will sooner or later be carried out in other directions.

Mr. Goodwin. Mr. Chairman, according to the laws of Massachusetts, the manufacturers of milk bottles can stamp their own bottles under a guaranty, and, of course, that is supposed to be an accurate measure; but according to the best testimony that I have been able to obtain it is not a fact. Those bottles are short in a great majority of cases. Now, what are we going to do if we give the right to a manufacturer of bottles to put a seal on the bottles and then allow him to come into a locality and sell that bottle when it is undersize?

The CHAIRMAN. It is not a seal; it is an identification mark.

Mr. Goodwin. Well, it is supposed to be a seal; it covers the ground of sealing, because a local sealer has no right to interfere with that bottle. He may test it, but further than that he can not go. He can not destroy it; he can not confiscate it, or anything of that kind.

Mr. HASKELL. Mr. Chairman, as I understand it, that manufacturer is under a bond, and if he sends out a bottle that is not full capacity, why don't they prosecute him?

Mr. Goodwin. That is the idea exactly. Why don't they? They don't. That is the point I want to bring out emphatically. There have been no convictions under the law, so far as I know, and I heard the statement made emphatically by the local sealers that such was the case, but they could not do anything and did not do anything.

Mr. Connors. On the subject of tolerance I would like to give a little information. In the State of Massachusetts Mr. Palmer has recommended a bill which does away with tolerance altogether. If this conference goes on record as favoring a bill requiring tolerance on milk jars, I do not know what effect it will have in Massachusetts, and I would like to see that question debated before the conference takes final action on this bill.

The Chairman. It seems to me, Mr. Connors, that we must recognize tolerance in some way or other, and that when we do it means a certain thing. Tolerance as defined here is not objectionable—that is, it is not a mere statement of a tolerance of so much, but it says how it shall be determined, which makes it altogether a different question.

Mr. Connors. My point was to inform the conference of the state of affairs in Massachusetts. I was wondering what effect it would have on that legislation.

Mr. Maroney. Mr. Chairman, it is necessary to do something on this bottle question. It is a serious problem for the sealer of any city to seal these bottles. In a city of 150,000 inhabitants there would be 400,000 bottles (that is a conservative estimate), and you would need all the Standing Army of the United States to seal all the bottles in a State. Moreover, the life of a bottle is not more than three months on an average. But by adopting such a method as this, allowing the manufacturer, under bond, to take care of the sealing of bottles, any reliable bottle manufacturer will give a guarantee, under a bond of \$1,000 or \$5,000, that there will not be over 1 dram of tolerance in a bottle, and you will eliminate all this trouble for the sealers and at the same time thoroughly cover the ground. I can not see any objection to it. If the State of Massachusetts does not want tolerance, then let it remove the tolerance; but the bill itself, covering the bottle proposition, be it liquor or milk or anything else, in putting the glass manufacturer under bond, is a good thing, and it should be taken up by this conference and adopted. If there is anything objectionable on account of local conditions, remove it; but the bill, as a foundation, is worth considering and passing as a whole. We can take it home and dissect it afterwards.

The Secretary. Mr. Chairman, the idea that Mr. Palmer has is in accordance with the Maine law. The law in Maine and the law that Mr. Palmer has before the legislature provide that the quantity shall not be less than a quart, less than a pint, etc., and require the manufacturer to keep that standard. But the practice of all foreign countries is to allow a tolerance. Every country in the world, so far as I know, permits a reasonable tolerance in every kind of apparatus, both above and below; it tries to keep the thing correct. If it is required to have the quantity at least correct the tendency is to create a standard that is a little large. There is no question about that. Other countries have attempted to keep the standard correct and permit very small variations above and below.

Mr. Maroney. I move the adoption of this recommendation, Mr. Chairman.

Mr. Haskell. Just a moment. When the tolerance on milk bottles was adopted in the District of Columbia and in other sections of the country, bottles were manufactured by hand. Milk bottles to-day are manufactured by machinery, and there is no reason why an absolute quart or 2-quart bottle can not be manufactured, except that perhaps it might vary a dram. But to allow a large tolerance on milk bottles I do not think is at all necessary, because the process of manufacturing milk bottles has changed within a very few years.

The CHAIRMAN. I understand that this suggested amendment takes that into account, and that this is the tolerance that can be safely lived up to with these machine-made bottles.

Mr. Connors. Mr. Chairman, I would suggest that the tolerance be bracketed.

The CHAIRMAN. That is a very good suggestion.

Mr. Goodwin. Mr. Chairman, I believe that tolerance is the dangerous thing about this bill. My predecessor was a wise man when he opposed any legislation allowing tolerance in the State of Rhode Island. I am satisfied that he knew what he was doing and used good judgment and wisdom. I find, and I know for a fact, that these people who are allowed a chance to defraud the public by using a tolerance scale make their apparatus on the minimum side. They give the people the short end of it every time.

The Secretary. Mr. Chairman, I think I can save Mr. Goodwin a good deal of unnecessary trouble if I point out that this particular provision is different from any he has ever seen. It says that the average must be practically correct, the average of a certain number of bottles.

Mr. Goodwin. Well, I should have the average of the whole of them, at least the quantity that the parties buy. If one buys a quart of any commodity, he ought to get a quart; and if the merchant sees fit to give him any surplus, which he does not very often do, that is his lookout. I believe that it should be definitely stated what the bottle shall hold, and then you have the thing settled for good and all.

Mr. Haskell. Mr. Chairman, it is a fact that you can manufacture an absolutely perfect bottle as to measure with the machinery that is now used, but 4 drams (the tolerance prescribed for the quart) is about half of a tablespoonful.

The CHAIRMAN. I would like to get that in percentage. Do you consider the tolerance too great?

Mr. HASKELL. No, no. That is the same as it is in the District now.

The CHAIRMAN. You are in favor of tolerance, then?

Mr. Haskell. Yes.

Mr. Holbrook. Mr. Chairman, I would say for the information of the delegates that I have figured the percentage on the quart bottle, and it is five-tenths of 1 per cent.

The Chairman. That is what I wanted to get.

Mr. Henry. Mr. Chairman, I want to propose an amendment. In the last two lines, next to the last paragraph, it reads: "shall be deemed guilty of giving false or insufficient measure." I think that word, instead of "giving," should be "using," and I would propose that amendment.

The Chairman. That is simply an improvement in the phrase-

Mr. Henry. Yes.

Mr. Holbrook. I think that is a good suggestion.

The Chairman. Is there any objection to this amendment? If not, we will change that and ask for the vote upon the section as amended.

The question was taken and the section was adopted.

The Chairman. I want to call your attention to the effect of that. If this is enacted into law, as I hope it will be, the effect will be more far-reaching than you perhaps think. If it is possible to do that in the case of milk bottles, it is possible to do it in the case of weights and all other manufactured commodities.

Mr. Maroney thereupon read as follows:

It shall be unlawful to sell or offer to sell in the State any coal, charcoal, or coke in any other manner than by weight. No person, firm, or corporation shall deliver any coal, charcoal, or coke without each such delivery being accompanied by delivery ticket and a duplicate thereof, on each of which shall be in ink or other indelible substance, distinctly expressed in pounds, the gross weight of the load, the tare of the delivery vehicle, and the quantity or quantities of coal, charcoal, or coke contained in the cart, wagon, or other vehicle used in such deliveries, with the name of the purchaser thereof and the name of the dealer from whom purchased. One of these tickets shall be surrendered to the sealer of weights and measures, upon his demand, for his inspection, and this ticket or a weight slip, issued by the sealer when the sealer desires to retain the original, shall be delivered to the said purchaser of said coal, or his agent or representative, at the time of the delivery of the fuel, and the other ticket shall be retained by the seller of the fuel. When the buyer carries away the purchase, a delivery ticket, showing the actual number of pounds delivered over to the purchaser, must be given to the purchaser at the time the sale is made.

Mr. Maroney. Mr. Chairman, I recommend the adoption of this section, with the proviso that it be distinctly expressed in pounds avoirdupois.

Mr. Holbrook. Mr. Chairman, I think if it was distinctly specified in kilograms it would still be legal.

The CHAIRMAN. I think your idea is to avoid the long and short ton, is it not?

The Secretary. According to the United States law it is legal to use metric weights and measures, and that would be in conflict with it.

The CHAIRMAN. We might get into trouble.

The Secretary. So we tried to avoid that.

The CHAIRMAN. The important thing there is the selling of these commodities by weight.

Mr. MARONEY. Yes.

Mr. Connors. Mr. Chairman, I move that the word "coke" be stricken out. There has been a great deal of trouble in different parts of the country in regard to the sale of coke, and it is the custom to sell it by measure. There is a good deal of fraud in coke on ac-

count of wetting it down before selling it. This was done in Massachusetts, and coke is sold there now by measure—by Winchester bushel.

Mr. Maroney. Mr. Chairman, the same thing holds good in coal. Why not stretch it to coal? I also found a dealer in my town watering dried fruit with a sprinkling can and selling it by the pound.

Mr. Haskell. Mr. Chairman, you can take a ton of coke and put two barrels of water on it and you would not notice it. If you want to demonstrate it take a cart of it and try it.

The Secretary. I second Mr. Connor's motion that the word "coke" be stricken out.

The question was taken and the amendment adopted.

Mr. Henry. Mr. Chairman, I would like to make just one suggestion, and that is whether or not this section as it stands is constitutional. Should not there be a provision after the first sentence, "except by express contract providing otherwise"?

The Chairman. I am not enough of a lawyer to answer your question.

Mr. Maroney. Mr. Chairman, there is nothing in any law that will prevent parties from selling anything in bulk. Coal, wood, or anything can be sold in bulk by special agreement.

Mr. Henry. That is the point exactly. Here is the law, which says that it shall be unlawful to sell in any other way than as prescribed here. In other words, it brands as unlawful an express contract between two persons, which express contract can not be made unlawful.

Mr. Connors. Mr. Chairman, I think Mr. Henry's point is that the whole statute would be thrown out as unconstitutional if that clause is not in; and if that is so, that is a good point.

Mr. Maroney. I explained that situation yesterday, Mr. Chairman. It is covered thoroughly by the words "unless by special agreement."

Mr. Holbrook. Mr. Chairman, I would suggest that I think it is perfectly within the police power of the State to specify what kind of agreement it shall be. I would make it a written agreement, so that it would not be one man's word against another's.

Mr. Henry. Then I move to amend that section by adding to the first sentence the words "except by written agreement."

The motion was seconded.

The question was taken and the section adopted.

Mr. Maroney thereupon read as follows:

All bread baked and kept for the purpose of sale, offered or exposed for sale, or sold in the State, shall be made of good and wholesome flour or meal, or both, and shall be sold by weight. To each loaf of bread shall be attached a label or stamp, plainly showing its weight and the firm name of the manufacturer thereof, the size of stamp and type used to be specified by the State superintendent of weights and measures. It shall be unlawful for any person

to make for sale, sell, offer to sell, or procure to be sold, any bread other than such as shall be in accordance with the provisions of this section.

Mr. Holbrook. Mr. Chairman, I have one suggestion to make. I move that the words "shall be made of good and wholesome flour or meal, or both," be stricken out, on the ground that it is not strictly weights and measures.

The Chairman. It seemed to me that was getting a little out of our province.

The Secretary. I move the adoption of the section as amended.

The Chairman. If there is no objection, we will consider that amendment adopted. I think it is a very good suggestion.

The question now is as to the whole law. Motions will be in order, I think, to adopt this as a whole.

Mr. MARONEY. I move, sir, that the model bill as read to-day be adopted as a whole, with the recommendations attached.

The Secretary. I second the motion.

The question was taken and the bill was adopted.

At this point a recess was taken for luncheon.

FOURTH SESSION (AFTERNOON OF SATURDAY, FEBRUARY 18, 1911).

The conference reassembled at 2.20 p. m.

The Secretary. In regard to the report made this morning on the bill fixing the sizes of certain containers and so on, I have had copies of the bill made. I think practically everybody has a copy of it.

The object of this bill is to fix certain containers as standard and to fix the sizes of certain containers; but it permits the use of other containers provided the net capacity is marked on the outside. That seems, in the opinion of the committee, to be absolutely necessary. We realize that that legalizes all sorts of odd-shaped and odd-sized containers, but it fixes what has never been fixed before. If an attempt were made to enforce the use of a certain standard barrel, it would not succeed, because it has not been fixed by law. This bill goes farther than anything else at the present time, and does fix what the standard is; but it also permits these other containers, and it is claimed that the use of nothing but the standard will be insisted upon, and that eventually it will result in the standard being used and no other size container. I thought it was necessary to make that explanation in order that you might understand these provisions as they come up. [Reading:]

A BILL fixing the sizes of certain containers and requiring the net quantity of the contents to be marked on the outside of certain other containers.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That it shall be unlawful for any person within any Territory or the District of Columbia to manufacture, sell, offer or expose for sale containers for vegetables, produce, or fruit that are not of the capacity of one barrel, half-barrel, one-third barrel, or multiples of the barrel or submultiples of the bushel divisible by two: Provided, however, That fruits, vegetables and produce may be sold in other sized containers if the net capacity in terms of measure is plainly and conspicuously marked, branded, or otherwise indicated in the English language on the outside or top thereof, or is marked in accordance with the provisions of section 2: Provided further, That a barrel within the meaning of this act shall represent a quantity of 7,056 cubic inches, or a quantity equal to a barrel having the following dimensions: Head diameter,  $17\frac{1}{8}$  inches; length of stave,  $26\frac{1}{2}$  inches; circumference of bilge not less than 64 inches outside measurement; distance between heads not less than 26 inches; and to be known as a standard barrel: And provided further, That reasonable tolerances shall be established.

Mr. Connors. Mr. Chairman, I move that the first section be adopted as read.

The motion was seconded.

Mr. Wescott. Mr. Chairman, I do not mean to trespass on the time of the convention. I appreciate heartily the courtesy extended me yesterday. However, there is one matter of very great practical importance, bearing on the wording of the proposed statute here, to which I would like very much to call your attention, if it be the will of the convention.

The CHAIRMAN. We will be very glad to hear what you have to say, especially if it refers to the other side of this question.

The Secretary. I might state that Mr. We scott represents the shippers, and I think his opinion is very important in this matter. We are trying here to describe what the sizes of containers shall be that he is going to use, and I know he has given the matter a great deal of thought and I am sure we will be very glad indeed to hear from him.

Mr. Wescott. Mr. Chairman and gentlemen, the organization on whose behalf I am here is filling about 2,000,000 of these barrels annually for shipment into about 40 States of the Union. In going over the list of delegates yesterday I was struck by the fact that there was probably only one gentleman present to whose table we had not at some time contributed. The specific point to which I wanted to ask your attention, especially in view of the fact, as I take it, that this proposed statute will probably be taken as a model for State legislation, is the fact that your requirement is alternative; that the law can be met either by giving your barrel a capacity of 7,056 cubic inches or by making your barrel of the dimensions specified. Now, a barrel is not a regular geometrical figure, and the point I want to make is that a barrel of the dimensions specified might or might not hold 7,056 cubic inches. It is the unanimous verdict of the manufacturers of barrels that the shape of a barrel varies not only with the manner of manufacture but with the nature of the material. A more elastic wood will give you a rounder barrel, one of a more shapely figure. Of course, as you depart from the approach to a spherical shape in your barrel, as you lessen the amount of curvature of the stave, and as the shape of your barrel approaches that of two truncated cones, base to base, giving more nearly a straight line from the point of maximum bulge to the two ends of the barrel, you lessen the holding capacity of the barrel. It is obvious on a little reflection that you can not fix an absolute standard by prescribing the dimensions of your barrel; and I think, expressed in this alternative manner, your statute would work some injustice to sections that do not find it practicable to follow the specifications given here, aside from that element of confusion, the indeterminateness of the thing. In my own par-

ticular section we make a barrel of pine timber, and we can not make a barrel with a 28½-inch stave and a 17½-inch head having a bilge that will give an outside diameter of 64 inches. The material is not elastic enough, and it splits before you bend it that much; so that our section must necessarily depart from these dimensions. In competition with other sections, where the material used is oak, perhaps, and where these dimensions can be followed, that would put the South, the pine-timber section of the United States, at a disadvantage. I would like to recall in this connection the part of Secretary Nagel's address this morning, in which he referred to the extreme desirability of establishing uniformity of measure among competitors. You see very readily the bearing of that principle on this particular proposition. The southern producer, compelled by local conditions to depart from the exact dimensions specified here, would be put at a disadvantage by comparison with sections that could fellow these dimensions, and at the same time, by varying slightly the shape of their barrel, straightening the stave from the bulge to the two ends, make a barrel that would get the sanction (as a technical legal proposition) of any court, as in compliance with the second alternative here (that specifying the exact dimensions), but that would not hold 7,056 cubic inches.

I thank you, gentlemen.

Mr. Goodwin. Mr. Chairman, I would like to ask the gentleman a question. What would you wish to do—cut out the cubical contents?

Mr. Wescott. No, sir; by no means. Retain that provision and cut out the dimensions—make it plain and unambiguous.

Mr. Goodwin. So, that no matter what the construction was, it would hold that quantity?

Mr. Wescorr. We believe the shape to be a matter to be determined by local convenience.

Mr. Goodwin. I think that is a good suggestion.

Mr. Connors. Mr. Chairman, I would call attention to the fact that in the specified dimensions the bilge is given as not less than 64 inches outside measurement, while the thickness of the staves is not specified. That would allow manufacturers to use staves of greater thickness, giving a smaller number of cubic inches inside measurement. I think that point ought to be stated, if we are going to state the outside dimensions.

The Secretary. The bill is all right at the present time, because the capacity is fixed. But I think myself there is a good deal in what Mr. Wescott says, that one or the other of these ought to be approximate. You can not fix them both, because the barrel is not a definite geometrical figure. We know that there are three different forms allowed for by the internal revenue laws, and taking the formula that they use in computing the size of the barrel and

estimating whether it comes in one class or another, we can make the capacity of a barrel of these dimensions vary from 7,300 cubic inches down to 6,900.

Mr. Connors. Mr. Chairman, the bill here gives two options. It says that the barrel shall represent a quantity of 7,056 cubic inches or a quantity equal to a barrel having certain specified dimensions. It seems to me a man would have the option either of measurement in cubic inches or by the dimensions of the barrel, and I think the bilge measurement specified should be inside measurement.

The Chairman. It seems to me it was intended that the barrel should contain 7,056 cubic inches and that the other dimensions were intended as limits. That would be a practical solution and prevent extreme variations from the size to specify the number of cubic inches and specify the limits in these other dimensions.

Mr. Goodwin. Mr. Chairman, I can not see that the dimensions of the barrel would have any weight at all in this bill. As long as we have the cubical contents it gives anybody the right to make a barrel of any construction that holds that quantity.

The Secretary. Mr. Chairman, it is very important, I think, that these barrels should be of approximately the same size. Is not that true, Mr. Wescott? You would not want barrels that differed from one another in height by 4 or 5 inches?

Mr. Wescort. No; I should think not, sir. They should be exactly the same size.

The Chairman. I think we can get around that very nicely. I would like to ask Mr. We scott what is the most important dimension. What dimension would you have limited? The height? We could limit one of these dimensions, or two, but not three.

Mr. Wescott. We, as producers of potatoes, and also the manufacturers of barrels, have had that matter up for discussion for a long time in our section. This question of building a barrel of certain specified dimensions, to hold a certain definite capacity, has been found with us impossible of solution. We have never been able to hit upon any set of dimensions that the manufacturer could not in some way beat when it came to the question of the holding capacity of the barrel. The difference in amount of curvature of the stave comes in there.

The Chairman. That can be remedied by leaving one dimension flexible. You see, there are three dimensions concerned—the length of the stave, the head diameter, and the bilge. One of those left open would allow for the very thing of which you are speaking. If it is the length of stave that is important, why not specify that? Or you might specify two dimensions, but you can not specify three and at the same time have the number of cubic inches.

The Secretary. The whole thing can be corrected if the diameter of the head is all right. That is, in order to get this capacity you would have to have a bilge diameter of 21 inches, and if that is not too great, it seems to me we ought to specify that bilge diameter. But I understand Mr. We scott to say that some of the people can not meet that requirement; if you make the head diameter as low as  $17\frac{1}{2}$  inches it requires more of a curve than can be made.

Mr. Wescott. Yes; you can not give your stave any very great curvature.

The Secretary. That is not very much, though.

Mr. Wescott. The point I wanted to make is that there is another factor that enters into the determination of the capacity of your barrel besides the diameter of the head, length of the stave, diameter of the bilge, and distance between the heads which is not susceptible of measurement as a practical working proposition; and that is the nature of the curve represented by a longitudinal cross section of your stave. If you take a barrel approaching the form of two truncated cones set base to base, the stave being rather a broken than a gradually curved line, it may exactly meet your requirements here as to dimensions and yet it will hold very much less than a barrel made of elastic material in the same dimensions but forming a gradual curve. There is a difference between the holding capacity of a barrel the stave of which is curved gradually and freely from top to bottom and one in which the curvature is in the middle.

The CHAIRMAN. I think we all understand that, Mr. Wescott. The question is this: Would it not answer to specify, say, the height and the number of cubic inches? If you have a less elastic material all that would be necessary would be to make the diameter a little larger. You fix the whole thing when you fix the height and the number of cubic inches.

Mr. Connors. Mr. Chairman, assuming that we specify the number of cubic inches in the barrel, do not the dimensions of the barrel then become a matter of the personal convenience of the shipper, with which we could not rightly interfere?

The CHAIRMAN. Except that they wish to have uniform sizes in shipping, etc.

Mr. Connors. That would be, then, a matter of personal convenience?

The Chairman. No; there are cases, as in dry measures, in which proportions must be specified. You might make a dry measure very narrow and very slim and it would not be a good measure. It ought not to be allowed.

Mr. Connors. As I understood the gentleman from Virginia to say yesterday, it is impossible to stack potatoes or any commodity of that nature in a barrel, because they would, in shipping, come right down.

Then it seems to me it is a matter of convenience that we would not be really interested in.

The CHAIRMAN. Has anyone a suggestion to make as to a change? The Secretary. I move that we strike out the bilge measurement entirely. Make 7,056 cubic inches the capacity, and then specify the height. Do you not think that would fix the matter all right?

Mr. Wescorr. I think so, provided you make it absolutely certain in the statute that the barrel must hold a minimum of 7,056 cubic inches. But if the language of the statute be left in the present alternative form, giving the manufacturer an option between building his barrel of dimensions to suit himself and making it hold 7,056 cubic inches on the one hand, and complying with these specified dimensions on the other, then you open the door for the manufacturer to build a barrel which will comply technically and legally with the second alternative here, but which will still not hold 7,056 cubic inches; and thereby you put at a disadvantage the manufacturer or the producer who, because of peculiar local conditions (in our individual case the fact that the steamers that carry a considerable proportion of our goods can not take a 281-inch stave three times between decks), has no such opportunity to comply with a technical set of dimensions. If it be in order, I would suggest that this objection might be met (if it be the wish of the convention to include these dimensions in some shape) by adding a proviso, somewhat in this form, after the last of those specified dimensions: "Distance between heads not less than 26 inches: Provided, however, That no barrel of these specified dimensions shall be held to be in compliance with law if it does not have a holding capacity of 7,056 cubic inches."

The Secretary. I second that amendment, Mr. Chairman, if that is in order.

Mr. Thomas. Mr. Chairman, I would like to call attention to the fact that there are barrels made and used in which there is no bilge at all. The material is prepared in sheet form and bent together. It is a cylindrical barrel.

The Secretary. As I understand it, those gentlemen last night wanted to bar that barrel for some reason.

Mr. Thomas. Why?

The Secretary. I do not know why.

Mr. Thomas. It seems to me the important thing, Mr. Chairman, is the cubic contents of the barrel. For my part, I should be satisfied if we stopped with that. The forms of barrels, as Mr. Westcott has said, vary in different localities in our country, and methods of shipment vary. Sometimes the consideration of the possibility of shipment in proper condensed form is in large part the determining factor in the shape of the barrel. It seems to me we would go far

enough if we simply specified the net cubic contents, leaving the shape of the barrel to meet the various conditions obtaining in different parts of the country.

Mr. Goodwin. Mr. Chairman, I wish to offer a suggestion here to avoid this trouble. It says, "Provided further, That a barrel within the meaning of this act shall represent a quantity of 7,056 cubic inches." Then it goes on to say, "or a quantity equal to a barrel having the following dimensions." I should cut out after the words "cubic inches" all that line up to "following" and make it read, "and having as nearly as possible the following dimensions." It seems to me that would be an easy way to avoid that trouble and still have a barrel that would meet all requirements.

Mr. Holbrook. Mr. Chairman, Mr. Westcott's proposal should come first.

The Chairman. I think Mr. Westcott mentioned incidentally a thing that we ought to be a little careful about. It seemed to me at first that it would answer the requirements if we should specify simply the length; and so it would, so far as the discussion before us is concerned. But that question of how the containers are packed sometimes is a rather important one. Now, in this particular case, your barrels are always stacked on end in the steamers, are they not?

Mr. Westcott. Yes, sir.

The Chairman. I have noticed that on the bay steamers they are always packed in that way, and if this length is such that they could not get the three tiers between decks it would be very serious. The same is true in many other cases. The size of the package should be made to conform with the methods of shipment. Now, is this length of 26 inches too great?

The Secretary. Twenty-six inside, 28½ outside.

Mr. Westcott. It seemed to me, in glancing over the specifications, that that was rather scant. Our Virginia law which is rather inadequate and out of date, perhaps, provides for a stave of not less than 271 inches, 1 inch shorter than this, and provides at the same time that the distance from the bottom head to the top of the stave shall be not less than 26 inches. This objection I mentioned as to the manner of loading on the steamboats is, of course, a comparatively trivial matter. That is not one that ought to weigh very heavily against the question of national legislation. But there are other considerations that could not so easily be overcome. I think it would be impossible for the manufacturers of barrels in our section of the country to make a barrel which would comply with these dimensions out of the material which we use, because the bilge is greater by comparison with the other dimensions of the barrel than we could get with a pine stave. The wood has not sufficient elasticity to bend that much, and it would be necessary

for them to make rather a straighter barrel, and therefore to depart from these exact dimensions.

The Chairman. The whole thing is settled by fixing the limits on the height; there is no question about that. All you have to do is to say that the height shall not be more or less than a certain amount and the other matters will have to be adjusted accordingly. We find ourselves in the same condition that we did in regard to the electrical standards. The Chicago convention defined the value of the three things which entered into Ohm's law. We want to avoid that. Will someone make a definite amendment now, in view of what has been said?

Mr. Haskell. Mr. Chairman, I move that this portion of section 1 be amended to read as follows: "Provided further, That a barrel within the meaning of this act shall represent a quantity of not less than 7,056 cubic inches;" then cut out the next three lines—"the distance between heads to be not less than 26 inches, and to be known as a standard barrel."

The motion was seconded.

The Secretary. The only thing I see in favor of the other, Mr. Chairman, is that it is a sort of indication to the barrel maker as to what he shall do; and I rather favor Mr. Goodwin's amendment—"and having as nearly as possible the following dimensions"—because otherwise, if we do not look out, we will have all sorts of freak barrels that might have the required dimensions and yet not have the proper capacity.

The Chairman. In order to bring it before the convention, we have Mr. Haskell's motion and the second. Are there any remarks?

Mr. HASKELL. Mr. Chairman, what difference does it make whether a barrel has 2 inches bilge or whether it is a straight barrel; whether it is 19 inches across the head or 22 inches across the head, if it holds not less than the number of cubic inches here stated?

The Secretary. It makes a good deal of difference to the shippers. Mr. Haskell. That will accommodate this shipper. Now, then, if some other shipper wants to use a barrel of other dimensions, let him do so, but it must not hold less than 7,056 cubic inches. If a man has a style of barrel that he wants to advertise, or anything of that kind, it seems to me that the whole thing is covered by merely stating that the cubical contents shall be not less than 7,056 cubic inches, and that the height of the barrel shall not be less than 26 inches inside measurement.

The Secretary. That, of course, is a great deal better than not specifying any dimensions. But I met with this committee last night—got the views of these commission merchants. They seemed to think it was highly desirable that the dimensions of the barrel be standardized to a great extent. They want barrels of about

the same shape. It is not sufficient to say that a gallon shall contain 231 cubic inches. Every weights and measures man knows that that is not enough, especially in dry commodities. It is all right in liquid commodities, but the minute you deal with dry commodities you ought to specify not only the number of cubic inches but also the dimensions; because you can get vessels with the same cubical contents that have entirely different capacities, so far as measuring commodities like potatoes, etc., are concerned. Of course, I can conceive that this, too, might be carried to some ridiculous extreme; for instance, they might make a barrel quite squat, if you do not specify the height.

Mr. Goodwin. Mr. Chairman, I do not want to take up time unnecessarily, but I feel it my duty to say just another word. There are three different interests directly involved in this matter the shipper, the carrier, and the dealer. Now, I think that the interests of all should be considered. Therefore, I made that amendment to this section, so as to give as nearly a uniform barrel as possible, and it seems to me that it covers the whole thing. You have the cubical contents and you have a barrel that is as nearly as possible of a certain size. It does not confine a man to an inch or two, but keeps the size within a reasonable limit.

The CHAIRMAN. In order to get the sense of the meeting, let us put the motion.

Mr. Haskell. Mr. Chairman. if I may have just a moment, I would like to illustrate this condition. In the District of Columbia Congress passed a law defining the sizes of dry measures and providing that two measures could be attached, a peck and a halfpeck. The half-peck would be on the bottom of the peck, and naturally, owing to the shape of it, the top of the half-peck measure would be two inches less in diameter than the bottom. Consequently the hucksters (and they are pretty shrewd) could stack in those peck measures and half-peck measures in such a way as to reduce the quantity very materially. Now, the question came up whether we could inspect and pass a measure that was round and had straight sides, which, of course, was a better measure for the consumer; and after taking the advice of the corporation counsel we passed measures of that kind. We did so because we took the ground that the parties interested were better served with a straight round measure than they were with a conical shaped measure with the top narrower than the bottom.

The CHAIRMAN. Is it your idea that this should be a straight barrel?

Mr. HASKELL. Not particularly. In my judgment it does not make any particular difference whether it has 2 inches of bilge, 4 inches of bilge, or is practically straight if you get the cubical contents. Of course you might possibly go to extremes, but I do not see any reason to give that a thought, because the people interested are not going to send to market a barrel that is going to be objectionable. In other words, they will not send a barrel to their customers in the several markets that would be in any way objectionable.

The CHAIRMAN. Don't you think that either of the plans proposed would result in an unobjectionable barrel?

Mr. HASKELL. I think so.

The CHAIRMAN. And it is a question for us to decide which one to take.

Mr. Boyer. I have a substitute to offer by request, if you will listen to it. Leaving the provision as it is now, insert after the words "not less than 26 inches: *Provided*, That no barrel of the dimensions specified shall be held to comply with the law if it have a capacity of less than 7,056 cubic inches."

The CHAIRMAN. In other words, you have just reversed it?

Mr. Boyer. Yes.

The Chairman. Now, we have a choice of three plans. Is there a second to this amendment? [Cries of "Question!"]

The question before us is Mr. Haskell's amendment, which, as I understand it, specifies merely the cubical contents and the distance between the heads. That is one plan. If that is not thought best, vote it down.

The question was taken and the section was adopted as amended. The Secretary (reading):

Section 2. That when commodities are sold or offered for sale in containers of other sizes than those specified in section 1 or whose sizes are not otherwise provided by statute the net quantity of the contents of each container shall be plainly and conspicuously marked, branded, or otherwise indicated on the outside or top thereof in terms of weight, measure, or numerical count: *Provided*, *however*, That reasonable variations shall be permitted due to the unavoidable variations in packing or filling or changes in the weight or measure of the contents due to natural causes.

On motion of Mr. Connors the section was adopted.

The Secretary (reading):

Section 3. That all other commodities not in containers shall be sold by legalized weight, legalized measure, or numerical count: *Provided*, *however*, That vegetables may be sold by the head or bunch: *And provided*, That poultry may be sold otherwise than by weight.

The object of that is to provide, first, for purchase and sale by carload lots. There ought not to be anything in this act that will prohibit a man from buying by the carload. The latter part, of course, needs no explanation.

On motion of Mr. Goodwin, section 3 was adopted as read.

The Secretary (reading):

Section 4. That the introduction into any State or Territory or the District of Columbia, from any other State or Territory or the District of Columbia, or from any foreign country, or shipment to any foreign country, of any container which does not conform with the requirements of this act, is hereby prohibited; and any person who shall ship or deliver for shipment from any State or Territory or the District of Columbia to any other State or Territory or the District of Columbia, or to a foreign county, or who shall receive in any State or Territory or the District of Columbia from any other State or Territory or the District of Columbia, or foreign country, and having so received, shall deliver, in original unbroken container, for pay or otherwise, or offer to deliver to any other person any such container not fulfilling the requirements of this act, or any person who shall sell, or offer for sale, in the District of Columbia or the Territories of the United States any commodities in containers not of the proper size or not properly marked, or offer to export the same to any foreign country, shall be guilty of a misdemeanor, and for such offense be fined not exceeding two hundred dollars for the first offense, and upon conviction for each subsequent offense not exceeding three hundred dollars, or by imprisonment not exceeding one year, or both, in the discretion of the court: Provided, That no container shall be subject to the provisions of this act when intended for export to any foreign country and made or packed according to the specifications or directions of the foreign purchaser; but if commodities in such container shall be in fact sold or offered for sale for domestic use or consumption, then this provision shall not exempt said container from the operation of any of the other provisions of this act.

Mr. Connors. I move that the section be adopted.

The motion was seconded.

The CHAIRMAN. Are there any remarks?

Mr. Goodwin. Mr. Chairman, I do not know whether it is a dangerous thing for us to adopt the words "from any foreign country." We can not regulate the size of a container that some foreign country may land on our shores. It seems to me that ought to be stricken from this section. We have no control over that. If they send goods here in containers different from ours, I do not know why we should refuse to receive them.

The Chairman. When we ship goods to foreign countries we can comply with their regulations; we have to do so.

The Secretary. Mr. Chairman, that is a provision that is in the pure-food law. It was put there for the purpose of preventing the foreign manufacturer from shipping anything into this country that was adulterated. Now, whether it is applicable to this, or not, is a question raised in my mind.

The Charman. I know that in the discussion of these matters before various committees at the Capitol this question of branding goods to be sold in this country has always come up in respect to foreign countries, and everyone has agreed to the fact that goods intended for foreign countries must comply with the regulations

of the country to which they are shipped. It seems to me that is perfectly obvious.

Mr. Goodwin. Has this thing been submitted to any legislative body?

The Secretary. This provision that we are dealing with now has been. It is part of the pure-food law at the present time, but it applies, of course, to adulterations. Now, whether we have a right to say that we shall not receive from a foreign country anything that is not in the right-sized package, of course, might be a question. We undoubtedly have a right to say that they shall not sell us adulterated materials.

The CHAIRMAN. We have a perfect right to say whether it is wise to do it or not.

Mr. Goodwin. It looks to me as if it was radical legislation.

The Secretary. On the other hand, Mr. Chairman, these people concerned with this measure do a large business with Canada. Are we going to require our own dealers to give us full-sized barrels and permit the Canadians to send us short barrels?

Mr. HASKELL. Suppose we do? The man who bought the barrel could not sell it here unless it was a standard barrel.

The Secretary. No; but if we had such a law they would be compelled to adopt for export trade a standard barrel.

Mr. HASKELL. But, Mr. Fischer, if the Canadian shipper should send into this country a different sized barrel from the standard barrel, the party that he sold it to in this country, before he could dispose of the contents, would have to put them into a standard barrel.

The Secretary. I think, perhaps, that might be left out, and still he would be required to use a standard-sized barrel, and that eventually, of course, would result in the people doing business between this country and Canada having standard-sized barrels.

On motion of Mr. Goodwin, the word "foreign" was stricken from section 4 wherever it appeared, and the section adopted as amended.

The Secretary (reading):

SECTION 5. That any person who violates any of the provisions of this section shall be guilty of a misdemeanor, and for each offense shall, upon conviction thereof, be fined not to exceed two hundred dollars, or shall be sentenced to one year's imprisonment, or both, such fine and imprisonment, in the discretion of the court, and for each subsequent offense and conviction thereof, shall be fined not less than five hundred dollars or sentenced to one year's imprisonment, in the discretion of the court.

These penalties, also, were prescribed for violations of the pure food law, and whether or not they are excessive for this kind of a violation of law I do not know.

On motion of Mr. Johnson the section was adopted.

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The Secretary (reading):

Section 6. That the Secretary of the Treasury, the Secretary of Agriculture, and the Secretary of Commerce and Labor shall establish reasonable tolerances from time to time to allow for unavoidable variations in manufacturing and filling such containers, and for changes in the weight or measure of the contents due to natural causes; and also shall make uniform rules and regulations for carrying out the provisions of this act, including the collection and examination of containers put up or offered for sale in the District of Columbia or in any Territory of the United States, or which may be submitted for test by the chief weights and measures officer of any State, Territory, or the District of Columbia.

The Secretary. That section appears to be very much confused, and I must confess I do not see how we can straighten it out now. What it is intended to do is to give the Secretary of the Treasury, the Secretary of Agriculture, and the Secretary of Commerce and Labor authority to establish tolerances, etc.

Mr. Chairman. I move that that section be adopted subject to revision. I can not get that straightened out just now; but if we can pass a resolution so that the sense of it will be adopted we can put it in shape afterwards. That is all I had expected to do here to-day, so far as these last eight sections are concerned. All of these sections beyond the first three merely have to do with carrying out the act.

Mr. Connors. Mr. Chairman, I second the motion that the section be adopted subject to revision by the secretary.

The Charman. As I understand it, the whole object is to refer the question of tolerances to this committee composed of the Secretary of the Treasury, the Secretary of Agriculture, and the Secretary of Commerce and Labor.

The Secretary. That is right.

The motion was seconded and carried.

The Secretary. There is not one chance in a thousand, Mr. Goodwin, that we would ever get that straight in a discussion of this kind. [Cries of "Question!"]

The Chairman. A motion is before us to adopt this section, subject to revision, providing that it shall contain the principle that the fixing of tolerances shall be referred to the usual committee.

The question was taken and the section was adopted.

The Secretary (reading):

Section 7. That the examination of the size, net weight, measure, or numerical count of such containers shall be made by the Bureau of Standards of the Department of Commerce and Labor, or under the direction and supervision of such bureau, for the purpose of determining from such examination whether such container is of the proper dimensions and correctly marked; and if it shall appear from such examination that any of such containers are not of the proper dimensions or are inadequately or not correctly marked within the meaning of this act, the Secretary of Commerce and Labor shall cause notice thereof to be given to the person from whom such container was obtained. Any person so notified shall be given an opportunity to be heard, under such

rules and regulations as may be prescribed as aforesaid, and if it appears that any of the provisions of this act have been violated by such person, then the Secretary of Commerce and Labor shall at once certify the facts to the proper United States district attorney, with a copy of the results of the examination of such containers duly authenticated by the officer making such examination, under the oath of such officer. After judgment of the court notice shall be given by publication in such manner as may be prescribed by the rules and regulations aforesaid.

Mr. Holbrook. Mr. Chairman, I move the adoption of the section, subject to such corrections in phraseology as seem desirable.

The motion was seconded and the section was adopted.

The Secretary (reading):

Section 8. That it shall be the duty of each district attorney to whom the Sectetary of Commerce and Labor shall report any violations of this act, or to whom any sealer of weights and measures or officer of any State, Territory, or the District of Columbia shall present satisfactory evidence of any such violation, to cause appropriate proceedings to be commenced and prosecuted in the proper courts of the United States, without delay, for the enforcement of the penalties as in such case herein provided.

On motion of Mr. McIntyre, the section was adopted.

The Secretary (reading):

Section 9. That the term "container" as used in this act shall include any barrel, basket, box, bag, crate, or other container used in shipping vegetables, produce, or fruit.

On motion of Mr. Goodwin the section was adopted.

Mr. Connors. Would it not be a good idea to insert "carton"?

The Secretary. I cut that out purposely, because it is only intended to cover containers used in shipping vegetables, produce, or fruit. It is more of a barrel and a basket bill than anything else. Those are the two things most urgent at the present time—the establishment of a uniform barrel and uniform basket for shipping berries and commodities of that sort. [Reading:]

Section 10. That the term "Territory," as used in this act, shall include the insular possessions of the United States. The word "person," as used in this act, shall be construed to include both the plural and the singular, as the case demands, and shall include corporations, companies, societies, and associations. When construing and enforcing the provisions of this act, the act, omission, or failure of any officer, agent, or other person acting for or employed by any corporation, company, society, or association, within the scope of his employment or office, shall in every case be also deemed to be the act, omission, or failure of such corporation, company, society, or association, as well as that of the person.

On motion of Mr. Goodwin section 10 was adopted.

The Secretary (reading):

Section 11. That this act shall be in force and effect from and after the first day of ———.

I move that section 11 be adopted with the date left blank. The motion was seconded, and the section was adopted.

The Chairman. I presume a motion is in order now to adopt the bill as a whole.

Mr. Connors. I move, Mr. Chairman, that this bill be adopted as a whole.

The motion was seconded, and the bill was adopted.

The CHAIRMAN. This, so far as I know, finishes the regular order of business.

The Secretary. With the exception, Mr. Chairman, of the discussion of a city ordinance, and I move that that be dispensed with. I feel as though I had about enough myself; I do not know how the rest of you gentlemen feel about it.

Mr. Goodwin. I move that it be referred to the executive committee, to be taken up at the next meeting.

The motion was seconded.

The Chairman. It is moved and seconded that the matter be referred to the executive committee with instructions to present a model ordinance at the next meeting. Are there any remarks?

The question was taken, and the motion was carried.

The Chairman. Is there anything further to come before the convention?

Mr. McIntyre. Mr. Chairman, in view of the kindness of the bureau and the efforts made to foster this conference and assist it, I move that a vote of thanks be returned to the Bureau of Standards for its assistance and the kindness that it has shown toward the conference of State sealers of weights and measures.

Mr. Goodwin. I second the motion.

Mr. Haskell. Mr. Chairman, I wish to say but a very few words; but I do want to impress, if I can, upon this conference the importance of having the assistance of the Bureau of Standards. I speak of this because I personally know of the influence that they have with the committees of Congress, the close connection there is between the bureau and the Committee on Coinage, Weights, and Measures of Congress, and I am heartily in favor of this. I would like to go further and express it in more emphatic words than even the resolution that has been offered, for we who are here on the ground realize and know how much time it takes to go before a committee and accomplish any results, and the patience, the energy, and the activity displayed by our president and our secretary ought to be very highly appreciated by this conference.

Mr. Goodwin. Mr. Chairman and gentlemen, I wish to indorse the sentiment of my friend from the District of Columbia. I think the way we have been treated here is conducive to the best interests of the business in which we are engaged. It has been my pleasure to be here on two occasions, and I have certainly profited very much by the information received from the bureau and the representative sealers that I met. Our presiding officer, I am satisfied,

is very much interested in this work, and always ready to assist us in every possible way. He has offered, and the secretary of the executive committee has offered, a reasonable explanation of why we did not get our reports, etc., and I am satisfied with their explanations. I hope the present year will bring our reports earlier, but if it does not we will have to get along without them. I want to thank the president of this association for the kind treatment I have received at his hands and the information I have obtained here, and I hope and trust that every delegate here to-day will go home with a feeling that Dr. Stratton is his friend and an adviser who is always ready to assist him and encourage him in this sealing work.

The question was taken and the motion was carried.

Mr. McIntyre. Mr. Chairman, in view of the faithful and diligent effort of our stenographer, I move that the conference extend a vote of thanks to Mr. Caswell.

The motion was seconded and carried.

Mr. Janssen. Just a word with reference to the time of getting out the document. I have been accustomed to receiving Government reports, for instance, the reports from the Commissioner of Education, and usually we have been very well satisfied if we could get the report a year and a half, and sometimes two years, from the time the data were supposed to be gathered. Of late years we have been able to get them a little earlier; but it is certainly not possible, with all of the Government printing and all the demands, to get reports out in so short a time as some might expect. I think, therefore, that we should bear these conditions in mind and have patience in waiting for the report.

The Secretary. There is one question that I think should be decided in connection with this report. It seems to me proper that we expurgate from our record everything that is not pertinent, and I would like to receive instructions from the conference as to whether they want irrelevant remarks retained in the record. It seems to me that we might leave most of them out, but I would like to be instructed before doing so in the future.

Mr. Thomas. I asked Dr. Stratton at the luncheon hour that my remarks made this morning be omitted.

Mr. Goodwin. Mr. Chairman, I move that the secretary be instructed to cut out whatever he thinks is objectionable and should not be contained in the record.

The motion was seconded and carried.

The Chairman. In regard to this report, it did not occur to us that that of itself would be of any great value in the advancement of the work throughout the country, especially as this report last year was almost entirely in the nature of experiences. I can assure you that we are always ready to be criticized, although we like to have it

done in a friendly way; and if it is your wish, we will do all in our power to accelerate the publishing of that report.

Mr. Goodwin. Mr. Chairman, I would like to ask if it would be possible within, say three weeks, to get this thing in any form. There are some things that are now being acted on in my legislature pertaining to this business that was transacted here to-day, and I would like to have the proceedings before me so that I can talk on these matters.

The Chairman. I think that most of them are covered in the drafts of the bills which we have passed.

Mr. Goodwin. While I am on my feet, I wish to say that I have a few reports of the sealing laws in my State, and I would like to have the delegates that have no State laws regarding the matter look them over.

The Secretary. Mr. Chairman, I move that we adjourn.

The motion was seconded.

Mr. Haskell. Subject to the call of the President?

The Secretary. I think that matter has been referred to the executive committee, has it not?

The Chairman. Yes; it was referred to the executive committee. Before putting this motion I want to thank the members of the convention for the patience that they have displayed and the earnestness with which they have entered into these discussions. It is going to prove of very great assistance to us in advising people, and in considering ourselves these questions with which, perhaps, we do not come in as direct contact as you do. I have been very much gratified this afternoon at the progress we have made and the definite way in which the various points have been taken up and considered. I sincerely hope that at the next meeting we will not only have this sort of discussion; that is, discussion confined to definite points of value, but that we can follow up the suggestions made yesterday. I have from the very beginning hoped that we could take up in this meeting from time to time definite questions pertaining to apparatus, standards, practices, and so forth—technical questions in which we are all interested; and if I have anything to do with the program for the next year some of these subjects are going to be included. I hope that the executive committee will come with a definite program of papers; that this program will be sent out some time in advance, and that the members will come with prepared papers on definite subjects. It seems to me the sooner we get to that the better off we will be.

I thank you again, gentlemen, for your kindness, and I am sure the members of the bureau all join with me in expressing this sentiment.

The motion to adjourn was carried, and at 3.45 p. m. the conference adjourned.

## APPENDIX.

3

MODEL UNIFORM REGULATIONS FOR STATE LEGISLATION ON THE SUB-JECT OF WEIGHTS AND MEASURES, DRAFTED BY THE NATIONAL BU-REAU OF STANDARDS AND INDORSED BY THE SIXTH NATIONAL CON-FERENCE ON WEIGHTS AND MEASURES.<sup>1</sup>

Section 1. The weights and measures received from the United States under a resolution of Congress approved June 14, 1836, and such new weights and measures as shall be received from the United States as standard weights and measures in addition thereto or in renewal thereof, and such as shall be supplied by the State in conformity therewith and certified by the National Bureau of Standards shall be the State standards, by which all county and municipal standards of weights and measures shall be tried, proved, and sealed.

SEC. 3. The superintendent of weights and measures shall take charge of the standards adopted by this article as the standards of the State, and cause them to be kept in a fireproof building belonging to the State (or in a safe and suitable place in the office

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¹The aim of the conference is to have efficient laws governing weights and measures in every State and Territory, and, so far as is practicable, to have these laws uniform. It is not expected, however, that the laws shall be uniform in all minor details; the titles used, terms of office specified, bonds required, etc., in the model regulations are only suggestive, and where not in conformity with the general practices of a particular State or Territory should be changed.

of the superintendent), from which they shall not be removed except for repairs or for certification, and he shall take all other necessary precautions for their safe keeping. He shall maintain the State standards in good order and shall submit them at least once in 10 years to the National Bureau of Standards for certification. He shall at least once in two (five) years try and prove by the State standards all standard weights, measures, and other apparatus which may belong to any county or city, and shall seal such when found to be accurate by stamping on them the letter "-" and the last two figures of the year with seals which he shall have and keep for that purpose. He shall have and keep a general supervision of the weights, measures, and weighing and measuring devices offered for sale, sold, or in use in the State. He shall, upon the written request of any citizen, firm, corporation, or educational institution in the State, test or calibrate weights, measures, weighing or measuring devices, and instruments or apparatus used as standards in the State. He, or his deputy, or inspectors, by his direction, shall at least once annually test all scales, weights, and measures used in checking the receipts or disbursements of supplies in every institution for the maintenance of which moneys are appropriated by the legislature, and he shall report in writing his findings to the supervisory board and to the executive officer of the institution concerned, and, at the request of such board, or executive officer, the superintendent of weights and measures shall appoint in writing one or more employees then in the actual service of each institution who shall act as special deputies for the purpose of checking the receipts or disbursements of supplies. He shall keep a complete record of the standards, balances, and other apparatus belonging to the State and take a receipt for same from his successor in office. He shall annually, on the 1st day of —, make to the governor a report of the work done by his office. The State superintendent, or his deputy, or inspectors, at his direction, shall inspect all standards and apparatus used by the counties and cities at least once in two years, and shall keep a record of the same. He, or his deputy, or inspectors, at his direction, shall at least once in two years visit the various cities and counties of the State in order to inspect the work of the local sealers, and in the performance of such duties they may inspect the weights, measures, balances, or any other weighing or measuring appliances of any citizen, firm, or corporation, and shall have the same powers as the local sealer of weights and measures. The superintendent shall issue from time to time regulations for the guidance of county and city sealers, and the said regulations shall govern the procedure to be followed by the aforesaid officers in the discharge of their duties. The State superintendent of weights and measures shall forthwith, on his appointment, give a bond in the penal sum of \$5,000, with sureties, to be approved by the secretary of state [attorney general] for the faithful performance of the duties of his office and for the safety of the standards intrusted to his care and for the surrender thereof immediately to his successor in office or to the person appointed by the governor to receive them. The deputy superintendent of weights and measures and each inspector of weights and measures shall forthwith upon his appointment give a bond in the penal sum of \$1,000, with sureties, to be approved by the secretary of state [attorney general], for the faithful performance of the duties of his office and for the safety of any apparatus intrusted to his care.

SEC. 4. The board of county commissioners of each county and the common council of each city required to appoint a sealer under this act shall procure at the expense of the county or city, and shall keep at all times a complete set of weights and measures and other apparatus of such materials and construction as the State superintendent of weights and measures may direct. All such weights, measures, and other apparatus having been tried and accurately proven by the State superintendent shall be sealed and certified to by him as hereinbefore provided, and shall be then deposited with and preserved by the county or city sealer as public standards for each county or city.

Whenever the board of county commissioners of a county or the common council of such city shall neglect for six months so to do, the county auditor of the county, or the city clerk [comptroller] of said city, on notification and request by the superintendent of weights and measures, shall provide such standards and cause the same to be tried, sealed, and deposited at the expense of the county or city.

Sec. 5. There shall be a county sealer of weights and measures in each county, who shall be appointed by the board of county commissioners for a term of five years. He shall be paid a salary determined by such board, said salary not to be less than \$1,000 a year, and no fee shall be charged by him or by the county for the inspection, testing, or sealing of weights, measures, or weighing or measuring devices. When not otherwise provided by law the county sealer shall have the power within his county to inspect, test, try, and ascertain if they are correct all weights, scales, beams, measures of every kind, instruments or mechanical devices for measuring, and tools, appliances, or accessories connected with any and all such instruments or measures kept, offered, or exposed for sale, sold, or used or employed within the county by any proprietor, agent, lessee, or employee in proving the size, quantity, extent, area, or measurements of quantities, things, produce, articles for distribution or consumption pur-

chased or offered or submitted by such person or persons for sale, hire, or award; and he shall have the power to and shall from time to time weigh or measure packages or amounts of commodities of whatsoever kind kept for the purpose of sale, offered for sale, or sold or in the process of delivery, in order to determine whether the same contain the amounts represented, and whether they be offered for sale or sold in a manner in accordance with law. He shall at least twice each year and as much oftener as he may deem necessary see that the weights, measures, and all apparatus used in the county are correct. He may for the purpose above mentioned, and in the general performance of his official duties, enter and go into or upon, and without formal warrant, any stand, place, building, or premises, or stop any vendor, peddler, junk dealer, coal wagon, ice wagon, delivery wagon, or any dealer whatsoever, and require him, if necessary, to proceed to some place which the sealer may specify, for the purpose of making the proper tests. Whenever the county sealer finds a violation of the statutes relating to weights and measures, he shall cause the violater to be prosecuted. Whenever the sealer compares weights, measures, or weighing or measuring instruments and finds that they correspond or causes them to correspond with the standards in his possession, he shall seal or mark such weights, measures, or weighing or measuring instruments with appropriate devices to be approved by the State superintendent of weights and measures. He shall condemn and seize and may destroy incorrect weights, measures, or weighing or measuring instruments which, in his best judgment, are not susceptible of satisfactory repair; but such as are incorrect and yet may be repaired, he shall mark or tag as "Condemned for repairs" in a manner prescribed by the State superintendent of weights and measures. The owners or users of any weights, measures, or weighing or measuring instruments of which such disposition is made, shall have the same repaired or corrected within 10 days, and they may neither use nor dispose of the same in any way, but shall hold the same at the disposal of the sealer. Any apparatus which has been "condemned for repairs," and has not been repaired as required above, shall be confiscated by the sealer.

Provided, however, That nothing in the above shall be construed to prevent two or more counties from combining the whole or any part of their districts, as may be agreed upon by the boards of county commissioners, with one set of standards and one sealer, subject to the written approval of the State superintendent of weights and measures. A county sealer appointed in pursuance of an agreement for such combination shall, subject to the terms of his appointment, have the same authority, jurisdiction, and duties as if he had been appointed by each of the authorities who are parties to the agreement.

SEC. 6. There shall be a city sealer of weights and measures in cities of not less than 25,000 population, according to the latest official State or United States census, to be appointed by the mayor from a list to be furnished by the civil service board and under the rules of such board where such board exists; otherwise he shall be appointed by the mayor, by and with the advice and consent of the common council. He shall perform in said city the duties and have like powers as the county sealer in the county. In those cities in which no sealer is required by the above the county sealer of the county shall perform in said cities the duties and have like powers as in the counties.

Provided, however, That nothing in the above shall be construed to prevent any county and the city situated therein from combining the whole or any part of their districts, as may be agreed upon, with one sealer, subject to the written approval of the State superintendent of weights and measures. A sealer appointed in pursuance of any agreement for such combination shall, subject to the terms of his appointment, have the same authority, jurisdiction, and duties as if he had been appointed by each of the authorities who are parties to the agreement.

Sec. 7. Any person who, by himself or by his servant or agent, or as the servant or agent of another, shall offer or expose for sale, sell, use in the buying or selling of any commodity or thing, or for hire or award, or retain in his possession a false weight or measure or weighing or measuring device, or any weight or measure or weighing or measuring device which has not been sealed by the sealer of weights and measures within one year; or shall dispose of any condemned weight, measure, or weighing or measuring device contrary to law, or remove any tag placed thereon by a sealer of weights and measures; or any person who, by himself or by his servant or agent, or as the servant or agent of another, shall sell or offer or expose for sale less than the quantity he represents, or sell or offer or expose for sale any such commodity in a manner contrary to law; (or any person who, by himself or by his servant or agent. or as the servant or agent of another, shall sell or offer for sale, use, or have

in his possession for the purpose of selling or using any device or instrument to be used to or calculated to falsify any weight or measure), shall be guilty of a misdemeanor, and shall be punished by a fine of not less than \$20 or more than \$200, or by imprisonment for not more than three months, or by both such fine and imprisonment, upon a first conviction; but upon a second or subsequent conviction he shall be punished by a fine of not less than \$50 or more than \$500, or by imprisonment in the county jail for not more than one year, or by both such fine and imprisonment.

SEC. 8. The superintendent of weights and measures, his deputy and inspectors, and the county and city sealers of weights and measures and their deputies, are hereby made special policemen, and are authorized and empowered to arrest, without formal warrant, any violator of the statutes in relation to weights and measures, and to seize for use as evidence, and without formal warrant, any false or unsealed weight, measure, or weighing or measuring device or package or amount of commodity found to be used, retained, or offered or exposed for sale or sold in violation of law.

SEC. 9. Any person who shall hinder or obstruct in any way the superintendent of weights and measures, his deputy, or inspectors, or any county or city sealer or his deputies, in the performance of his official duties shall be guilty of a misdemeanor, and shall be punished upon conviction thereof in any court of competent jurisdiction by a fine of not less than \$20 or more than \$200, or by imprisonment in the county jail for not more than three months, or by both such fine and imprisonment.

SEC. 10. Any person who shall impersonate in any way the superintendent of weights and measures, his deputy, or inspectors, or any county or city sealer, by use of his seal or counterfeit of his seal, or otherwise, shall be guilty of a misdemeanor, and shall be punished by a fine of not less than \$100 nor more than \$500, or by imprisonment for not more than one year, or by both such fine and imprisonment.

SEC. 11. Bottles used for the sale of milk and cream shall be of the capacity of half gallon, 3 pints, 1 quart, 1 pint, half pint, and 1 gill, filled full to the bottom of the lip. The following variations on individual bottles or jars may be allowed, but the average content of not less than 25 bottles selected at random from at least four times the number tested must not be in error by more than one-quarter of the tolerances: Six drams above and 6 drams below on the half gallon; 5 drams above and 5 drams below on the 3 pint; 4 drams above and 4 drams below on the quart; 3 drams above and 3 drams below on the pint; 2 drams above and 2 drams below on the half pint; and 2 drams above and 2 drams below on the gill. Bottles or jars used for the sale of milk shall have clearly blown or otherwise permanently marked in the side of the bottle, the capacity of the bottle, and the word "Sealed"; and in the side or bottom of the bottle the

name, initials, or trade-mark of the manufacturer and a designating number, which designating number shall be different for each manufacturer and may be used in identifying the bottles. The designating number shall be furnished by the State superintendent of weights and measures upon application by the manufacturer, and upon the filing by the manufacturer of a bond in the sum of \$1,000, with sureties to be approved by the attorney general [secretary of state], conditioned upon their conformance with the requirements of this section. A record of the bonds furnished, the designating numbers, and to whom furnished shall be kept in the office of the superintendent of weights and measures.

Any manufacturer who sells milk and cream bottles to be used in this State that do not comply as to size and markings with the provisions of this section shall suffer a penalty of \$500, to be recovered by the attorney general in an action against the offender's bondsmen to be brought in the name of the people of the State. Any dealer who uses, for the purpose of selling milk or cream, jars or bottles purchased after this law takes effect that do not comply with the requirements of this section as to markings and capacity shall be deemed guilty of using a false or insufficient measure.

Sealers of weights and measures are not required to seal bottles or jars for milk or cream marked as in this section provided, but they have the power and shall from time to time make tests on individual bottles used by the various firms in the territory over which they have jurisdiction in order to ascertain whether the above provisions are being complied with, and they shall report violations found immediately to the State superintendent of weights and measures.

Sec. 12. It shall be unlawful to sell or offer to sell in the State any coal or charcoal in any other manner than by weight, except by written agreement to the contrary. No person, firm, or corporation shall deliver any coal or charcoal without each such delivery being accompanied by delivery ticket and a duplicate thereof, on each of which shall be in ink or other indelible substance, distinctly expressed in pounds, the gross weight of the load, the tare of the delivery vehicle, and the quantity or quantities of coal or charcoal contained in the cart, wagon, or other vehicle used in such deliveries, with the name of the purchaser thereof, and the name of the dealer from whom purchased. One of these tickets shall be surrendered to the sealer of weights and measures upon his demand for his inspection, and this ticket or a weight slip issued by the sealer when the sealer desires to retain the original shall be delivered to the said purchaser of said coal or charcoal or his agent or representative at the time of the delivery of the fuel; and the other ticket shall be retained by the seller of the fuel. When the buyer carries away the purchase, a delivery ticket showing the actual number of pounds delivered over to the purchaser must be given to the purchaser at the time the sale is made.

SEC. 13. All bread baked and kept for the purpose of sale, offered or exposed for sale, or sold in the State, shall be sold by weight. To each loaf of bread shall be attached a label or stamp plainly showing its weight and the firm name of the manufacturer thereof, the size of stamp and type used to be specified by the State superintendent of weights and measures. It shall be unlawful for any person to make for sale, sell, offer to sell, or procure to be sold any bread other than such as shall be in accordance with the provisions of this section.

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