

PROCEEDINGS  
OF THE  
NATIONAL ASSOCIATION OF OFFICIALS  
OF  
BUREAUS OF LABOR STATISTICS  
IN THE  
UNITED STATES.  
TWELFTH ANNUAL CONVENTION.

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HELD AT  
Albany, N. Y., June 23-25, 1896.

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HARTFORD, CONN.  
1896.



NORWICH, CONN. :  
THE BULLETIN COMPANY,  
1896.



## OFFICERS FOR 1896-97.

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### *President :*

CARROLL D. WRIGHT, Washington, D. C.

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### *First Vice President :*

HORACE G. WADLIN, Boston, Mass.

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### *Second Vice President :*

CHAS. H. MYERS, Baltimore, Md.

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### *Secretary-Treasurer :*

SAM'L B. HORNE, Hartford, Conn.

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### *Executive Committee :*

F. P. CLUTE, Chairman,	Nashville, Tenn.
CARROLL D. WRIGHT,	Washington, D. C.
SAM'L B. HORNE,	Hartford, Conn.
CHARLES H. MORSE,	Lansing, Mich.
JAMES M. CLARK,	Harrisburg, Pa.

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### *Official Stenographer :*

SAMUEL C. DUNHAM, Washington, D. C.

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Place of Meeting for the Thirteenth Annual Convention :

Nashville, Tenn.



## CHRONOLOGY OF ASSOCIATION.

Year.	Convention Held at	Month.	OFFICERS—NAMES OF				Number of Bureaus Represented
			President.	First Vice President.	Second Vice President.	Secretary-Treasurer.	
1883	Columbus, Ohio.	September	H. A. Newman.			Henry Laskey.	10
1884	St. Louis, Mo.	June.	H. A. Newman.			Henry Laskey.	13
1885	Boston, Mass.	June.	Carroll D. Wright.	James Bishop.		John S. Lord.	14
1886	Trenton, N. J.	June.	Carroll D. Wright.	James Bishop.		E. R. Hutchins.	14
1887	Madison, Wis.	June.	Carroll D. Wright.	Frank A. Flower.		E. R. Hutchins.	13
1888	Indianapolis, Ind.	May	Carroll D. Wright.*	Frank A. Flower.		E. R. Hutchins.	17
1889	Hartford, Conn.	June.	Carroll D. Wright.	Samuel M. Hotchkiss.			
1890	Des Moines, Iowa.						
1891	Philadelphia, Pa.	May	Carroll D. Wright.	Samuel M. Hotchkiss.	Willard C. Hall.	Frank H. Betton.	20
1892	Denver, Colo.	May	Charles F. Peck.	Lester Bodine.	Samuel W. Matthews.	Frank H. Betton.	16
1893	Albany, N. Y.†						
1893	Chicago, Ill.†	October.					8
1894	Washington, D. C.	May	Carroll D. Wright.	B. R. Lacy.	George W. Waltz.	L. G. Powers.	17
1895	Minneapolis, Minn.	September.	Carroll D. Wright.	B. R. Lacy.	Lee Meriwether.	L. G. Powers.	12
1896	Albany, N. Y.	June.	Carroll D. Wright.	Horace G. Wadlin.	Chas. H. Myers.	Sam'l B. Horne	11

\* Frank A. Flower presided; Mr. Wright absent. † No meeting. ‡ An informal conference; Samuel W. Matthews presided.

## CHRONOLOGY OF BUREAUS.

STATE.	When Organized.	Chief Officers.	YRS. OF SERVICE.	
			Date.	No.
United States.....	1884	Carroll D. Wright.....	1885	12
Arkansas.....	1889	M. F. Locke.....	1889-1893	4
		W. G. Vincenheller.....	1893	2
California.....	1883	John S. Enos.....	1883-1887	4
		John J. Tobin.....	1887-1891	4
		George W. Waltz.....	1891-1895	4
		E. L. Fitzgerald.....	1895	2
Colorado.....	1887	C. J. Driscoll.....	1887-1889	2
		John W. Lockin.....	1889-1891	2
		Lester Bodine.....	1891-1893	2
		J. W. Brentlinger.....	1893-1895	2
		W. H. Klett.....	1895	2
Connecticut.....	1873	James F. Babcock.....	1873-1874	1
		Samuel J. Starr.....	1874-1875	1
		Arthur T. Hadley.....	1875-1887	2
		Samuel M. Hotchkiss.....	1887-1893	6
		Robert J. Vance.....	1893-1895	2
		S. B. Horne.....	1895	2
Illinois.....	1879	F. H. B. McDowell.....	1879-1881	2
		John S. Lord.....	1881-1893	12
		George A. Schilling.....	1893	4
Indiana.....	1879	John Collett.....	1879-1881	2
		John B. Connor.....	1881-1883	2
		William A. Peele, Jr.....	1883-1895	12
		Simeon J. Thompson.....	1895	2
Iowa.....	1884	E. R. Hutchins.....	1884-1890	6
		J. R. Sovereign.....	1890-1894	4
		W. E. O'Brien.....	1894	3
Kansas.....	1885	Frank H. Betton.....	1885-1893	8
		J. F. Todd.....	1893-1895	2
		Wm. G. Bird.....	1895	2
Kentucky.....	1876	C. E. Bowman.....	.....	..
		C. Y. Wilson.....	.....	..
		Nicholas McDowell.....	1892	4
		Lucas Moore.....	1896	1
Maine.....	1887	Samuel W. Matthews.....	1887	10
Maryland.....	1884	Thomas C. Weeks.....	1884-1892	8
		Allen B. Howard, Jr.....	1892-1896	4
		Charles H. Myers.....	1896	1
Massachusetts.....	1869	Henry K. Oliver.....	1869-1873	4
		Carroll D. Wright.....	1873-1888	15
		Horace G. Waldin.....	1888	9
Michigan.....	1883	John W. McGrath.....	1883-1885	2
		C. V. R. Pond.....	1885-1887	2
		A. H. Heath.....	1887-1891	4
		Henry A. Robinson.....	1891-1893	2
		Charles H. Morse.....	1893	3
Minnesota.....	1887	John Lamb.....	1887-1891	4
		J. P. McGaughey.....	1891	..
		L. G. Powers.....	1891	6
Missouri.....	1879	W. H. Hilkene.....	1880-1882	2
		H. J. Spaunhorst.....	1882-1883	1
		H. A. Newman.....	1883-1885	2
		Oscar Kochtitzky.....	1885-1889	4
		Lee Meriwether.....	1889-1891	2
		Willard C. Hall.....	1891-1893	2
		Henry Blackmore.....	1893-1895	2
		Lee Meriwether.....	1895	2
Montana.....	1893	James H. Mills.....	1893	4
Nebraska.....	1887	John Jenkins.....	1887-1890	3
		Philip Andres.....	1891-1893	2
		J. B. Erion.....	1893-1895	2
		J. H. Powers.....	1895	2
New Jersey.....	1878	James Bishop.....	1878-1893	15
		Charles H. Simmerman.....	1893	4
New Hampshire.....	1893	John W. Bourlet.....	1893-1896	3
		Julian F. Trash.....	1896	..
New Mexico.....	1891	Max Frost.....	1891	5
New York.....	1883	Charles F. Peck.....	1883-1893	10
		Thomas J. Dowling.....	1893-1896	3
		John T. McDonough.....	1896	1

## CHRONOLOGY OF BUREAUS—Continued.

STATE.	When Or- ganized.	Chief Officers.	YRS. OF SERVICE.	
			Date.	No.
North Carolina.....	1887	W. N. Jones.....	1887-1889	2
		John C. Scarborough.....	1889-1893	4
North Dakota.....	1889	B. R. Lacy.....	1893	3
		H. T. Helgesen.....	1889-1893	4
		Nelson Williams.....	1893-1895	2
Ohio.....	1877	A. H. Laughlin.....	1895	2
		Harry J. Walls.....	1877-1881	4
		Henry Luskey.....	1881-1885	4
		L. McHugh.....	1885-1887	2
		A. D. Fassett.....	1887-1890	3
		John McBride.....	1890-1892	2
		W. T. Lewis.....	1892-1896	4
Pennsylvania.....	1872	William Buehrwein.....	1896	1
		Thomas J. Bigham.....	1872-1875	3
		W. H. Grier.....	1875-1879	4
		M. S. Humphreys.....	1879-1883	4
		Joel B. McCamant.....	1883-1887	4
		Albert S. Bolles.....	1887-1895	8
Rhode Island.....	1887	James M. Clark.....	1895	2
		Josiah B. Bowdich.....	1887-1889	2
		Almon K. Goodwin.....	1889-1893	4
South Dakota.....	1890	Henry E. Tiepke.....	1893	3
		Frank Wilder.....	1890-1891	2
		Robert A. Smith.....	1891-1895	4
		Walter McKay.....	1893-1895	2
		S. A. Wheeler.....	1895	2
Tennessee.....	1891	George W. Ford.....	1891-1893	2
		John E. Lloyd.....	1893-1895	2
		F. P. Clute.....	1895-1896	1
Texas.....	1876	A. H. Wood.....	1896	1
		V. O. King.....	1879-1881	2
		A. W. Spreight.....	1881-1883	2
		H. P. Brewster.....	1883-1884	2
		H. P. Bee.....	1884-1887	2
		L. L. Foster.....	1887-1891	4
		J. E. Hollingsworth.....	1891-1895	4
Utah.....	1890	A. J. Rose.....	1895	2
Wisconsin.....	1883	Joseph P. Bachc.....	1890	7
		Frank A. Flower.....	1883-1889	6
		H. M. Stark.....	1889-1891	2
		J. Dobbs.....	1891-1895	4
West Virginia.....	1889	Halford Erickson.....	1895	2
		Edward Robinson.....	1889-1893	4
		John M. Sydenstricker.....	1893	4

## NOTES AND EXPLANATIONS OF CHRONOLOGY OF BUREAUS.

The act creating the United States Bureau was passed in 1884, but no officers were appointed before 1885.

When the constitution for the State of Idaho was framed, it contained a clause providing for a Commissioner of Immigration, Labor and Statistics. Under the provisions of the constitution Mr. J. M. Matthews was appointed Commissioner in 1890. The legislature has, however, never made appropriation for the pay of the Commissioner, nor enacted any legislation to make the provision of the constitution operative. Hence, nothing was done by Mr. Matthews during his term of office, and no successor has been appointed.

In Indiana, South Dakota, and Kentucky, the office of Commissioner

of Labor is elective. The South Dakota office was abolished March 12th, 1895, to take effect January 1st, 1896.

In Illinois the Bureau of Labor Statistics consists of three Commissioners appointed by the Governor. These Commissioners meet and select a Secretary, and determine the line of investigation to be carried out by the department. The Secretary is, however, the main executive officer of the department, as the Commissioners meet but seldom and exercise only a power of selection in the choice of subordinates and the lines of investigation.

In Minnesota, at the beginning of 1891, Mr. McGaughey was appointed Commissioner, but resigned at the expiration of three months, and Mr. Powers was then appointed to fill out the unexpired term.

The Kentucky Bureau, created in 1876 as a Bureau of Agriculture, Horticulture, and Statistics, was made a Bureau of Agriculture, Labor, and Statistics in April, 1892.

In Nebraska, Governor Boyd, who was elected at the general election in 1890, appointed Philip Andres. A contest was instituted in the courts as to Boyd's eligibility, and he was unseated, the former Governor, Thayer, assuming the office pending a final settlement. From this time until August, 1891, the Chief Clerk, H. F. Downs, acted as Commissioner, when Luther P. Ludden received the appointment from Governor Thayer. When the gubernatorial matter was finally settled, and Governor Boyd declared eligible, he again, in March, 1892, appointed Mr. Andres.

The Connecticut Bureau was created by law July 12, 1873. Later, in 1875, it was abolished, and then re-established in 1885. Two reports were issued under the law of 1873.

Texas, by act of legislature, approved Aug. 21, 1876, created a Department of Insurance, Statistics, and History. The first Commissioner was confirmed Jan. 23, 1879. The duties of the bureau were enlarged April 1, 1887, and the name changed to Department of Agriculture, Insurance, Statistics, and History.

There is no uniformity in the work of the various bureaus above catalogued. The work of the several bureaus is determined largely by the industries of the state in which they are located. Over half the bureaus confine their labors to what has technically come to be known as labor statistics. Others, as Indiana and Montana, devote a portion of all reports to general statistics of the states, including agriculture, and Arkansas, Kentucky, New Mexico, North Dakota, Utah, and Texas devote the greater portion of their efforts to gathering and disseminating information relating to agriculture and but little to general labor.

RULES  
OF THE  
NATIONAL ASSOCIATION OF OFFICIALS  
OF  
BUREAUS OF LABOR.

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ADOPTED MAY 24, 1892, AT DENVER, COLORADO.

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1. This organization shall be known henceforth as the National Association of Officials of Bureaus of Labor Statistics.

2. Its objects are to meet annually for the discussion of business pertaining to the association—for the discussion of methods of work, current and otherwise, pertaining to Bureaus of Labor or Industrial Statistics and kindred departments with which its members are connected in their respective states; also, to foster the ties of friendship, interchange ideas, and in various ways seek to promote the welfare of these Bureaus of Statistics; to present subjects for investigation and to transact all such business as is deemed consistent with the duties of statisticians.

3. The active members of this association shall consist of Commissioners and Chiefs of State and National Bureaus of Labor and Industrial Statistics, their deputies and chief clerks. All ex-commissioners and ex-deputies of such bureaus shall also be ex-officio members of the association, entitled to all rights except election to office; and all officers of the association shall be entitled to serve out the full term of their election.

4. The officers of this association shall consist of a President, First Vice President, Second Vice President, Secretary-Treasurer, and an Executive Committee, who shall serve for the term of one year from the date of their election, or until their successors are elected.

5. The officers shall be elected at each convention annually, by ballot, and those receiving a majority of votes of the total number cast shall be declared elected to the positions for which they were nominated. All officers shall serve for the term of one year from the time of their election, or until their successors are elected, and shall assume their respective duties immediately after being thus elected.

6. The Executive Committee must, by either session or correspondence, agree upon a date for convention sixty days previous to the date

selected, and immediately, within ten days after such agreement, issue the official call for the convention, which must be signed by all members of the committee and approved by the signatures of the President and Secretary.

7. The Executive Committee shall consist of five members, to consist of a chairman, who shall be the member residing in the state wherein the next convention is to be held, two members to be selected by ballot, and the President and Secretary-Treasurer of the association. It shall have charge of all preliminary arrangements pertaining to each convention that occurs during the term of said committee.

8. The cost of membership in this association will be five dollars per year for each state represented and as much more as is necessary to meet the maintenance of the association; provided, that the maximum cost of said respective membership does not exceed the sum of ten dollars per year.

9. Any state in arrears for a period exceeding one year will be suspended from membership until such time as all arrears are paid.

10. The conventions of this association shall be held annually at a place chosen by ballot at the immediately preceding convention. The annual conventions of this association will convene in the month of May or June, at a date agreed upon by a majority vote of the Executive Committee. In the event that neither May nor June proves practicable, some other month, to be selected by a majority vote of all members—sent to the chairman of the Executive Committee—shall be named. No convention shall convene, however, earlier than May or later than September in each year.

11. The place of meeting selected by the convention cannot be changed except by unanimous consent of all members of the Executive Committee, including the acquiescence of the resident member in the state wherein said convention was to have been held.

12. A standing committee of three, composed of the President, First Vice President, and Secretary of the convention, is hereby created, whose duty it shall be to select such question or questions as they may deem, in their judgment, of general interest, to be taken up for investigation by the Bureaus of Statistics.

13. The conventions of this association must extend through at least two full days, and shall not exceed five days.

14. The duties of the President shall be to preside over the deliberations of the association and to preserve order, and transact such business as may of right appertain to his office. The First Vice President shall perform all duties of the President in event of the absence or resignation of the President. The Second Vice President shall perform the duties of the President in event of the absence or resignation of the President and First Vice President.

15. The proceedings of each session of the convention shall be printed under the direction of the Secretary-Treasurer and published in pamphlet form; each bureau to be supplied with copies at cost. The Secretary shall also keep a correct record of all proceedings of the convention, transact correspondence incidental to his duties, and deliver to his successor all books, papers, moneys, etc., that are property of the association. He shall also be custodian of all moneys of the association.

16. All rules inconsistent with these are hereby repealed.



## PROCEEDINGS.

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The twelfth annual convention of the National Association of Officials of Bureaus of Labor Statistics met in the Senate Chamber of the State Capitol at Albany, N. Y., June 23, 1896, at 10.30 o'clock A. M., President Carroll D. Wright in the chair. In calling the convention to order the President spoke as follows :

Fellow Commissioners : In calling you to order for our twelfth annual convention, it occurs to me that some one may ask, What is there for such offices as those we represent to do? The question is very often asked me, personally, whether or not the state and federal offices devoted to the collection of industrial statistics are not about through with their work. The only answer to such a question is, that when all the means of education, all the varied instrumentalities for the collection and dissemination of knowledge, all the functions of government under those clauses of our various constitutions which look to the welfare of the people.—when all these things have ended their work, then the statistician can lay down his commission and consider that there is no further use for knowledge in the world. It is often said, too, that the statistician, as such, accomplishes but little. Very true. It may be that he does not belong to the class of men who set rivers on fire, who move the world, and who bring about great reforms, so far as appearances are concerned, and yet, gentlemen, I think we all know by this time that the man who enters public life with the idea that he is going to sway men and establish a new order of things, whether in economics, in finance, or in any of the social sciences, without resort to the statistician's methods, makes the great mistake of his life. I think we have demonstrated this fact in this country, and so thoroughly demonstrated it, too, that other countries are not only glad to copy our methods but are endeavoring to improve upon them. If you have watched foreign reports during the last two or three years (for it is only recently that foreign countries have undertaken to do the work which we have been doing in this country for nearly a generation), you will find that in their presentation of facts they are very close students of our American reports, and before they undertook this work of collecting industrial statistics foreign legislators were obliged to depend for comparative data upon our American offices. It was my privilege to know Bailey Potter, Esq., one of the Liberal members of the House of Commons in England, and he paid the American offices of statistics of labor a great compliment. This was before the

establishment of the Department of Labor in England. Bailey Potter said : " Whenever anyone of us on our side (meaning the Liberals) wishes to impress an industrial fact upon the members of the House of Commons, we are obliged, in the absence of all such information relating to English localities, to stand before the Speaker with an American labor report in our hands as the basis of our argument." That was his estimate of the work being done by these American offices.

Our offices have recognized another thing, it seems to me, and this was a feature of our discussions at Minneapolis last September,—they have recognized that in dealing with the problems committed to them as statisticians, they must enter their work with a very strong theory as to what can be shown, but they have also learned the other side of the theoretical statistician's work, that it is none of their business what they show. They must understand thoroughly, before they succeed in their practical work, just how far statistical theory can be applied, and this is all that the economic statistician, to say the least, has to do with that word "theory." Without it they are useless, but when they follow it to the extreme they are more useless still, because they become partisan. Following this is the key-note of the value of our work. It is this that will perpetuate our work ; it is this that will enable us to answer the question, which I suggested in the beginning of my remarks, as to whether the work of the statistician is completed. You know, gentlemen, that the statistical method is a modern method. It is being introduced into all the work of every man connected with public education ; whether he be an economist, a politician, a statesman, or whatever his calling, he must resort to the results of the work of gentlemen employed as we are, and it is gratifying to know, and I believe that I have repeated this statement almost every year since we have been in existence as an association,—it is gratifying to know that the gentlemen who enter upon this work are soon made alive to its sacredness. They understand that to misrepresent facts of industry is a crime, and they do not wish to commit it, and they have been true to this thought, so far as I know. There has been no attempt, so far as any report can be made to show it, to pervert the sacredness of the work committed to the state statistician, as a rule. This, I say, is gratifying in the extreme.

I wish, gentlemen, that we could by some means secure the attendance at our annual conventions of all our commissioners, and how this can be accomplished is a problem for us to examine and consider. What elements can be brought into this convention that will bring all our members together, so that we may have a full discussion of the methods and means that we consider annually and determine how we shall treat various questions? You know we are not here as partisans. We know nothing of politics when we assemble in our annual convention ; but it is our duty to understand each other, to understand our work, and to move forward in it along scientific lines. This being the case, it ought to be possible to bring all our members together every year. Of course we know one of the chief difficulties in this direction, and that is the lack of means. The states do not as yet equip their offices sufficiently well to enable commissioners to travel long distances and attend these conventions. We sympathize with those commissioners who are unable to meet with us. They lack the good-fellowship which we enjoy each year ; they lack the rubbing up against one

another, which is one of the very best results of these conventions. We, who meet every year, know that the open sessions are not the most important features of our gatherings. Our greatest benefits are derived from our intercourse as individuals,—the meeting in the quiet corner at the hotel, the private exchange of views, the comparison of difficulties,—matters which we do not care to bring to the attention of the convention as a body. All these features of our annual gathering are of great importance, and each and every one of us ought to do all in his power to secure a full attendance at our conventions.

To the work of this session I trust we may dedicate ourselves with earnestness and with a keen appreciation of the value of the questions that are to be discussed, to the end that when we adjourn we shall feel that the session at Albany has been indeed the most valuable of them all. (Applause.)

Col. Ashley W. Cole, Private Secretary to Governor Morton, welcomed the delegates, in behalf of the State of New York, and addressed the convention as follows :

Mr. President, Gentlemen of the various State Bureaus, and Ladies : In the absence of the Governor of the Empire State, I have been requested to extend to you the welcome to New York which it would be his pleasure to extend to you if he were here. It was understood that you would meet here to-day about noon, at which time the Governor will arrive in the city ; but in his absence and for him, and in the absence of some one who might more worthily represent him, it gives me great pleasure to welcome the members of this convention to the State and to the Capital.

The Governor, as you are aware, is very widely known as a capitalist ; but he is a man who sprang from the ranks of labor. In early life he labored with his hands, and has ever since labored with his mind, and I am sure that the long and varied experience of his life puts him in hearty accord and sympathy with the work which it is the function of your respective bureaus to perform, in behalf of the states in which they are located. I feel, as your worthy presiding officer has said, that there is not a sufficient appreciation, in the minds of the people at large, of the work in which you are engaged. It is considered very largely the work of experts, of the library, and of a purely scientific or academic order. People generally seem to regard the consideration of economic questions in large measure as what may be called " student labor." It is student labor, but it is a kind of labor which in late years has been developed to a very high degree, and if the public men of the nation paid more attention to the subjects which you are considering it would undoubtedly result in vast benefits to the people. I am not an expert myself, and have not given very careful attention to the subject, but in the occupation in which I was employed for years before I had the honor of becoming private secretary to the Governor I was brought in contact with the representatives of labor, and I studied the labor question in very many directions, but only in the cursory way in which a newspaper man deals with such matters. I remember well the existence of the old Free Labor Bureau in New York city. Mr. Jack-

son, Secretary of the Board of Immigration Commissioners, was in principal charge, and he was a man full of information on all questions relating to immigration and labor, and these two subjects are closely allied. I do not suppose the subjects of immigration and labor are so closely allied in any other country as in ours, we being the recipients of practically all the immigration exodus of almost all other countries. In the study of these matters I am well aware that you gentlemen devote your best energies, the best efforts of your minds, and your best capabilities, to the bringing about of what is most desirable, from the standpoints of both labor and capital, with a view to harmonious understanding between them, the reconciliation of grievances, the redress of wrongs, and the explanation of differences, and in those directions it is well understood that you are rendering a service of vast importance to the whole country and to the world.

It occurs to me, observing the comparatively small attendance here, that it is a great pity that some of our higher public men, some of our legislators, some of our department officers, some of the gentlemen who are ambitious of reaching greater heights in the public service than those they now occupy, are not present. I am led to this thought by the fact that I have met to-day, in this building, two gentlemen who are possible candidates for Governor of this state. I called their attention to your meeting and asked them why they did not step in; but they replied that they were too busy with other affairs. It seems to me that they might very well spend an hour or two here to-day listening to the proceedings of this convention. In this connection another thought occurs, and that is, that it is regrettable, seeing how much interest was taken in the subject of the appointment of a Commissioner of the Bureau of Labor Statistics, that some of the leaders of what are called our labor organizations in the state,—I mean the Knights of Labor, the Federation of Labor, and various other associations,—who clamor around the public officers and politicians at various times, are not represented here by some of their foremost men, because I believe it would tend to bring them in closer touch with each other and with you. When the Governor had a Commissioner of the Bureau of Labor Statistics to appoint this year, there are a great many "assistant governors" throughout the state who wanted to advise him what was best to do. The Governor made a selection which I trust may prove to be a wise one, and his choice is here as a new Commissioner of Labor Statistics among you to-day; the representative of this state. Some of you gentlemen may possibly have known him before. I know that the Governor, in making that selection, acted upon the very highest recommendations. Our commissioner is not altogether a novice, however, on the subject of labor. He has given much attention to it in years gone by, and I am credibly informed that at the last Constitutional Convention, held in this state in 1894, he was considered one of the authorities in that body on all subjects relating to labor. As I have already stated, the representatives of various labor organizations took great interest in the selection of a commissioner, and it does seem to me that they should also manifest some interest in the labor which that commissioner is charged to perform, and especially when the opportunity is afforded, as it is afforded here, to meet the representatives of so many states and thereby come in contact with so much wisdom, knowledge, and research on the subjects which you are studying.

I thank you for your attention, and I am sure that so far as the state of New York is concerned it will do all it can, in the humble way to which reference has been made by your presiding officer, to make your stay here comfortable and pleasant. I find, from the little I know, that there seems to be a stinginess on the part of state governments toward their labor bureaus. Why this is so I can hardly say. In the ordinary drift of political affairs,—and political affairs are somewhat allied with the administration of your bureaus,—and for almost every other question or service that comes before a state government they are not so niggardly in making appropriations. It was somewhat difficult here this year to get the requisite sum, and I do not yet know whether our commissioner secured the amount that he deemed requisite to carry on the work of his bureau. But, so far as we can, we will endeavor to make you welcome to the state of New York, and I trust that the work of the convention will redound to the credit, not only of this state alone, but of the whole country.

Hon. John Boyd Thacher, Mayor of Albany, in welcoming the convention, in behalf of the city of Albany, spoke as follows :

Mr. President, Ladies and Gentlemen : Albany is greatly honored by your presence to-day, and in the name of our citizens I give you welcome. I believe it is the first time that your association has gathered within the borders of the Empire State, and our people are sensible of the honor paid them in thus making your first visit to our old Dutch city.

We welcome you as philosophers,—as men who are seeking truth and who are pursuing knowledge for the benefit of our race, and we selfishly hope that as the ancient philosophers made towns and cities famous by uttering great thoughts within their groves and academies, so perchance our Albany, like Athens and Megara and Alexandria, may have added to her present glory the fame of receiving and entertaining philosophers. Let Albany be identified as that city in which your association worked out some mighty problem or verified by practical solution some noble truth,

It is particularly appropriate that you should hold your session in this place dedicated to the making of laws. The purpose of the science of statistics, it seems to me, should be to produce remedial legislation, and if these doors should be barred to those who come here only to legislate for party and could be opened to men who like yourselves have made a study of the causes and conditions of the evils and disorders of our time, the world would be better and wiser and happier. The few laws would be needed laws, and the tabulated results of the statistician's inquiries would become the statutes of the state.

I have a profound appreciation, Mr. President, of the value of the scientific research in which you are engaged, and my appreciation comes from personal experience in a remote corner of the field in which you yourself labor. During the World's Fair I gave to the duties of the office which fell to my lot a wider significance than had usually been attached to those duties. Starting with the idea that the object of an international exposition was educational in its character rather than purely commercial, I encouraged an inquiry into the condition which surrounded the production

of the various exhibits. We had, for example, wool from every country in which that commodity is grown. Instead of contenting ourselves with awarding a medal to the fleece which presented the best appearance, we measured the length of the fiber, we found the tensile strength of the filament, we subjected it to chemical influences, we placed it under the microscope and before the photographic lense, we inquired into the racial and family characteristics of the animal from which it came, and we studied the soil and climate of the region in which it was raised. When the representatives of the forty-two nations gathered in Chicago they brought with them the principal articles of their food. These we fed to our own people and to the representatives of the forty-two nations; we took the principal articles of our own foods and fed them to our people and to the representatives of the forty-two nations, always under like conditions. We weighed, we measured, we tested. We recorded the heat-units furnished and we discovered the foot-pounds of strength obtained by the use of these various foods, and all this filled volumes of statistics and of figures. If a thoroughbred animal bred in this country was led out for a prize, instead of contenting ourselves with tying to him a ribbon of blue, we measured that animal with the utmost detail, and made a careful comparison between that particular specimen and the lines of perfection attained by the same type in the country of its origin, in order that we might learn whether the breed when transplanted deteriorated or developed. We built a model workingman's home, in which we placed a man and his wife and three children. We gave the cost of proper foods as found by an average in each of the five zones of our continent, and compared the cost of living with the price of labor in those zones. Thus an object lesson was given showing the minutest detail, and I am glad to say this interesting lesson was given by the New York State Commission, and the general plans and scope are published in its report. All the other results in the Department of Awards, after three years of patient waiting, are unpublished, and I have been induced to make these remarks in the hope that you who are so interested in statistical research may use your influence to have the Government make this valuable material accessible by publishing it to the world. Statistics can be of no value until systematized; the best arrangement of statistics ever devised is of no value without publicity, and the full benefit of publicity is found in wise and salutary legislation.

And now, gentlemen and ladies, I am permitted to express the hope of our citizens that the few days you spend here may be pleasant and profitable, and that in the busy days of your lives to come you may now and then recall agreeable memories of your visit to Albany. (Applause.)

The President: I know I echo the sentiments of your hearts unanimously when I thank most cordially the representatives of the Empire State and of this grand old city of Albany for the welcome they have extended to us in behalf of their respective governments. We know the state of New York, we know its industries, we know its progressive ways. We know the city of Albany, we know its work, we know its record in the past.

His Honor, the Mayor, has referred to an exceedingly interesting piece of statistical work, that in which he shared at Chicago. I know how hard the friends of the Exposition have labored to secure the printing of this very material to which he refers. It has been my pleasure to make an argument before the Joint Committee on Printing of the House and Senate of the United States, urging that this very work be printed. Years are rolling by. Here is one of the difficulties under which we individually labor,—that is, to secure the prompt printing of the results which we spend so much time and money in producing. We all labor under this same difficulty, and it is a question which should meet the earnest consideration of state and national legislators. The printing departments of our governments are well enough equipped, apparently, and yet it is a year or two after the compilation of the results of our labors before they can be brought to public notice. I might refer to the late lamented Eleventh census in connection with this very point,—how for more than a year and a half we have had nearly a dozen volumes lying in the printing office, all completed and ready for the presses, and yet constantly receiving the criticisms, and the just criticisms, too, so far as the main fact is concerned, of the press and the public generally because these reports do not come out. If there is any genius anywhere who can say just why printers never do the right thing, he has not yet appeared. They seem to be the controllers of the destinies of men, not only as regards their reputation and character and welfare in life generally, but in many business respects. But I suppose, from what I know of them, that they labor under very great obstacles in carrying out their own duties. The public printer, whoever he is, whether state or federal, always has a valid reason why he does not take up my individual work or yours in preference to somebody else's work, and we have to acquiesce. Is it a question of inadequate equipment; is it our fault, or what is the reason? So the Mayor has touched upon an exceedingly valuable feature of statistical work, not only in the principal involved in the work he did at Chicago, but in this other feature of how to get our work promptly before the people before it becomes a "back number." It is exceedingly discouraging, after having produced what might be called a valuable document, which we feel ought to come out at an early date, to find that it is delayed and does not reach the public until another report is almost ready to be sent to the printing office. I wish

some of these evils could be remedied, and I wish, furthermore, that the suggestion of His Honor, the Mayor, in regard to this matter, could be carried out at this convention, and whatever influence and advice we have in the matter be allowed to be heard by the printing committee at Washington, through a resolution adopted here, if the members of the convention see fit.

We shall try to profit, gentlemen, by your valuable suggestions and the wise thoughts to which you have given utterance in your welcoming addresses, and I assure you that we shall go out of Albany and out of the state of New York feeling that the people here are willing and ready to do all they can to advance and further our work, and we will carry with us a keen appreciation of the courteous reception which you have accorded us. We thank you most heartily for the kind sentiments which you have expressed. (Applause.)

The Executive Committee, through Mr. McDonough, the Chairman, submitted the following order of business for the twelfth annual session :

JUNE 23D—MORNING SESSION.

10 A. M. Opening address by the President of the Convention.

Address of welcome, in behalf of the State, by Col. Ashley W. Cole, Private Secretary, in the absence of Hon. Levi P. Morton, Governor of New York.

Address of welcome, in behalf of the City of Albany, by the Mayor, Hon. John Boyd Thacher.

Response, in behalf of the Convention, by the President.

AFTERNOON SESSION.

2 P. M. The Commissioners will assemble and visit the different departments of state in the Capitol building.

Convention business.

In the evening an opportunity will be offered the delegates to visit the Dudley Astronomical Observatory.

JUNE 24TH—MORNING SESSION.

10 A. M. Discussion of the topic, "How Best to Investigate the Subject of the Municipal Ownership of Water, Gas and Electric-Light Plants."

Addresses by Prof. Walter F. Willcox, of Cornell University, Ithaca, New York ; Prof. Edward W. Bemis, late of the University of Chicago, Chicago, Ill. ; Mr. M. N. Baker, Associate Editor of the *Engineering News*, New York, N. Y., Mr. Osborne Howes, Boston, Mass.



These addresses will be delivered in accordance with the action of the Association at its eleventh annual session and of the Executive Committee at its session in Harrisburg, Pa., February 12, 1896. The action of the Association upon this subject was embodied in the following resolution :

*Resolved :* That the executive officers of this Association be authorized to invite to our next annual meeting some of the leading representatives of the economic schools of thought, at their own expense, to appear before us and give their views as to what fields of investigation the bureaus of labor might best exploit for the benefit of the social and economic advancement of our American life."

The action of the Executive Committee, aside from selecting the gentlemen to make the addresses, is found in the following resolution :

*Resolved :* That the Executive Committee recommend to the convention the question of investigating the municipal ownership of water, gas and electric-light plants. This investigation not to be considered for or against municipal ownership but for the purpose of ascertaining all facts bearing upon this question."

Election of officers.

Selection of a place for the next meeting.

At 3 o'clock P. M. the Commissioners and their guests will assemble for the purpose of visiting the various places of interest in and around Albany, including the Watervleit Arsenal at Troy, and the Harmony Mills at Cohoes.

At 8 o'clock P. M. the Commissioners and their guests will attend a banquet to be given in their honor by the Governor of New York.

#### JUNE 25TH.

The Convention will hold its session in Saratoga.

The Commissioners will take the 9 o'clock P. M. train on the Boston & Albany Railway for Boston, in which city they will arrive Friday morning.

#### JUNE 26TH.

The Commissioners will spend the day in an inspection of the methods and labor-saving devices of the Massachusetts Bureau of Statistics of Labor.

On the motion of Mr. Morse, of Michigan, the order of business submitted by the Executive Committee was adopted.

The Secretary called the roll of states, and the following named gentlemen responded :

Carroll D. Wright, Commissioner of Labor, Washington, D. C.

Horace G. Wadlin, Chief of the Massachusetts Bureau of Statistics of Labor, Boston, Mass.

James W. Latta, Secretary of Internal Affairs, and James M. Clark, Chief of the Bureau of Industrial Statistics of Pennsylvania, Harrisburg, Pa.

Samuel B. Horne, Commissioner, and William W. Ives, Chief Clerk of the Bureau of Labor Statistics of Connecticut.

Lee Meriwether, Commissioner of Labor, Jefferson City, Mo.

Charles H. Simmerman, Chief of the Bureau of Statistics of Labor and Industries of New Jersey, Trenton, N. J.

George A. Schilling, Secretary of the Bureau of Labor Statistics, Springfield, Ill.

Simeon J. Thompson, Chief of the Bureau of Statistics of Indiana, Indianapolis, Ind.

John T. McDonough, Commissioner of Labor, and John McMackin, Deputy Commissioner of Labor, Albany, N. Y.

Thomas J. Dowling, ex-Commissioner of Labor, Albany, N. Y.

Charles H. Morse, Commissioner of Labor, and H. R. Dewey, Deputy Commissioner of Labor, Lansing, Mich.

Halford Erickson, Commissioner of Labor, and Charles Lewiston, Deputy Commissioner of Labor, Madison, Wis.

Charles H. Myers, Chief of the Bureau of Industrial Statistics of Maryland, Baltimore, Md.

Samuel W. Matthews, Commissioner of Labor, Augusta, Maine.

L. G. Powers, Commissioner of Labor, St. Paul, Minn.

F. P. Clute, Commissioner of Labor, Nashville, Tenn.

The Secretary reported the following states and territories having Bureaus of Labor Statistics, or kindred offices or departments. For each state or territory there is given the title of the office, the date of its establishment, the method of publishing its regular reports (annually or biennially), the title of the executive officer in charge, the name of the present incumbent and his post office address :

United States Department of Labor—Established as Bureau of Labor, January 31, 1885; made a Department of Labor June 13, 1888. Annual reports. Commissioner of Labor, Carroll D. Wright, Washington, D. C.

• Massachusetts Bureau of Statistics of Labor—Established June 23, 1869. Annual reports. Chief of the Bureau of Statistics of Labor, Horace G. Wadlin, Boston, Mass.

Pennsylvania Bureau of Industrial Statistics—Established April 12, 1872. Annual reports. Chief of Bureau of Industrial Statistics, James M. Clark, Harrisburg, Pa.

Connecticut Bureau of Labor Statistics—Established July 12, 1873. Abolished July 23, 1875. Re-established April 23, 1885. Annual reports. Commissioner of Labor, Samuel B. Horne, Hartford, Conn.

Kentucky Bureau of Agriculture, Labor and Statistics—First established March 20, 1876, as a Bureau of Agriculture, Horticulture, and Statistics; the

duties of the bureau were enlarged and present name adopted April 2, 1892. Biennial reports. Commissioner of Agriculture, Labor and Statistics, Lucas Moore, Frankfort, Ky.

Missouri Bureau of Labor Statistics and Inspection—Established March 19, 1879; enlarged March 23, 1883. Annual reports. Commissioner of Labor, Lee Meriwether, Jefferson City, Mo.

Ohio Bureau of Labor Statistics—Established March 5, 1877. Annual reports. Commissioner of Labor, William Buehrwein, Columbus, Ohio.

New Jersey Bureau of Statistics of Labor and Industries—Established March 27, 1878. Annual reports. Chief of the Bureau of Statistics of Labor and Industries, Charles H. Simmerman, Trenton, N. J.

Illinois Bureau of Labor Statistics—Established May 29, 1879. Biennial reports. Secretary of the Bureau of Labor Statistics, George A. Schilling, Springfield, Ill.

Indiana Bureau of Statistics—Established March 29, 1879. Biennial reports. Chief of the Bureau of Statistics, Simeon J. Thompson, Indianapolis, Ind.

New York Bureau of Labor Statistics—Established May 4, 1883. Annual reports. Commissioner of Labor, John T. McDonough, Albany, N. Y.

California Bureau of Labor Statistics—Established March 3, 1883. Biennial reports. Commissioner of Labor, E. L. Fitzgerald, San Francisco, Cal.

Michigan Bureau of Labor and Industrial Statistics—Established June 6, 1883. Annual reports. Commissioner of Labor, Charles H. Morse, Lansing, Mich.

Wisconsin Bureau of Labor Statistics—Established April 3, 1883. Biennial reports. Commissioner of Labor, Halford Erickson, Madison, Wis.

Iowa Bureau of Labor Statistics—Established April 3, 1884. Biennial reports. Commissioner of Labor, W. E. O'Brien, Des Moines, Iowa.

Maryland Bureau of Industrial Statistics—Established March 27, 1884. Annual reports. Chief of the Bureau of Industrial Statistics, Chas. H. Myers, Baltimore, Md.

Kansas Bureau of Labor Statistics—Established March 5, 1885. Annual reports. Commissioner of Labor, W. G. Bird, Topeka, Kan.

Rhode Island Bureau of Labor Statistics—Established March 29, 1887. Annual reports. Commissioner of Labor, Henry E. Tiepke, Providence, R. I.

Nebraska Bureau of Labor and Industrial Statistics—Established March 31, 1887. Biennial reports. The Governor, ex-officio Commissioner. Deputy Commissioner of Labor and Industrial Statistics, J. H. Powers, Lincoln, Neb.

North Carolina Bureau of Labor Statistics—Established February 28, 1887. Annual reports. Commissioner of Labor, B. R. Lacy, Raleigh, N. C.

Maine Bureau of Labor Statistics—Established March 7, 1887. Annual reports. Commissioner of Labor, Samuel W. Matthews, Augusta, Me.

Minnesota Bureau of Labor—Established as a Bureau of Labor Statistics March 8, 1887; enlarged and changed to Bureau of Labor, April, 1893. Biennial reports. Commissioner of Labor, L. G. Powers, St. Paul, Minn.

Colorado Bureau of Labor Statistics—Established March 24, 1887. Biennial reports. Commissioner of Labor, W. H. Klett, Denver, Colo.

West Virginia Bureau of Labor—Established February 22, 1889. Annual reports. Commissioner of Labor, John M. Sydenstricker, Charleston, W. Va.

North Dakota Department of Agriculture and Labor—Established October 1, 1890. Biennial reports. Commissioner of Labor, A. H. Laughlin, Bismarck, N. D.

Utah Bureau of Statistics—Established March 13, 1890. Annual reports. Territorial Statistician, Joseph P. Bache, Salt Lake City, Utah.

Tennessee Bureau of Labor Statistics and Mines—Established March 23, 1891. Annual reports. Commissioner of Labor, A. H. Wood, Nashville, Tenn.

Montana Bureau of Agriculture, Labor and Industry—Established February 17, 1893. Annual reports. Commissioner of Labor, James H. Mills, Helena, Mont.

New Hampshire Bureau of Labor—Established March 30, 1893. Biennial reports. Commissioner of Labor, Julian F. Trask, Concord, N. H.

#### FOREIGN BUREAUS OF STATISTICS OF LABOR.

In Belgium the Office du Travail (Ministere de l'Industrie et du Travail) was established in 1895 at Brussels, the official head of the office being entitled "Chef." A superior council of labor (conseil superieur du travail), which made investigations and reports on matters relating to labor, has been in existence since April 7, 1892. November 12, 1894, a separate labor bureau, similar to the American and French type, was created under the Department of Agriculture, Industry, and Public Works. But in 1895 this department was separated into two departments, known as Department of Agriculture and Public Works and Department of Industry and Labor, and the newly created labor bureau was made a division under this latter department.

In France the Office du Travail (Ministere du Commerce, de l'Industrie, des Postes, et des Telegraphes) was established July 21, 1891, at Paris, the official head of the office being entitled "directeur." The publications of the bureau consist of special reports on particular subjects, of which a number are issued each year, and since January 1, 1894, a monthly bulletin, "Bulletin de l'Office du Travail."

In Germany the Kommission fuer Arbeiter Statistik was established June 1, 1891, at Berlin. This is a permanent commission, which issues special reports from time to time on particular questions and reports of the minutes of its meetings. The material collected by it is compiled by the Imperial Statistical Bureau.

In Great Britain the labor department of the board of trade was established in 1893 at London, the official head of the office being entitled "commissioner." A service for the collection and publication of statistics of labor has been in existence under the board of trade since March 2, 1886. In 1893 this service was greatly enlarged and given its present name. Its reports, therefore, date from 1886-7, and consist of annual reports of operations and statistical abstracts, annual reports on strikes and lockouts, annual reports on trade unions, annual reports on wages (contemplated), special reports, and, since May, 1893, a monthly "Labor Gazette."

In Switzerland the Secretariat Ouvrier Suisse was constituted Dec. 20, 1886, at Berne. The "secretariat" is an officer of the federation of labor organizations,

but is subsidized by the government, which directs him to make certain reports. His publications consist of annual and special reports.

In Ontario, Canada, a bureau of industries was organized under the commissioner of agriculture, March 10, 1882, the official head of the bureau being styled secretary. Annual and occasional special reports are issued.

In New Zealand a bureau of industries was created in 1892. In the following year the designation of the bureau was changed to that of department of labor. Its publications consists of annual reports and a monthly journal commenced in March, 1893, under the title "Journal of Commerce and Labor," which after the issue of a few numbers was changed to that of "Journal of the Department of Labor."

We have been informed unofficially that an office for the collection of labor statistics has recently been established in Spain.

The above statement is believed to include information concerning all bureaus of foreign governments especially created for the collection and publication of statistics relating to labor. It is not a statement, however, of the extent to which foreign governments publish labor statistics, as a great deal of valuable information on this subject is contained in the publications of the central statistical bureaus or other offices of foreign governments.—*Bulletin of the United States Department of Labor, November, 1895.*

The President: According to the order of business, we can now receive the reports on current work of the various bureaus or take up any other business of the convention. What is your pleasure in this respect?

On motion of Mr. Morse, of Michigan, the convention proceeded to the consideration of reports on current work.

The President: Before we take up the reports of current work I would state that at the Minneapolis convention it was agreed that those commissioners who could not be present should send their reports to the Secretary in writing, so that they could be read and the members thus get the benefit of the reports from all of the states.

The Secretary: All of the commissioners were notified, and I have received three reports.

The President: I would suggest that the Secretary read in their proper order the three reports which he has received.

#### THE UNITED STATES DEPARTMENT OF LABOR.

Mr. Wright: The work of the Department of Labor this year is practically a continuation and completion of the work outlined at Minneapolis, with the exception that we have entered upon an investigation, under the authorization of Congress,

relating to the economic aspects of the liquor traffic. This investigation is now under good headway, and is being carried on successfully. We are taking up separate lines of work relative to the economic aspects of the liquor traffic, the first relating to the revenues of the states, counties, and municipalities in the United States. This involves an inquiry in all the states and the collection of data relative to the revenue received by each government, respectively. Of course the result will be reported for the governments to which the revenue applies. Second, we are taking up the question of cost, of the absorption of raw materials in the production of liquors, the proportionate consumption of liquors for the arts and as beverages, and all the fiscal relations of the subject, these points being considered as emphatically among the economic aspects of the traffic. There have been various estimates, made in accordance with the views of the party making them, relative to these points, but so far as I know there has been no systematic collection of data relating to the production and consumption of the various kinds of liquors. The arguments of the temperance reformers and the arguments of those opposed to the temperance reformers are usually constructed to answer the argument which is met; in other words, these arguments are as thoroughly partisan as any line of arguments put before the public. The object of the Department of Labor, under this authorization of Congress, will be to ascertain as accurately as may be the truth in regard to these features. All of you know how difficult it is to chase a fact down and put your finger on it and be able to say "That is so," and I anticipate that in this particular feature of our investigation the ordinary obstacles that rise in front of the statistician every time he moves will be emphasized and exaggerated, even; but with the data at hand, through the census, through the work of the Internal Revenue Bureau at Washington, and through our original inquiries, we are in hopes of securing information which will be of absolute value in determining these questions, quite free from the vicious element of estimate or of partisan argument. Another line of this investigation, which is perhaps the most interesting one, relates to a series of inquiries propounded to manufacturers, and to great employers everywhere, whether manufacturers or not. We have already sent out about 30,000 schedules of inquiry, and so far something over 25 per cent. have come back well answered. That is a pretty good proportion,—very satisfactory, indeed. This line of

inquiries relates to the individual,—first, as to what great corporations and great employers are doing everywhere toward the regulation of the liquor habit. Railroads almost everywhere now prohibit the use of intoxicants by their employés, and very many private corporations are following the same rule. We are also observing the effect of the use of liquor upon the man himself,—how it affects his skill, his attention to duty, his productiveness, and all these matters; furthermore, how far overwork induces the liquor habit, and how far the close attention required by highly-specialized machinery induces it, if at all; how the frequency of payment of wages affects the question of liquor drinking—whether frequent payments induce it or prevent it being one of the most serious questions along industrial lines. All these questions and more along the same line are being treated seriously and candidly by the great employers of labor in this country; so that, take it all in all, I believe this investigation, which Congress so generously ordered a year ago, will prove of very great value in sociological studies,—in fact the evidences all show that it will be so.

We are completing the work of the investigation relating to machinery in its relation to cost of production, etc., but this report is an exceedingly tedious one to make, and the results will not be forthcoming for another year.

The other report to which I referred at Minneapolis relates to the question as to how far women in their employments have superceded men, if at all, and what the relation of their wages is to the wages of men when performing the same work. This investigation was also ordered by Congress, and the report is about completed and probably will go forward as our next annual report to Congress.

These investigations, together with the work of preparing the bi-monthly bulletin, keep the Department fairly busy and represent its most important current work.

One of the most valuable features of our current, everyday work is not seen by the public at all, and this I know is true of every one of our offices. This the public does not realize, and if we can in some way bring it out and let the public understand that a very large proportion of the time of the head of a bureau of statistics of labor is occupied in such a way as completely to subordinate his own existence to his official work, it would be doing ourselves justice, to say the least, and this lies in the constant labor of furnishing specific information to

correspondents. I think that every one of you will testify that a very large proportion of your time is devoted to answering correspondents who want specific information along certain lines, and which it is in your province to supply. All this work does not appear in our reports. Our legislators, when they are contemplating appropriations for us, do not realize that a considerable clerical force is essential for this work in addition to preparing and analyzing tables for our annual reports. If you can manage to let your public know of this feature of the work of your bureaus you will be doing yourselves justice. Every question that comes up must be argued from a statistical basis, and the men who wish to make the arguments, or the writers who wish to prepare them, appeal at once to the statisticians of their respective governments for specific information, and it is here that the chiefs and commissioners of bureaus of labor statistics have it in their power to do, perhaps, their best service, after all, because the facts which they contribute to individual legislators, to the governor of the state for incorporation in his annual message, to the members of the House and Senate for use in making their speeches upon the affairs of their respective bodies, and to the writers for the magazines constitute in many respects the most effective work they do. I speak of this under the head of current work of the Department because we have so much of it to do and because I wish to call your attention to the subject so that you may do yourselves justice.

It is customary to give the facts in regard to our appropriations. Congress has increased our appropriation this year something like \$6,000 or \$7,000, so that we have, instead of \$175,000, the amount appropriated last year, about \$182,000 for the fiscal year beginning July 1.

The Secretary: I would like to ask a question or two in relation to the investigation of the liquor traffic. First, Does the investigation take into account the relative increase or decrease in the consumption of liquors during the last twenty, thirty, or more years; and, second, Does it take into account the relation of such increase or decrease to the changing financial ability of the working people, the masses, to purchase liquors, so as to give us a correct idea as to whether there has been an increase or decrease of what might be called drunkenness among the people?

The President: I would state, in answer to the inquiry of



the Commissioner from Minnesota, that the investigation will show, so far as the official facts are obtainable, the relative proportion of consumption of liquors, both as a beverage and in the arts, for as long a term of years as the records of the Internal Revenue office will admit. We cannot take a census of the consumption of liquors to ascertain this point. We must depend upon the data already in existence, but which has not been utilized to the fullest extent. The consumption of liquors each year is rather a difficult subject to handle because of the necessity of following pretty closely the annual production. Some years the great whiskey distilleries—factories, as they call them in Peoria,—stop work for a long time, in order to shorten the supply of stock on hand, like other manufacturing establishments, and then, again, they will push their plants to their fullest capacity when there is a market ; so that the production one year hardly represents the consumption for that year. Then there is difficulty in adjusting importations and exportations with the view of ascertaining the quantity that remains in the country and is consumed. But so far as the facts will allow we will go into that question deeply. It has been studied carefully by Hon. David A. Wells, and it has been studied by others while the Internal Revenue Bureau has placed all of its books and records at our disposal.

The other question is one which can be answered by facts to be drawn from different reports ; for instance, if the investigation now going on shows that there has been a constant increase in the consumption of liquors from a personal point of view, the student can find from other reports an answer to his question as to whether the remuneration for labor or services of any kind has increased during the same period of years. That is a philosophical study which I would hardly feel called upon to bring out unless I were discussing suggested legislation. Of course there are difficulties in this investigation which will hamper us at every point ; as, for instance, how far different methods of regulating the sale of liquors enter into the question. Our friend from Maine (Mr. Matthews), I suppose, would insist that prohibition prohibits,—

Mr. Matthews : Sometimes.

The President : But it has been doubted sometimes ; while, on the other hand, some people from license states will insist that there is less drunkenness under a license system than under prohibition. If the convention will bear with me a moment, I

can give an illustration on this point. A few years ago, in Massachusetts, I undertook to gather the statistics of arrests under license and prohibition regimes, and collaterally we found, paradoxical as it may seem on the face of it, that under prohibition there was a great deal more drunkenness than under the license system. I think that proves true wherever such an inquiry is made. The point is this: We satisfied ourselves, in the investigation some years ago to which I have referred, that the municipal officers, especially the police, are usually opposed to a prohibitory law, and consequently, when the prohibitory law is in operation everybody that can possibly be arrested for drunkenness is arrested, and when the license system is in operation, the police officers, who are usually in favor of a license system, tell a drunken man to move on, instead of running him in, the consequence being that all these statistics which show an increase of drunkenness under prohibition and a decrease under license are the results of the enforcement or non-enforcement of the law by the local police authorities. This has been proven time and again, not only in Massachusetts, but in other states; so that any conclusion drawn from a study of the statistics of the operation of prohibition and license laws relative to the amount of drunkenness is to a certain extent quite vicious, and cannot be sustained. So the statistical method, in this particular direction, fails very largely in determining the real state of facts. These are some of the obstacles we shall meet in our investigation; yet, on the whole, along the lines which we have attacked, which are the practical ones, and I believe it should be the policy of statistical offices not to attack lines that we cannot carry to success,—never voluntarily to meet failure. I believe we shall satisfy the public of the truth underlying the investigation.

#### STATE BUREAUS OF LABOR STATISTICS.

Massachusetts.—Mr. Wadlin: Mr. President and Gentlemen: So short a time has elapsed since our convention at Minneapolis that the work of the Massachusetts bureau has not materially changed.

I find that I reported last year the special investigation ordered by the Legislature of Massachusetts respecting the effect of intemperance upon pauperism, insanity and crime. That investigation is conducted under a special appropriation, and is

intended to bring together all the data that can be obtained relating to the subject. Twelve months were assigned to the collection of material, and the period closed last August. We have since been engaged in tabulating results, and in completing incidental inquiries relating to the matter. The material is now in my hands for analysis, and forms, of course, a part of the current work of the bureau. It will soon be ready for the press and published immediately. This has proved an exceedingly interesting investigation, and will, I think, form the basis of a valuable report. The collection of data has required extensive personal investigation by specially selected agents. We have not relied upon official records, but have secured our information by direct personal interviews with the criminals and paupers in the different institutions of the state, our agents having visited those who have been committed from week to week during twelve months, so that we have the individual replies of the persons directly concerned. We have brought out the particular form of intemperance to which these persons have been addicted, if intemperate at all. We have covered, to some extent, the influence of heredity upon the drinking habit, and altogether have secured a great deal of interesting material.

As to the insane, who were incapable of giving personal testimony, we have endeavored to ascertain something of their personal history, and have obtained much important evidence respecting the use of liquor by the defective classes and its effect incidentally upon industrial conditions. Of course whatever injuriously affects social conditions, whatever leads to pauperism, crime or insanity, has a direct relation to the welfare of society; and such an inquiry as I have outlined, although undertaken in this instance by special legislative mandate, falls appropriately within the province of a bureau whose work is the collection and presentation of statistical data, respecting the social, economical and sanitary conditions surrounding the industrial classes.

Of course the question will occur to you, as it did to us, whether in putting these inquiries to the defective classes we obtain truthful replies. Can we depend upon their answers? In reply I may say that our experience leads us to believe that we may, and that our fears to the contrary have been entirely overcome during the progress of the work. Without exception, so far as I know, the authorities in charge of the different institutions, who were at first inclined to the opinion that the state-

ments which we might receive would not be trustworthy, now agree with us that we have been able to get at the truth,—that the people who have given the information have stated facts, thus bearing out a theory which I have for some time held, as the result of my experience, that the average man, when he understands the purpose of sociological inquiry, is willing to reply truthfully, so far as he can. I may say in passing that I have especially found that to be true of the manufacturers to whom we have put very many personal questions in the course of industrial investigation.

We have in Massachusetts a local option law ; that is to say, in a given town it may be a crime to sell liquor this year, and next year it may be legitimate to sell it. A town may change its policy from year to year. This, of course, affects the administration of law respecting the offenses which grow out of the sale of liquor. It affects also the specific liquor crimes, such as drunkenness. It is sometimes alleged that crime in license towns is increased by the arrest therein of residents of no-license towns who have come for the purpose of obtaining liquor. In tabulating the facts as to liquor crimes we shall be able to show, for the first time, the number of such crimes committed by non-residents, the comparative number under license and no-license in towns which have changed their policy during the year, and in the license and no-license towns.

The remaining part of our current report will give the first installment of the census of wages, to which I alluded at Minneapolis last year, wherein we have placed in comparison, as an historical record merely, Massachusetts wages for a series of years and those of other states and countries.

We are of course making our usual collection of statistics of manufactures.

Apart from these lines of investigation, the great work of the department during the year has related to the decennial census of Massachusetts, which we are now bringing to completion. The first volume, devoted to population, social statistics, etc., is practically ready for the press, and will be issued soon. We have collected during the year the information regarding agriculture, and are now obtaining that relating to manufactures, trade, commerce and the fisheries.

I trust I shall have the opportunity on Friday, during your visit to Boston, to show you the methods we pursue in our office work. It is an exceedingly opportune time to visit our depart-

ment. We have at present about 150 clerks engaged in tabulating the results of the census, and we shall take great pleasure in showing you the practical details of the work.

Our appropriation remains the same as reported last year. We have a contingent fund of \$5,000, and in addition to that an annual appropriation of \$6,500 for the collection and tabulation of the statistics of manufactures. Of course these amounts are separate from the census appropriation and do not include the salaries of the executive officers. The Chief receives \$2,500, the First Clerk \$1,800, and the Second Clerk \$1,500.

The President : Do the appropriations which you have mentioned cover the cost of printing ?

Mr. Wadlin : They do not. The printing is done under a general contract covering the printing of all state documents. We have nothing to do with that. We simply send the manuscript to the printer, and the work is paid for out of a general appropriation for the entire public printing.

Pennsylvania.—Mr. Clark : Mr. President : My last report at Minneapolis anticipated, perhaps, what I will have to say to-day. The short time intervening has not enabled us to complete the work outlined then. The work covering 1895 will shortly leave the hands of the printer. As I stated last year we contemplate making a thorough report on the manufacture of tin-plate in Pennsylvania, tracing its struggles from its earliest history up to the present time. I have to report to the association that that work has been completed and that the study of it will show that our statements have been fully verified as to the fact that tin-plate can be made successfully in the United States, that America is manufacturing first-class tin-plate, and that Pennsylvania has the largest tin-plate plant in the world in successful operation and turning out the best and highest grade of finished tin-plate. This we have established by figures and from comparisons. In connection with that investigation we show the aggregate of wages paid in Pennsylvania in the production, not only of black plate, but of finished tin-plate made by the black plate manufacturers. In addition to that we shall show the amount of tin made in Pennsylvania by the dipping establishments and the aggregate of wages paid, the number of people employed, the average earnings, etc. We also describe in our report the process of manufacturing tin-plate, stage by

stage, from the steel billet down to the finished product of tin-plate, and show the various processes by means of illustrations. That covers our work on the tin-plate industry.

We have also taken up the production of silk in Pennsylvania. Our inquiries show that while there may have been no increase in the number of silk manufactories in the state, the volume of business and the capacity of the manufactories have been very largely increased. We shall also show the number of women and children employed in the silk industry and such other census statistics as you would expect in connection with such a report.

Our comparative work for the last four years of leading industries continues. In addition to that we have taken a very full census of the manufacture of iron and steel in the state.

As in years past, we have continued our strike report, not in that thorough way that some of the bureaus have treated the subject, but we give the causes of the strikes, the loss incurred thereby, whether by the employer or the employé, and the general facts involved.

As I have stated, we contemplate continuing the comparative work that has characterized the operations of the bureau for the last few years, extending the field of inquiry as to wages. We have taken a number of representative plants in leading industries, and have had our special agents secure the facts from the pay-rolls, following individual employés right through, so as to ascertain the amounts received by individuals without reference to averages. How far we will be successful in that I cannot tell at present ; but we propose to try it.

That practically covers our work for the coming year.

Our appropriation remains as it was. Our legislature meets biennially. Our report was made last year, to cover June, 1894. The legislature gives us \$12,000, or \$6,000 a year, for incidental and traveling expenses. The printing is done under a general appropriation.

Connecticut.—Mr. Horne: Mr. President: The work being done by the Connecticut Bureau consists of an investigation on the inequality of taxation in the state. The law of the state requires that all real and personal property shall be put into the assessors' hands for taxation at its true market value. In the economy of Connecticut there is provision made for state,

county, and town tax. Results thus far have shown that out of the 168 towns, less than fifty are obeying the law. The law of a full valuation would have no special bearing on the towns alone if all property in each town was equally assessed; but it is a hardship on the farming towns, which are nearer 100 per cent. valuation than the cities or manufacturing towns, when the county tax is laid. The rate of valuation has been found to be from  $33\frac{1}{2}$  per cent. to the maximum. The results thus far have shown that the smaller estates are in for very nearly their full value, while many of the large ones are in for at least one-half to two-thirds of what they should be. Comparison is being made with the sworn statements of the corporations in the state as made to the State Secretary and tax assessors. A wide discrepancy is found to exist. From the different probate courts in the state a list has been secured of the estates probated in 1895, and comparison has been made with the return made to the assessors in 1894. This includes real estate and improvements only. No charge of venality can be made against the tax officers, as in Illinois, but the careless, slipshod manner in which the work is done calls for the severest condemnation. The small amount paid for the work done is the greatest factor in placing the responsibility.

The schedules for the manufacturers have been prepared for mailing July 1. The questions asked this year are:—

Number of men employed July 1, 1895.

Number of men employed July 1, 1896.

Average weekly hours of labor.

Number of days closed during year ending June 30, 1896.

Amount paid in wages during year ending June 30, 1896.

Advance in wages, and per cent.

Restoration of wages, and per cent.

Reduction of wages, and per cent.

Proportion of business done.

Number of men, women, boys and girls employed, with highest and lowest wages paid each division.

It is probable that some minor matters of local interest may be reported upon.

The expense of conducting the bureau for the past year has been a little over \$11,000. Of this sum, \$3,000 was expended for the printing and distribution of the report. Our bureau is

not limited in its expenditures. We have all the money at our command that it may be deemed necessary to use, but as I stated last year, I have an eye to economy and the strict employment of those associated with me in the work. That is substantially the report which I desire to make.

The President: Do your expenditures come under the eye of the auditor or other officer as to amounts?

Mr. Horne: The State Comptroller pays all orders upon my signature.

The President: Has he no discretion as to the amount of your expenditures?

Mr. Horne: None whatever, either to amount or character. My bureau is held responsible for such orders as I may sign, and in my absence, orders signed by the Chief Clerk.

Ohio.—The Secretary read the following report, received from Hon. Wm. Buehrwein, Commissioner of the Ohio Bureau of Labor Statistics:

Gentlemen: Being new in the work, having taken the office April 1st, this year, I can only give the convention an imperfect report of the methods pursued by the Ohio Bureau. I can only outline the work of the present year by saying that we have largely followed the plan adopted by Mr. Lewis, my predecessor. We will take up the manufacturing and mining industries and will also give an account of the workings of the free employment offices which have been established in the five principal cities of the state. Child labor will be touched upon as it shows in connection with the manufacturing industries. For want of time will omit some of the industries treated in the report of 1894.

The report of my predecessor, now in the hands of the binder and which will soon be ready for distribution, contains an elaborate investigation into the clay industries of Ohio.

The appropriation for the current year and for 1897 is the same as last year. (*a.*)

*a.* The Commissioner of the Ohio Bureau reported the appropriation for that office last year as follows:

There is appropriated for the maintenance of our office for salary of Commissioner, \$2,000; traveling expenses of Commissioner, \$550; Chief Clerk, salary, \$1,300; Clerk, \$720; Clerk, \$600; Stenographer, \$720; contingent expenses, \$8,500. Out of this \$8,500 are paid the expenses of the five employment offices, which cost annually about \$2,200. This appropriation covers all other expenses, such as extra salaries, expenses of special agents, telegrams, expressage, etc. The printing of our office is paid for out of a state printing fund, and hence is not included in the above.



New Jersey.—Mr. Simmerman : Mr. President : The report of the New Jersey Bureau for 1895 was received from the printer the day I started from home, and it is now being distributed. It contains about all the data reported on last year.

For the report for 1896 we are pursuing the line of investigation pursued by the Massachusetts Bureau relating to manufactures. We have practically adopted the Massachusetts blanks, and so far we have been quite successful in getting returns.

In addition to that, we are making a special investigation of the oyster interests of New Jersey, which have come to be of vast importance.

These two lines of inquiry will constitute the bulk of our work for this year. Our statistics of building and loan associations, as usual, will constitute a feature of the report. That is required under the law.

In the matter of appropriations, I would state that heretofore, in addition to the salaries of the Chief and Secretary, the bureau has had an appropriation of \$5,000. For the coming year, beginning with October 31, 1896, that appropriation has been reduced to \$4,000. The last legislature, in its struggle to reduce expenses, cut our appropriation down \$1,000. This, of course, does not affect us this year ; but it will seriously cripple the efficiency of the office next year, unless we can get the \$1,000 restored.

That is all I have to say in regard to current work, but I would like to state to the convention that I feel very much encouraged in the effort we are making on the line of interesting the manufacturers of New Jersey in our work. So far, the results of our inquiries among the employers of labor have been very encouraging.

Mr. Horne : I would like to enquire of the Commissioner of the New Jersey Bureau whether the appropriation of \$4,000 includes the salaries of the officers as well as the other expenses of the bureau.

Mr. Simmerman : No. The salaries of the Chief and Secretary are paid out of the salary fund and not out of the \$4,000. The printing does not come out of that sum, either, but is paid for by the state out of a general appropriation.

New York.—Mr. McDonough . Mr. President : I am the "baby" of this convention, having been in office only about two months. I am glad to notice that my predecessor, Mr.

Dowling, has kindly favored us with his presence. He has an excellent report in the hands of the printer, which has not yet been printed, but is in proof. The bureau has been employed on that work up to the present time, and I am sure you will be interested in hearing what Mr. Dowling has to say in regard to the contents of that report.

Mr. Dowling: Mr. President: I think that by reference to last year's proceedings you will find that in my report at Minneapolis, I gave a very full account of the features which constitute the report of the New York Bureau for 1895, which is now in the hands of the printer, with the exception that I did not go into details with reference to out-work so far as the bakeshops of the state of New York are concerned. I would state to the convention that the bureau, in connection with the bakers' union, entered into a very extensive investigation of the condition of the bakeshops, and of the employes working therein, in the various cities of the state, for the purpose of securing remedial legislation that would bring about a reform, which would be beneficial to the bakers and also to the outside community, and our report for 1895 treats that question very exhaustively. I believe that there is somewhere in the neighborhood of 400 or 500 pages devoted to the details of the various questions connected with the bakeshops of the state, and in addition to that the report contains matter in regard to the rates of wages paid in July, 1894, and in July, 1895, the number of members in the organization in 1894, and the number in 1895, and other points that are of interest or benefit to organized labor, so far as legislation is concerned.

I would also state that in December, 1895, after receiving a number of communications from different labor organizations in the state, making complaints against the operation of the mechanics' lien law, especially in the building trades, I spent five weeks in New York city and investigated the working of that law there. I found that in almost every instance, the law enacted to protect the mechanic, was a failure in New York city and Brooklyn, and I corresponded with other states, and found that the conditions were not much better there than they were here. New Jersey has a fair lien law; and we tried last winter to have the New York law amended, so as to protect those, whom it does not protect at the present time. We also entered upon an investigation relative to the use of suitable scaffolding for workmen in the building trades. It was shown

that under the present conditions prevailing in the large cities of the state, that the law on the statute books of New York state for the protection of life and limb, gives no relief or protection to the great number of workmen who are employed on the many large buildings erected in this state. I am pleased to say that as the result of the statistics and information obtained at this investigation, as to the number of workmen killed and injured in the cities of New York and Brooklyn during the past year, a bill was passed at the last session of the legislature, which will to a greater extent protect the lives and limbs of the workmen hereafter employed. In regard to the present work of the department, I understand the new commissioner has prepared some very extensive circulars, bearing upon very important subjects, which I believe will be of interest to all the commissioners present. He is better able to give you the facts in relation to that matter than I am, and I think it would be of interest to the convention, if Mr. McDonough would report upon that part of the work of the New York Bureau.

I may not have another opportunity to address you, and therefore I embrace this occasion to say that I believe that this meeting of the association in Albany will be of great benefit to the New York Bureau of Statistics. I am sure you have aroused the interest of the Governor's Private Secretary, and that of the Mayor of the City, and I feel that their influence will be felt hereafter to the advantage of the New York Bureau. Our people, who drop in during your deliberations, will be impressed by your discussions, I have no doubt, and in this way will be led to take an interest in our work. There are many intelligent citizens of this state, who believe that the bureau of statistics of labor is of no benefit to the masses. I am convinced from observation that there are people in every state, who believe that if it cannot be shown, that our bureaus have placed money directly in the pockets of the workingmen, then such offices are a failure, and that the appropriation for their support is illy spent. I believe that your discussions here will convince this class of people that we are looking after the interests of the masses, and that there is something to be gained aside from putting 25 or 50 cents more per day, or per week, into the workingmen's pockets,—that we are not looking after the dollars and cents alone, but something beyond that, which will be of far greater benefit to the masses in the long run. I trust that you will have a pleasant time, and that when you leave

us, you will carry with you the feeling that the convention held in Albany has been one of the most prosperous and valuable that the association has ever held. My recollection is, that I promised that at Minneapolis, and I believe that my promise will be kept.

The President: The convention would like to learn, either from Mr. McDonough or Mr. Dowling, whether the New York Bureau still maintains its branch in the city of New York.

Mr. McDonough: We have a branch in the city of New York in which three clerks are employed. In connection with this subject I would state that the last legislature passed an act—and I think Mr. Dowling is entitled to great credit in securing its passage—providing for a free employment bureau in cities of this state containing a population of 1,500,000, or in other words, New York city. The legislature appropriated \$5,000 for that purpose, and I am now making an effort to organize that bureau. I have been delayed on account of the civil service laws and rules, as I am informed that the clerks must come from the civil service lists. This delays the matter of organization, as we have to announce the date of the examinations, and then the examinations will take time. I have made arrangements for quarters, having secured a whole floor, and intend to put the clerks of the two branches of the service together. The law establishing the free employment bureau provides that we may gather statistics that may be of interest to the working people in their efforts to securing employment, and defines the duties of the superintendent. We hope to establish a large and influential labor headquarters in New York city, which is the greatest manufacturing city in the United States, and no doubt great good will result from the enterprise.

I have thought it wise to carry out Mr. Dowling's work in relation to wages, and the circulars that are about to be sent out call for information on that subject. To show whether we are progressing or retrograding it was deemed wise to ascertain the cost of living and wages, the hours of work and the amount of manufactured articles, if possible, covering a period of five years, so that we may compare one period with another.

I have also been requested by people having the matter at heart to investigate the condition of working women in New York city. There are a great many of them, as you know, and I think we may investigate that subject.

Like the bureaus of many other states, we are hampered by

the lack of means. Last year the appropriation was reduced \$5,000. Formerly the appropriation for the office, outside of the salary of the Commissioner and his Chief Clerk, was \$20,000; but last year they gave us only \$15,000. Through great exertions we obtained an extra appropriation of \$5,000, but for the next year we will have only \$15,000. One of our senators, the chairman of the finance committee, while the matter of our appropriation was under consideration, wanted to know what good the bureau of labor statistics was anyhow. I hope your work here this week will convince him and others who hold as he does that the office is of great benefit to the people, so that we may fare better next year in the matter of appropriations.

I see that you have provided in your programme for the discussion of the question of municipal ownership of gas and electric-light plants, etc. If this convention concludes that it is wise to take up that question, we may devote some attention to it. There are a great many cities in this state which control their own electric-light plants, and it is a question that has been much discussed, as to whether it is cheaper for our cities to operate their own gas and electric-light plants or have such plants conducted under private ownership. I believe it would be wise to ascertain and publish the facts in relation to this question and let the people draw their own conclusions.

Mr. Horne: While Mr. McDonough was speaking about the establishment of an employment bureau in New York city, the question occurred to my mind, What would be the duties of such an office? I understand that bureaus having similar titles to that referred to here have been established in New Zealand and some of the older countries, and I desire now to inquire of the Commissioner of the New York Bureau what the real object of the employment bureau is,—whether it is to give employment to men and women, and boys and girls, or to be simply a bureau of information.

The President: I suppose it is to be patterned after the Ohio institution.

Mr. McDonough: Its duties are similar to those of the Ohio Bureau. The first section of the act is as follows:

"It shall be the duty of the commissioner of statistics of labor, immediately upon the passage of this act, to organize and establish in all cities having a population of one million five hundred thousand inhabitants or more, a free public employ-

ment office or bureau for the purpose of receiving all applications for labor on the part of those seeking employment, and all applications for help on the part of those desiring to employ labor, and to appoint a superintendent and such clerical assistants for each office so organized, as in the judgment of said commissioner may appear necessary for the proper conduct of the duties of the several offices."

The next section provides :—

"It shall be the duty of the superintendent of every free public employment office so organized to receive and record, in a book to be kept for that purpose, the names of all persons applying for labor or help, designating opposite the name of each applicant, the character of employment or labor desired, and the address of such applicant. It shall also be the duty of every such superintendent to make a weekly report on Thursday of each week to said commissioner of the names and address of all applicants both for labor and help, and the character of the employment or labor desired, and also the names of all persons securing employment through the respective offices. Said superintendent shall also perform such other duties in the collection of labor statistics, and in the keeping of books and accounts of their respective offices as the commissioner may determine, and shall make a semi-annual report of the expense of maintaining their respective offices to the commissioner."

Then it is made the duty of the commissioner to send a copy of that report each week to every supervisor in the state, the object, I suppose, being to secure employment for such persons as may desire employment, and if any one desires help to point out where that help can be had. It is understood that rank frauds have been perpetrated by many of the private employment offices throughout the state and in the city of New York, and it is to overcome this bad condition that our employment bureau has been established. Our men in New York city report that in many instances the employment offices take the money of poor people seeking employment and give them no adequate return for it,—do not get them employment at all, or secure positions for them where they are employed for one or two days and then discharged, simply to get the fee. We hope to put a stop to this fraudulent practice through the operation of our free employment bureau.

Michigan.—Mr. Morse: Mr. President: The work the Michigan Bureau has undertaken this year is an examination into the amount of forests we have left in the state. This was undertaken at the request of and after a conference with quite a number of our people who are interested in tree-planting and the observation of Arbor Day. To make the inquiry through special canvassers would cost too much, so it is being made through the supervisors of townships, and has progressed in a fairly satisfactory manner. There are a little over 1,200 townships in the state, and blank schedules, with explanatory letters, were sent to all the supervisors. When I left Michigan last week we had received returns from about 800 townships. Of course we expect that the last end of the work will have to be done through personal correspondence, perhaps several times repeated with some supervisors. In connection with this inquiry, we are conducting another inquiry relating to the lumber manufacture. Another part of our work is a canvass of the carriage and other vehicle manufactories. Michigan is becoming quite a state for the manufacture of vehicles. We are considering everything, aside from steam and electric cars and the various water crafts,—every kind of vehicle that is propelled by man or animal power. We have nearly two hundred manufactories of that class in the state. Our schedule embraces inquiries as to whether the business is conducted by an incorporated company, or whether it is a partnership or an individual enterprise, the number of people employed, and the amount paid in wages. We are also ascertaining the amount paid in salaries to officers, clerks, and traveling salesmen, endeavoring to keep the pay-rolls separate. Then we give the aggregate pay-roll, and also the amount of capital invested in the business. We are also endeavoring to find the number of different vehicles manufactured, and the market where they are sold, what proportion are sold outside of our state, etc. Our inquiry embraces the business for the year 1895, and we shall try to show what proportion of the product of the factories was unsold at the commencement of this year. We are getting this information quite satisfactorily. I suppose that at this time over half of the schedules have been returned, and we have just completed our first trip among the manufacturers. The work has been done very largely by Mr. Dewey, the Deputy Commissioner, and Mr. Russell, the Chief Clerk of the bureau.



In addition to this we publish every year our prison statistics,—the number of people confined in all of our penal and reformatory institutions, the number that are engaged on contract labor and on state account, the cost of keeping the inmates of those institutions, including food and clothing, and the appropriations for these institutions.

We shall also probably take up this year, as we did the first year of my administration of the bureau, the statistics of pauperism. We have not considered it advisable to collect these statistics every year, but we shall gather them at stated intervals, for the purpose of comparison.

The appropriation for the bureau remains the same as it was last year,—that is \$8,000, exclusive of the salaries of the Commissioner and Deputy Commissioner. In addition we have our quarters furnished us by the state, and all of our office supplies, including our printing. I find that I am able to help out on our work very much by the use of our factory inspectors. All of the older commissioners here are aware that factory inspection in Michigan is under the control of the Commissioner of Labor. I use factory inspectors as canvassers for the Bureau of Labor whenever that is found convenient. Through them we ascertain every year the number of people employed in all the manufacturing establishments that they inspect, and we get very closely the aggregate pay-roll.

It has been our custom to take every year some portion of our laboring population and make an individual canvass as to their condition. This year we are taking the class of people that are engaged in the vehicle manufacturing industry. Our schedules cover their nationality, their domestic condition, the number of people dependent upon their wages for support, the amount of time they are employed or idle, what their total earnings are, whether they own their homes, and if so, whether those homes are free of incumbrance and whether they are insured, and whether they carry life insurance,—in fact, our object is to find as near as may be how good care these people are taking of themselves.

In addition to these matters I have mentioned, we have “sandwiched” in an inquiry relating to the eight-hour day. This investigation is not very extensive, but it is an entering wedge in that direction. The eight-hour day is attracting much attention in Michigan, especially among organized labor and some of our manufacturers. We ask of the employé the ques-



tion whether he is in favor of the eight-hour day, and if so, whether he is in favor of the eight-hour day with a corresponding reduction of wages, whether he thinks he can accomplish as much work in eight hours as in ten hours, and whether he thinks the average employé can accomplish as much in eight hours as in ten. You will see that the questions are very simple. While we are canvassing the people who work, we also make the same inquiries of the employers, and wherever it is possible we get their ideas on the subject beyond a direct answer to the questions.

Upon motion of Mr. McDonough, the convention took a recess until 3 o'clock P. M., for the purpose of paying its respects to Hon. Levi P. Morton, the Governor of the State of New York, and to visit the various departments of the state government in the capitol.

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## FIRST DAY.

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### AFTERNOON SESSION.

The convention reassembled at 3 o'clock P. M., with President Wright in the chair.

Upon motion of the Secretary, the privilege of discussing current work, as well as the special topics to be brought before the convention, was accorded to Profs. Willcox and Commons and the other guests of the convention.

Upon motion of the Secretary, the President appointed the Secretary, Mr. Schilling, of Illinois, and Mr. Matthews, of Maine, a committee to nominate officers for the ensuing year and to name the place for the next meeting.

The Secretary submitted the following resolution, which, upon his motion, was unanimously adopted :

*Whereas*, The World's Columbian Exposition, which so wisely commemorated the four hundredth anniversary of the discovery of the New World, was the occasion for the assembling in our country of

the peoples of the earth, thus affording an opportunity to study and compare the arts, industries, manufactures, and products of the various countries represented ; and

*Whereas*, The department charged with the examination and passing of judgment on the exhibits conducted the inquiry into their merits and degrees of excellence with the most searching detail, resulting in the gathering of a vast amount of statistical information which is still before the Congress of the United States in manuscript reports ; and

*Whereas*, It is of the utmost importance to students of economic questions, as well as to those who are pursuing studies along the line of special subjects or employing knowledge directly for immediate and practical purposes ; therefore be it

*Resolved*, That the National Association of Officials of Bureaus of Labor Statistics does hereby respectfully urge upon the Congress of the United States the publication and distribution of said reports at the earliest possible moment ; and be it further

*Resolved*, That the Secretary of this Association be instructed to forward a copy of this resolution to the President of the Senate and the Speaker of the House of Representatives.

The convention proceeded to the consideration of reports on current work of the various bureaus.

Illinois.—Mr. Schilling · I am not prepared to go into details, but will simply say to the convention that the ninth biennial report of the Illinois Bureau of Labor Statistics will deal exclusively with municipal problems, such as franchises of street railways, gas works, telephones, etc. We had originally intended to embody this information in the eighth biennial report, but we found that we had such a mass of data relating to the tax question that it would be unwise to mix the two things,—first, because it would make the volume too large ; and, second, because we could not handle it as successfully as we desired. For these reasons we concluded to omit this data from the eighth biennial report. Since this information was collected, there has been such a change and such progress in transit that we find our statistics somewhat antiquated. Trolleys have taken the place of horse-cars, while the elevated roads in the city of Chicago have developed to such an extent during the last two years that an entirely new phase has been brought into the situation.

Our appropriation since the 39th General Assembly has been \$8,000, exclusive of the salary of the secretary ; but the salaries of the five labor commissioners, all of our clerical service, and all the special agents that the bureau employs are paid out of that \$8,000. We also publish annually a coal report, the compilation of which is entirely performed by the bureau, and the postage and expressage on reports are also paid out of the appropriation just mentioned.

Indiana.—Mr. Thompson: Mr. President: As you are aware, I am new to this work, this being the first convention I have attended, and I am not prepared to make any extended remarks. Our reports are made biennially. The one we are now preparing will be printed by the first of January, the time of the meeting of our legislature. Our bureau in Indiana has a very wide scope. It is not a labor bureau, especially, nor an industrial bureau ; but it devotes attention to agriculture, labor, and industries of all kinds,—nearly everything that you could think of. It is the only bureau in the state that gathers agricultural statistics, and necessarily we have to pay a good deal of attention to that subject. We are following largely, in the manner of collecting statistics, our predecessor, Mr. Peelle, but we are widening out as to the number of factories and the number of employés. We have investigated about forty different industries, in which about 80,000 people are employed. Of that number we have personally seen, through the agents of the bureau, very near 12,000. We have not stopped to inquire *why* their condition was this or that, but *what* it is. In the questions we have asked, and by the answers we have received, we are aiming to show the actual condition of the laboring population, as to the wages they receive, the number employed during the past year, whether married or single, the number in the family, whether they own their homes, the rent they pay, and whether they are able to save any money out of their wages,—in fact, as I said a moment ago, covering largely the line that Mr. Peelle had been working on in order to show their actual condition, and not theorizing at all.

We have not done anything in the way of new work, with the exception of a little investigation we are now carrying on in our penitentiaries in relation to convict labor, wherein we are endeavoring to ascertain the amount of manufacturing of differ-

ent kinds done in our penal institutions, so that we can make a comparison with the same lines of manufactures on the outside. Our last legislature appointed a committee to investigate and report at the next session, with the idea of abolishing labor in the penitentiaries, as the laboring people demanded it, on the ground that it conflicts with them ; so we are doing this work for the purpose of helping the legislature out a little.

That is about the extent of our investigations this year.

Our appropriation for the present two years is \$9,200. That includes everything that the bureau expends for all of its work, except the printing of the biennial report, which is paid for out of the appropriation for printing. It includes the salary of the chief and all assistants, postage and stationery, and all printing aside from that of the report.

Wisconsin.—Mr. Erickson: Mr. President: The current work of the Wisconsin Bureau of Labor, Census, and Industrial Statistics has been carried out mainly as outlined in my report to the last annual convention. A few changes were found advisable and one or two investigations have been added, but on the whole these are along the lines of the original plan. A part of the report is now in the hands of the printers, and the report when completed will contain the results of investigations relating to the condition of the farmer, the cost of producing most of the staple products, and the causes of low prices on same ; the relation of labor to cost of production, the earnings of capital, and the product and earnings per worker in about fifty industries in Wisconsin ; the earnings and cost of living of mechanics and workingmen, a comparative statement of the average yearly and daily wages and time in operation of all the industries in the state from 1888 to 1895, inclusive, and an extensive inquiry into the condition and workings of the building and loan associations in Wisconsin. We expect to have the report ready for distribution some time in October next.

Maryland.—Mr. Myers: Mr. President: In reference to the Maryland bureau, I will merely state that last year's work was somewhat supplementary to the preceding one and, in the hands of my predecessor, an able and intelligent worker, it was completed when I took hold of the office. The details of the

work I suppose you are familiar with, and it does not seem to be necessary for me to dwell upon it here.

My object in coming here was not to make a report on what I have been doing, but rather to "sit at the feet of the elders" and profit by their instruction. The proceedings here, from the able opening address of our presiding officer up to the present moment, have been an instructive as well as a practical lesson to me, and should I hear nothing more, I shall feel that I have been amply repaid for my journey to Albany.

As, some of you may recall, the governor of Maryland, in his inaugural address, stated that he wanted to have the demands of labor heard and heeded. As we know this was not a political platitude, because we had sufficiently tested our new governor's position towards labor in Maryland, by closely scrutinizing his conduct in his management of the different manufacturing establishments, mines, etc., in which he is interested, and in which he gives employment to a vast number of men. We had found that he was interested in his fellowman, be he millionaire or be he laborer.

Under these circumstances, the Federation of Labor of Maryland, after being informed by the then incoming administration, that it would be given recognition in matters pertaining to the industrial elements of the state, endorsed five men whom it thought worthy of the position of chief of the bureau of industrial statistics, and, fortunately for me, I was chosen. Whether it was fortunate for the state, depends solely upon my course, while an incumbent of the office, and fully realizing the responsibility, I shall do my utmost to represent faithfully the interests of my native state. My object, therefore, in coming here is to learn from you gentlemen of greater experience how best to perform the duties which devolve upon me, so that I may go back to Maryland better qualified than I have been heretofore to decide in connection with those who have the welfare of our people at heart, what will be the most useful and valuable work for our bureau to undertake. After I have decided upon a line of work I shall consult with those who have had experience in statistical work as to the best methods to pursue to obtain satisfactory results.

Our appropriation in Maryland is extremely limited. This is what we call an off-year in Maryland. When the legislature is in session, our report is printed under the general appropriation for printing; but during the off year we have to depend

upon our resources. We are allowed \$5,000, out of which must be paid the salaries and all incidental expenses. I believe the laborer is worthy of his hire, and hence I have made an effort to get an able assistant to aid me with the work of the bureau, and I am sure I have succeeded.

Maryland is noted for her many good things, and I shall strive very earnestly in my reports to bring to the attention of the outside capitalists, manufacturers and wage-earners the bountiful resources of our unsurpassed Commonwealth, its valuable geological formations, its great farming facilities, its splendid harbors and shipping, its fisheries, its great railroads (both steam and electric), and last but not least, its health-giving climate.

I appreciate the fact, that in many of the reports made here, particular attention has been given to the conditions and surroundings of the wage-earner throughout the country. This body may not be able to solve the problem of Capital *vs.* Labor, but it can go far towards the solution of the question by making strenuous efforts to promote arbitration, pending difficulties in our respective states, and to be just and to show no discrimination between employer and employé.

As I come from the ranks of the workingman, I believe I know the needs of the working classes. And so I hope, by the faithful conduct of my office, to help bring in closer unison those great bodies on which depends the welfare of the community, Capital and Labor. And if they are not in closer touch at the end of my term in the office, it will not be my fault, I will assure you.

Gentlemen, I thank you for your patience and consideration, and if Providence permits that we may meet again a year hence, I want to be able then to tell my experience as a "Statistical Gatherer" with the ease of you veterans, and the wisdom born of intimate acquaintance with the results of the brawn and brain of my fellow-workers. Representing a small state, still that state has as varied fields of labor and as wide a range of manufactures as any state in the Union. And when the various natural products of land and sea are added thereto, the conditions are such that the workingman may there find his ideal surroundings. With such environments, with such inducements, my task to interest the investor, the workman, the immigrant, is made easy. With these conditions my labor is increased, but it becomes only a labor of love. In the name of

my state, I invite you to come and see our ideal home for both labor and capital, and profit thereby.

Maine.—Mr. Matthews: Mr. President: The work of the bureau in Maine is of an extremely practical character. We have not the time nor the money at our disposal to enable us to indulge in theoretical matters. At the present time I am engaged in an investigation of certain special industries that have not been reported upon heretofore. One is our tannery industry, another is our starch industry, and another is the iron ship-building industry of the state. We have in Maine some sixty tanneries, and quite a number of them are large and important establishments. In the starch industry we have, in the single county of Aroostook, some fifty establishments, which use for that product about 2,500,000 bushels of potatoes. This potato starch is not used for laundry purposes nor for food, but is used for manufacturing purposes in our mills and factories. Our ship-building plant is at Bath, under the direction of General Hyde, who has acquired something of a national reputation as a government contractor. Those three industries are the special subjects of the present investigation. Beyond that, I propose during the season to investigate the general features of our manufacturing interests,—our woolen and cotton industries, etc. At the same time, I am very much interested in the question that it has been proposed to discuss at this convention. As I understand it, it is proposed to consider the matter of municipal ownership of water, gas, and electric-light plants, and how best to investigate that subject. It having been announced in my state that we propose to investigate that matter, I find that great interest is being taken in it. It is a difficult question, it seems to me, to investigate, and it should be judiciously treated. I start out with no theories. It is a mere matter of fact whether it is better that these branches of the service should be managed by the municipalities or by private companies. I have no theories whatever to advance, but I desire and hope that we can devise some way of getting at the facts in regard to this matter in a judicious manner, without being controlled and influenced in advance by any theories, and enter upon the investigation of the subject candidly, honestly, and fearlessly. I trust that I may obtain some information here as to how that should be done. The matters that we are consider-

ing in connection with the work of our bureau are all practical questions.

Our distinguished president made a suggestion to-day in regard to the work we accomplish with which the world is not familiar, and there has been some reference to employment agencies. I can say, personally, that there is hardly a day passes that I do not receive a letter from some one in my state, where I have quite an acquaintance among the working people, who wishes to obtain employment upon a railroad, in a granite quarry, or something of the kind, and I have been enabled, without any employment bureau, to secure work for many worthy men through my own personal efforts. This involves a good deal of labor outside of the ordinary work of the bureau. My feeling, gentlemen, is this, that we should make our bureaus a practical, useful, beneficial thing to the public. I have been connected with our bureau since 1887. I have had the honor and the privilege of participating with you in your deliberations. I have attended every convention held since my appointment, with the exception of the one in Minneapolis. I am sure that these bureaus accomplish an enormous amount of good for the people. We should make them practical, and we should avoid matters that are theoretical and accomplish nothing for the good of the people. Let us come right down to bare matters of fact. Let us deal with the people as they should be dealt with. Theory is a very good thing, if good common sense goes with it.

I trust I may be excused for making these additional comments upon the work.

In regard to our appropriation, I will say that our provision is \$7,000 for two years, that is, \$3,500 a year, and salaries and all other expenses are paid out of that, with the exception of the printing, postage, and so on, which are paid for out of the special appropriations. We have, then, for clerk hire and for the employment of special agents, some \$2,000.

Minnesota.—Mr. Powers: Mr. President: In reporting upon the current work of the Minnesota bureau, I will begin by reversing the order, and will state the amount of our appropriation and the purposes for which it is used. We have a total appropriation of \$12,200, besides printing. The printing includes all the stationery and office supplies of the bureau. This \$12,200



per annum pays the salaries and all incidental expenses, other than the printing and office supplies, but it involves the performance of duties of a double nature, not only statistical work such as is done by most of your bureaus, but likewise factory inspection, and not only factory inspection, but an oversight and inspection of railroad tracks and the enforcement of quite a wide range of laws that are not entrusted to the average factory inspection department of most of our states. We have three factory inspectors, who, with their expenses, take out not far from \$5,500, leaving something less than \$7,000 per annum to pay the salaries and incidental expenses that are connected with the work of statistics, which is here represented.

In our statistical work we are carrying on at the present time two leading series of investigations. The one which is most nearly completed relates largely to the prices of agricultural products and live stock in the United States. The problem which we set before ourselves in this investigation may be briefly stated as follows: There are two great factors that have operated in the world in affecting prices. Down to a time preceding this century, or about a century ago, outside of the temporary causes such as changing crops, varying supply and demand, etc., there had been but one great cause affecting prices, and that was the various fluctuations in the medium of exchange. In this century we have the changes that have come with invention,—the changes in methods of production and transportation. As the summing up of all these results and the workings of these two great forces in this generation, there can be no question, according to all other investigations, that there has been a decline in average prices, or, in other words, an appreciation of gold. So far as I know, there have been no investigations that have sought to separate these two factors, the one which was the distinguishing characteristic of all past centuries and the one which is the distinguishing characteristic of this,—currency or invention changes. This investigation which we are carrying on seeks to separate, so far as it is possible, these two forces, first, by taking out from the problem the amount of these price variations that are due to invention, if you may use that term to sum up all the fluctuations that come from various local causes, and other forces that are changing with to-day, apart from that which comes with the currency, and thus leave, so far as it is practicable from a purely statistical point of view, the changes that can properly

be charged to a change in the supply of the currency operating in the United States. I have sought, in conducting this investigation, to bring out all possible facts that might bear upon this question, to make every possible tabulation that will throw any light upon this question, from any standpoint. I have made not only those which have been suggested to my own mind by my study, but I have appealed to differing minds, students of economics representing the divergent schools of thought, in regard to suggestions concerning how to tabulate the data at command so as to bring out any thought or any principle that has been operating to affect prices. I shall have this present week in Boston a meeting with a number of distinguished economists, some of them representing the school of scientific bimetallism, and some representing monometallism, with a view of discussing the methods involved in this investigation. The object is simply so to treat the facts, if possible, as to bring out all that is in them that may throw light upon each possible trend of prices as they are affected by the invention of our day and by the possible effect of the changing supply of precious metals in the present generation and the use of those metals and the changing currencies of the world.

The second investigation which we are carrying on relates to taxation and the relative burden of taxation in the several counties and cities of the state. In connection with this we tabulate every real estate transfer made in the year 1895 in every county in the state. We also tabulate every mortgage foreclosure in the state, and for a portion of the state we shall also tabulate every mortgage recorded, and from these three tabulations we seek, by varying calculations, to determine the relative burden of taxation in the several counties of the state. We shall ascertain the amount of assessment and the taxes for each piece of property represented in the three tabulations mentioned. For the lands sold by warranty deeds we shall ascertain the percentage which the assessed value bears to the selling price shown in the deeds. In the case of the lands mortgaged we shall obtain this percentage indirectly as follows: We shall take what the real estate men or the loan agents say is the relative amount of money that they would place as a loan upon the real estate. It is said in Minneapolis, for example, that the loan agents calculate to place a loan on mortgage of 40 per cent. of what the real estate man states to be the actual value of the property. As showing

how close two calculations, the one from warranty deeds and the other from mortgages may agree, I will say that we find from the tabulation of several thousand distinct real estate transfers that the taxation, as assessed by the assessors, equalized, is 50 per cent. of the actual selling value, while if we allow 40 per cent. to represent the amount of property or value that is covered by the mortgage, we realize 52 per cent. The two wholly different investigations thus practically agree in showing that for Minneapolis the assessed value of real estate is about 50 per cent. of its selling value. We also follow up these two lines of investigation by a third—that by means of our tabulation of mortgage foreclosures. This shows the relative value at forced sale of a large amount of real estate. By it we reach parallel conclusions. This investigation shows that the burden of taxation in Minnesota is far larger in the cities,—larger in St. Paul than in Minneapolis, and larger in both cities than in the country. It shows further that which may surprise some others, that there is far more of dishonesty in taxation in the country than in the city; thus, in one of our counties we find that over one-third of the pieces of land sold were never on the tax list, and that there has been in that county, and some others, a concerted effort on the part of large numbers of persons to keep down the amount of land that is assessed, as well as to reduce the rate of assessment in those counties as compared with other counties. There are many other such facts that are being disclosed, although we have carried this investigation over only a portion of the state. We expect, however, to cover the whole state with this data,—the transfers of real estate by warrantee deeds, the real estate mortgages, and mortgage foreclosures.

I might mention in this connection, although it in part comes under our factory inspection work, one class of work that we have been doing. Since I have been in the Minnesota bureau I have striven in all possible ways to make the bureau of practical use to the people along the line that has been pointed out by our friend from Maine (Mr. Matthews). One of the duties which we have had to perform in connection with factory inspection during the past year is the enforcement of a child labor law. There had been a compulsory education act upon the statute books of Minnesota for ten years, but that law had been an absolute dead letter. The educational authorities and all others concerned had felt that it was an absolute impossibility

to enforce it. We are making an inquiry to see whether that law, as it stands, is enforceable, and if not enforceable, in what respects the statutes of Minnesota need to be amended in order to make that law a practical force, and I am inclined to believe that we shall demonstrate to the educational authorities of the state of Minnesota, with whom we are co-operating and who we have got to co-operate with us in the larger towns, that the law as it is and has stood for ten years need not be a dead letter, if they will only take hold of it with a spirit that involves tact and good judgment and a regard for the rights of others so far as it involves the question of religion, which has been a perplexing question in many of our western states touching compulsory education. I believe that this law and the child labor law can be made, what they have not heretofore been in more than a very few states, a factor for the uplifting of our people.

I think this constitutes a fair resumé of our work so far as it touches the work of statistics. Although we have in our factory inspection work more or less of statistics, I have covered all that can properly be considered here.

Mr. Schilling: I would like to ask the commissioner from Minnesota whether he considers it an advantage to the statistical branch of his bureau to have the factory inspection department connected with his office; in other words, is it not a seeming advantage to the statistical department to have the other department as a part of the bureau? I would also like to inquire whether the assessors in Minnesota, in making up their field-books, assess the land values separate from the improvement values.

Mr. Powers: To answer the last question first, the law requires the assessors to assess the buildings and other improvements separate from the land itself, and in tabulating the results we shall separate all the sales of lands upon which there is no record of assessment of improvements from those on which there are improvements. I will state here, however, that I do not look upon this possible tabulation as having any great amount of value. It will be of some value in such counties as Hennepin and Ramsey, in which the cities of Minneapolis and St. Paul are situated, where there is, as I believe, a tolerably honest and fair taxation along the letter of the law; but there are counties which we have already traversed, in which we have learned that there is a large amount of land that has been improved, but which appears on the tax books as unimproved.

Thus, in one county a man who was acting as our agent, and who was familiar with the affairs of that county, found the record of the sale of a farm for \$12,500,—a farm which he knew had upon it improvements aggregating \$5,000,—for which the assessor's book does not show one dollar of improvements. Under these circumstances, while we separate those lands which, according to the record, are unimproved from those which are improved, I may say in advance, what I shall be forced to say in the report, that this portion of the report cannot be considered of any very great value, owing to the fact that in so many counties that part of the law is wilfully violated. Of course our agents are instructed to make inquiry in each and every county as to how far there is an observance of the law, and whether the transcript of the assessors' books is a transcript of fact or not. I am sorry to say that in many counties it is not a statement of fact. Of course if the data which we collect along that line is not reliable our conclusions cannot be worth very much, as far as that point goes.

Concerning the first question, that relating to the use of our factory inspectors in gathering statistics, I hardly know what to say. I have felt from the first that it was a dangerous experiment to combine factory inspection with statistical work. The theory of factory inspection involves the enforcement of penalties, and the enforcement of penalties means oftentimes ill-will. Our statistics, so far as manufacturers and private firms are concerned, cannot be worth anything, in my opinion, if they are gathered under compulsion. To be valuable, they must be the result of earnest co-operation on the part of those who furnish them. My experience in statistical work leads me irresistibly to this conclusion. I have accomplished much, however, through our factory inspectors, but in order to do so I have kept the moral force to the front, and not the legal force, which has been and must be the general rule in factory inspection. I have been able to do this, as but few factory inspectors can, for this reason: I began the work of the bureau at a time when the problem of factory inspection was before the state. The state legislature had refused to pass a factory inspection law. I instructed my men, in gathering data in regard to the benefits of factory inspection, to recommend safety devices in the various factories of the state. I sought to organize the moral forces of the community, in connection with the bureau, in favor of the adoption of those safety devices, and I

believe that I was able, as the result of that effort, in two years, without any law requiring the adoption of such devices, but by organizing moral forces, to get as many safety devices introduced as were ever introduced during the first two years through the operation of any factory inspection law in the country. That gave me and the bureau a moral advantage in the community which passed the factory inspection bill at the next session of the legislature without a dissenting vote, exactly as I prepared it, and made, on the one hand, all the manufacturers of the state say, "We will submit to factory inspection provided it comes under the Bureau of Labor," and it made the laboring people of the state, on the other hand, say substantially the same thing; so while my own opinion was against having factory inspection placed under the bureau, it stood in this shape, that all the manufacturers of the state and all the organized labor of the state would support a bill that brought factory inspection into the bureau, but both forces would fight the creation of an independent department. We therefore consented to have that work placed in our bureau, and in order to avoid the friction between two rival and seemingly contradictory forces, I have in the one line sought continuously to depend upon the moral forces of the community that could be organized, rather than upon legal compulsion, and I believe I have avoided in a large degree the friction I had anticipated, and have been able to secure certain advantages. I still question whether we can continue in the future to secure along all lines the development and extension of the laws for the protection of the working people that must come from the work of a factory inspection department, and yet be left free to take up all phases of statistical investigation that ought to be treated in our statistical work.

Mr. Wadlin: I would like to ask Mr. Powers whether he means by the term, "improved land," simply land having buildings upon it, or whether he applies the term also to land without buildings, but otherwise improved in the ordinary sense.

Mr. Powers: In the contemplation of the law, the word "improvements" means fences and buildings, and that is what the assessors understand by the term.

Mr. Wadlin: My object in asking the question was to bring out that point. Of course the term "improvements" may have a wider significance than that, and it seems to me, especially in

the consideration of systems of taxation which shall bear upon land with improvements or upon land without improvements, that there ought to be a wise discrimination in the use of such terms so that there may be no misunderstanding as to what is meant.

I want to add a word in hearty indorsement of what Mr. Powers has said as to combining the functions of a statistical bureau with those of factory inspection. My observation, of course, is confined to my own state largely, where we have a very efficient force of inspectors, perhaps as well organized as in any state in the country. I am fully convinced that both departments do better work along separate lines than could possibly be achieved if they were combined. The two functions are not identical, as Mr. Powers has very well said. One has to do with the enforcement of law, which sometimes involves controversy, and the other is confined to inquiries into economic conditions,—inquiries about which there ought not to be any controversy. By separating these functions excellent results have been achieved in Massachusetts. The establishment of our inspection department was largely due to the investigation of industrial questions by the statistical department. Hardly any of the laws whose enforcement is in charge of the inspection department would have been enacted originally if it had not been for such investigations previously. Since the original enactments, however, the legislature has constantly extended the scope of factory inspection, with a view to improving the law and providing for its better enforcement. When we take up an investigation of social conditions which involves entrance upon a new field, the results of which may finally be embodied in legislation, I think such preliminary investigation can be more successfully conducted by a department that has nothing to do with the enforcement of law. It is much wiser, generally speaking, to keep the two functions separate. Of course, if the two departments are combined, the factory inspectors, if the equipment of the statistical department is limited, can be of some assistance in collecting information along certain lines; but if the inspectors visit a factory and ask questions touching the private interests of the establishment, and the proprietors fear that the same officers may possibly use the answers in the enforcement of law, I do not believe that information would be easily obtained or would be of much value. I think that Mr. Powers is entirely right in his general view upon the subject.



Mr. Powers: I might say, Mr. President, that I have been deterred from undertaking certain lines of statistical investigation because I wished to avoid the conflict which might possibly arise on account of the double functions devolving upon us under our present organization. I have felt that during this stage when the two branches of work are together there is but one way to avoid trouble, and that is by confining our statistical studies, so far as practicable, to questions that would not raise controversy. Our investigation in regard to prices does not touch the subject of factory inspection at all, and the same thing may be said of our investigation of taxation. By confining our work to separate, independent subjects, that do not trench upon the interests of those to whom we are occasionally obliged to say harsh things, we avoid all possible friction, and I confess that at the present time I would not dare to undertake certain lines of investigation that I believe are fraught with the promise of great results,—investigations that my friend Wadlin could undertake and carry forward with great success, but in which I could not hope to obtain anywhere near the measure of success in Minnesota that he could in Massachusetts, simply because the conditions which prevail in Minnesota are less favorable than those in Massachusetts.

The President: I would like to inquire, Mr. Powers, what you mean by "actual value" of land.

Mr. Schilling: While Mr. Powers is answering that question, I would be glad to have him give me some information along the same line.

The President: What is your question, Mr. Schilling?

Mr. Schilling: I wish to know whether Mr. Powers, in his investigation, has discovered that the assessors are in the habit of assessing land values separately from improvement values. In the reply he made to my question a few minutes ago he did not seem to comprehend the full force of my inquiry. I asked the question for the purpose of learning the common practice of the assessors in his state. For instance, in the cities of Minneapolis and St. Paul the greater part of the property is improved. Now the question arises, does the assessor, when he goes into those improved communities with his field-book, note down in one column that the land of a certain piece of property is worth, say \$10,000, and the improvements \$5,000; in other words, does he separate in his field-book the land values and the improvement values by using three columns, placing the assessed



value of the land in one column, the assessed value of the improvements in another column, and then make a total of those values in the third column? I ask this question because, in our investigation in Illinois, we discovered that, in the city of Chicago, the assessors separate in their field-books, land values from improvement values, and the practice has always been to assess land values at less than improvement values; that is to say, an assessor would come along and find a certain piece of property worth \$4,000, of which the lot was valued at \$3,000, and the building at \$1,000. Now he would assess the land at about 7 per cent. of the total value, and the improvement value at about 12 or 14 per cent. of the total value. This practice has been uniformly applied between the rich and poor, and when one first considers the matter it seems perfectly innocent and equitable, as long as the same system is applied to all classes alike; but a careful examination will show that it results in great discrimination against property holders whose improvement value exceeds the land value. That is the reason I asked the question.

Mr. Powers: I will state the law again, as it seems I did not make myself clear. The law requires the assessor to assess the full value, both of the land and of the improvements. These are to be stated and entered upon the books separately, the land at its full value and the buildings, etc., at their full value, and then the amounts are carried out and totalled. Where there is an honest assessment, and I believe there is an honest effort in most counties to this end, the buildings and other improvements, including fences, etc., and the land are entered at the same proportional rate. In some counties there is undoubtedly an attempt made to decrease the relative burden of taxation from what it should be in those particular counties, and wherever there is that effort they make use of this law in regard to buildings and improvements as one of the main instrumentalities for accomplishing their dishonest purpose; for example, if the real estate in a particular county was worth \$1,000,000 and the improvements were worth \$500,000, they would doubtless enter the land at \$1,000,000 (I am now giving relative figures) and the improvements at \$100,000, for the reason that the reduction, if placed on the improvements, would be less liable to detection than it would be if placed on the land. So while the law requires that there shall be carried out in tabular form—first, the value of the land apart

from improvements ; second, the value of the improvements (buildings, fences, etc.) ; and third, the total value ; and while this is done in certain counties honestly and with as much accuracy as faithful, careful assessors can do it, in other counties it is not done.

In regard to the term, "actual value," I will confess that it has been very perplexing in this investigation, as well as in all others of a similar nature that we have undertaken, to arrive at what is meant by "actual value" as contemplated by the law. The general interpretation is that value which the property would sell for under an ordinary sale,—not a forced sale, but an ordinary sale, under favorable conditions, and yet not under "boom" conditions. How to ascertain that actual value is a difficult problem. If we ascertain it by means of the real estate sales recorded, provided the amount stated in the deed expressed the actual consideration, they would doubtless show something above the actual value in normal times, and if there is a large number of mortgage foreclosures, they would represent forced sales, giving us something below that average which is contemplated by the law-makers in fixing the assessment system. So we take these two lines of investigation, the one expressing the actual real estate sales by warrantee deeds, and the other by mortgage foreclosures, one leading us to a conclusion one side of this line, and the other to the other side. It is only in this way that we can hope to get something like an approximation of what the law contemplated in directing the assessment to be made at the actual value. Of course I have defined merely what I understand to be the meaning of the law-makers in the use of the phrase, "actual value."

Mr. Morse: I should like to ask the commissioner from Minnesota a question. I understood him to say that a larger percentage of property was left off the books in the country than in the cities, and that remark would lead to the natural inference that some property is left off in the cities. I would like to inquire whether he has taken note of the amount of property left off.

Mr. Powers: We tabulate that which we find in every county. We cannot ascertain in every county or in every city the amount that is left off the books. We can only approximate it in this way: If we find a mortgage foreclosure or a sale by transfer under warrantee deed, and we do not find that par-

ticular piece of property taxed, then we look up two questions : first, Is this a sale of a piece of land that is in any way properly exempt by law ? There are sales of land, such as church property, that are exempt from taxation, and then there are a larger amount of sales of land from the United States government, which, until the government makes a deed, is exempt from taxation. All of those sales will be tabulated by themselves. Then there will be left only those pieces of land that ought to have been on the tax list, but were not, owing either to an error of the assessor or to fraud of some kind. We shall tabulate all of those. One set of tabulations will show the pieces of land that have been sold during the time under consideration by warrant deed from the government of the United States, and which of course had not been on the tax list because exempt, the sales of church property, the sale of school lands, and all such lands that are exempt by law, and under the other tabulations comes the other class of property that ought to be on the tax list but is not.

Mr. Morse : Of course I do not know very well the tax laws of Minnesota, but as I understand it, in all of the western states the government surveys the land into townships of thirty-six sections, each section being one mile square and containing 640 acres. That makes in round numbers about 23,000 acres in a township. Now I am sure, so far as Michigan is concerned, that if an assessor left off very many pieces of property in a township, he would get into trouble right away with the people who were assessed, and furthermore, I believe he would be hauled up short for vitiating the tax roll. The point I wish to bring out is whether Commissioner Powers is certain whether the omissions to which he has referred occurred through the wilful negligence of the assessors or whether they were the result of accident. It certainly seems to me that if there are many omissions they are not the result of accident.

Mr. Powers : There are some counties in Minnesota that have 25,000 acres less on the rolls than were returned twenty years ago. That may give you some idea of the extent of the omissions.

Mr. Horne : I would like to inquire of Commissioner Powers whether there is a penalty attached to the non-performance of duty by an assessor in Minnesota.

Mr. Powers : There is a penalty in Minnesota, as I presume there is in all other states.

Mr. Morse: I would like to ask the gentleman from Minnesota one more question, and that is whether his observation leads him to believe that more real estate escapes taxation in the country than is the case with regard to personal property in our cities and villages. Now I have no hesitation in making the assertion, without knowing the figures, that there is in this city of Albany at least \$50,000,000 worth of personal property that goes clear of taxation. My theory of taxation is that it is the property of a township or city or county or state, no matter whether it is real or personal, that should bear the burden of taxation; but my observation is that where the people in the country escape taxation in any degree, the people in the cities see them and go them several better in that respect.

Mr. Powers: I think our friend from Michigan is raising a point that he ought not to raise as a statistician. We are not privileged, as statisticians, to answer questions that we have not investigated, and that we have no means of investigating. If the commissioner from Michigan can give me a suggestion as to how to investigate the subject and get an answer to the question he raises, I promise him that I shall be only too glad to follow that suggestion and endeavor to give an answer to his inquiry. I cannot here give any answer to his question, because I confess my absolute inability to formulate a plan for obtaining definite information relating to that subject. I would say, in behalf of the people of Minnesota, that the commissioner from Michigan will confer a favor, not alone upon the people of Minnesota, but upon the commissioner from that state, if he will give us a suggestion that will lead to a practical investigation along the line of his inquiry. Until we receive such a suggestion we must be content to confine ourselves to the investigation we have attempted, the question of real estate taxation.

Mr. Matthews: I dislike to trespass upon the time of this convention, but this question of taxation is such an interesting one that I cannot refrain from briefly stating the condition in the state of Maine. We have three kinds of taxes,—our state tax, our county tax, and our town tax. Our state tax amounts to about 2.25 mills upon the dollar of valuation, so that a farm worth \$2,000 would pay \$4.50 to the state. In the towns the tax depends upon the indebtedness of the towns. If they are extravagant and put up a town house, or run in debt for any other purpose, then the town taxes are increased accordingly;

so the result is that while the state tax amounts to very little, the local or town tax may be burdensome, but in all cases where the tax rate is burdensome it is because the people of the towns have brought the condition upon themselves. While our law requires that the valuation of property shall be at the full cash value, until within two or three years, when we changed our system from the ten-year valuation to a perpetual board, which we have in session all the time, the rate varied, and it would be one-quarter, one-half, or two-thirds of the equitable valuation of the property. We have a state mill tax for school purposes, which is assessed upon the valuation of the property, and our wealthier places, such as Portland, Bangor, and other cities, are assessed and pay to 230 towns (we have about 520 towns, cities and plantations) more for the support of their schools than they receive from those towns in state taxes; so that practically the property of the state is assessed for the benefit of the poorer portions of the state in the support of their schools. What I mean, and hope I make myself clear, is this: That when the state taxes are paid by these 230 towns, instead of a balance coming from them, there is a balance going to those towns for the support of their schools, which balance is paid by the wealthier sections of the state. We do not feel in Maine that our wealthy towns or capitalists are disposed to do anything out of the way, because they are supporting the poorer sections of the state, and on several occasions, in speaking in political campaigns, I have stated to my hearers, as I repeat here, that we have 230 towns in our state which actually receive more from the wealthier sections of the state, through this mill tax for the support of their schools, than they pay into the state treasury.

Tennessee.—Mr. Clute: Mr. President and Gentlemen of the Convention: The work of the Bureau of Labor Statistics and Mines of Tennessee is a little different from that of the bureaus of other states. Our bureau was organized in 1891, and I am the third commissioner, having been in office a little over one year. The work consists principally of factory and mine inspection, the mine inspection alone taking the entire time of the commissioner. What labor statistics we gather, are collected chiefly by the clerk of the bureau. Owing to our limited ap-

propriation for expenses, which amounts to but \$1,000 a year, we are able to do very little work in that line.

I have taken considerable interest in the question of child labor in our state, and have succeeded in driving them from the mines. According to the act of 1893 of our state it is unlawful to employ children under 12 years of age, and I have recently commenced warfare on the factories employing children, through correspondence with persons in the towns. I ascertain the presence of children in the factories in this way, and turn this information over to the attorney general of the district.

When I entered the office the entire press of the state was opposed to it, and the bureau came very near being abolished by the last legislature, coming within two votes of it in the house committee. As I state, the press of the state was against it, and a great many of our leading men were against it, holding that it was a useless expense ; but since the appearance of my report, the fifth annual report of the bureau, I am pleased to say that the principal papers of the state have taken up the fight for the bureau. Many articles are now appearing in the daily press, which are leading the people up to a better view of our work, and I hope to secure an increase of appropriation at the next session of the legislature.

Our factory inspection laws are very limited in their scope, and not at all what they should be. I shall endeavor to have a law enacted by the next legislature that will cover factory inspection and at the same time change our mining law so that it shall be similar to that of Pennsylvania. Work in some of our mines is extremely hazardous, as there is considerable fire-damp in some of them.

Until we get a larger appropriation but little can be done in the collection of statistics of labor in our state. You will observe that the greater portion of my fifth annual report is devoted to the mineral industries of the state and to mine inspection. I think the work this year will be in the same direction, with the exception of the work which I have undertaken in regard to child labor, and to which I have already referred. Our legislature meets in January, 1897, at which time I hope to secure a larger appropriation and more assistance.

Mr. Dewey : What is the minimum age at which children are allowed to work in your factories?

Mr. Clute : The age limit is 12 years. That is fixed by the law of 1893. As the bill was originally introduced in the senate

the age was placed at 14, but by amendment it was reduced to 12. I shall use every effort at the next session of the legislature to have it raised to 16 years in the mines and 14 years in the factories.

In regard to our appropriation, I would state that we are allowed \$4,000 a year, which covers salaries and expenses. That includes all of our printing except for the years when the legislature is in session, when the printing is done under a general appropriation.

I have been very much interested in this convention and have been greatly profited by listening to the reports of the various commissioners in reference to the course pursued in their bureaus. The work is new to me, but I am very much interested in it. There are many lines of investigation that I would like to pursue provided I had the assistance and the appropriation to do so.

Montana.—The Secretary read the following report from the Commissioner of the Montana Bureau of Agriculture, Labor and Industry :

The law makes this the immigration bureau of the state. It is also the bureau of statistics, and in 1895 a free public employment office was established and placed under its supervision. Much of the regular work is necessarily devoted to these matters.

The current work in progress covers the industrial and productive statistics of the state including wages, cost of living, employment and unemployment, and conditions of wage earners in the several avocations; also railroad traffic and wages, market rates of agricultural products in its several counties, consumption of domestic and imported farm products, etc. In the latter half of 1895 special investigations were made on a number of subjects as occasion demonstrated the desirability thereof and the same course will be pursued this year. Owing to the vast area of the state and limited funds to work with,—the appropriation for the expenses of the bureau outside of salaries being \$1,500,—nearly all inquiries except those as to agricultural and stock growing have, necessarily, been conducted by mail. The precious metal productions are collected by officers and agents of the United States mint.

I trust you will have an enjoyable and valuable meeting of the Association at Albany, and regret that I cannot participate with you.

Missouri.—Mr. Meriwether: Mr. President. The current work of the Missouri Labor Bureau consists of the franchise and taxation investigation which was planned last year, and I believe was outlined by me at the Minneapolis convention. This investigation is in addition to the usual routine work of the inspection of factories and securing manufacturing statistics which the law provides must be done from year to year.

I believe our special investigations have proved of more value than was at first anticipated; for instance, it may be fairly claimed that the statistics collected on the subject of taxation aided very materially in preventing Missouri from taking an unwise and expensive step. The great tornado, which caused such disaster to St. Louis a few weeks ago, produced a panic in the minds of some who ordinarily are conservative, and caused a demand among a large number of people for a special session of the legislature for the purpose of submitting to the people at the November election a constitutional amendment permitting a higher rate of taxation to be imposed upon taxpayers than the constitution now permits, with a view of subsequently levying this higher tax for the benefit of the thousands of tornado sufferers.

An extra session of the legislature costs from sixty to eighty thousand dollars and the relief such an extra session would bring the people would be both remote and uncertain. While this demand was being made for an extra session the labor bureau's facts regarding taxation were made public, and when it conclusively appeared from those facts that there was absolutely no need of increasing the tax rate if the assessors would only cease their gross undervaluation of property, the demand for the extra session abated and was finally abandoned.

The press of St. Louis made public some of the instances collected by the bureau. For example—a house and lot which was sold on the first of May for \$10,000 was assessed thirty days later at only \$1,100; an office building sold for \$337,000 was assessed at only \$125,000. In the face of such instances as these it was not difficult for the people to see that the true remedy lay in using more common sense in making assessments.



rather than in extra sessions and constitutional amendments with higher rates of taxation.

The investigation of street railway franchises has disclosed the fact that there is even greater undervaluation in assessing franchise values than in assessing values of other forms of property. On every hundred dollars of true value the ordinary citizen is assessed at the rate of \$50.40; whereas on every hundred dollars of true value the street railway corporation is assessed only \$11.17.

Another special investigation made by the bureau during the present year shows the movement of farm mortgages since 1890. In one or two counties in Missouri the number and amount of farm mortgages has been found to be less now than in 1890, but in the great majority of the counties the farm mortgage indebtedness of 1895 is some 10 per cent. greater than that of 1890.

The bureau has also prepared a special report showing the resources of Missouri's 114 counties. This special report is intended to answer the inquiries constantly being made by parties intending to settle in Missouri, and who desire before doing so to receive information as to what portions of the state are best adapted to the particular occupations in which they wish to engage. This work may be considered more properly belonging to the functions of the immigration bureau, but as our state has no immigration bureau, and as the demand for this information was large, the work was undertaken by the labor department.

Nebraska.—The Secretary read the following report on current work from the Deputy Commissioner of the Bureau of Industrial Statistics of Nebraska :

It will be impracticable for me to attend the Albany meeting. The work I have undertaken this term may be summarized as follows :

First.—A brief presentation of the condition of the wage-workers in the state.

Second.—A presentation, as far as possible, of the industries of the state as they now exist.

Third.—A description of the natural features of each county by congressional townships; showing the quality and lay of the land, the water supply, etc., and also a general description of

the improvements and productions; and this accompanied by a carefully drawn outline map of each county.

Fourth.—Recommendation of such new enterprises and improvements of existing industries as seem advantageous to the prosperity of the state.

The Secretary: The commissioner from Tennessee, Mr. Clute, has handed to me a number of communications from various organizations, commercial bodies, etc., of Nashville, inviting this association to hold its next annual convention in that city.

The President: They can be read and referred to the Committee on the Selection of a Place of Meeting, of which you are chairman.

The Secretary: The letters are as follows:

STATE OF TENNESSEE,  
EXECUTIVE CHAMBER,  
NASHVILLE.

NASHVILLE, Tenn., June 18, 1896.

CARROLL D. WRIGHT, Pres.,  
National Convention, Bureaus of Labor and Kindred Offices,  
Albany, N. Y.

Gentlemen:

Permit me, on behalf of the state of Tennessee, to invite you to hold your next convention in the city of Nashville. The state of Tennessee will celebrate the one hundreth anniversary of its admission into the Union by holding a grand exposition in the city of Nashville during the spring, summer and fall of 1897.

Our people are making elaborate preparations to receive and entertain all visiting associations, and it is the desire of the people of the state, expressed through me, that the members of your association give us the pleasure of your presence at some time during the continuance of the exposition.

Yours respectfully,

P. TURNEY, *Governor.*

CITY OF NASHVILLE,  
OFFICE OF THE MAYOR.

NASHVILLE, Tenn., June 18, 1896.

CARROLL D. WRIGHT, Pres.,

National Convention, Bureaus of Labor and Kindred Offices,  
Albany, N. Y.

Gentlemen :

I take pleasure in endorsing the invitation extended by the Chamber of Commerce to your honorable body to hold your next annual convention in this city during our centennial year. We will see that you receive a most cordial, hearty greeting, and that your stay shall not only be pleasant, but profitable to each of you.

Yours respectfully,

WM. M. MCCARTHY, *Mayor*.

BOARD OF PUBLIC WORKS AND AFFAIRS,

NASHVILLE, Tenn., June 18, 1896.

CARROLL D. WRIGHT, Pres.,

National Convention, Bureaus of Labor and Kindred Offices,  
Albany, N. Y.

Gentlemen :

The Board of Public Works and Affairs, of Nashville, Tenn., joins with His Honor, the Mayor, and others, in extending a most cordial invitation to your association to meet in Nashville in 1897.

Respectfully,

BOARD OF PUBLIC WORKS AND AFFAIRS,

Per GEO. W. STAINBACK,

*Chairman.*

TENNESSEE CENTENNIAL EXPOSITION CO.,

NASHVILLE, Tenn., June 18, 1896.

CARROLL D. WRIGHT, Pres.,

National Convention, Bureaus of Labor and Kindred Offices,  
Albany, N. Y.

Dear Sir :

As representatives of the daily press of Nashville, we join most cordially in inviting your association to hold its next meet-

ing in this city. We will gladly publish all proceedings of your meetings, and will extend such other courtesies as are usually due from the press on such occasions.

THE AMERICAN,

By JNO. C. BURCH.

THE BANNER,

By E. M. FOSTER.

THE SUN,

By A. L. ROWE.

CHAMBER OF COMMERCE,

NASHVILLE, Tenn., June 18, 1896.

CARROLL D. WRIGHT, Pres.,

National Convention, Bureaus of Labor and Kindred Offices,  
Albany, N. Y.

Gentlemen :

The Chamber of Commerce of Nashville, Tenn., together with other official bodies of this city, beg very respectfully to tender herewith a most cordial and pressing invitation for your association to hold its annual convention of 1897 in the city of Nashville during the pendency of our Tennessee Centennial Exposition, opening May 1, 1897, and continuing six months.

We can assure you a most hearty and cordial welcome, and will use all possible means to make your stay among us pleasant, and we feel sure that the recollections of your visit to Tennessee will be a matter of pleasure both to yourselves and the people of our city.

The many attractions and inducements that our state and city have to offer for the meeting here of the different organizations of the country in our centennial year, 1897, are set forth in part in the accompanying circular. Side trips to any and all points of interest, the many battle-fields, Hermitage, Lookout Mountain, celebrated stock farms, etc., etc., can be made in a few hours ride at greatly reduced rates. Many of the principal points can be reached without charge.

Trusting to have the presence of your association in our city next year, we remain,

Very respectfully,

NASHVILLE CHAMBER OF COMMERCE,

By A. J. HARRIS, *President*.

A. W. WILLIS, *Secretary*.

## TENNESSEE CENTENNIAL,

NASHVILLE, Tenn.

Gentlemen :

The Tennessee Centennial joins most heartily in the accompanying invitations, and will be greatly pleased to have you visit our beautiful city in 1897.

We propose to hold one of the grandest industrial expositions ever witnessed in this country for the purpose of celebrating the one hundredth anniversary of the admission of the state of Tennessee into the Federal Union.

On account of the many conventions to assemble in Nashville next year, we will be able to secure for you a very low transportation rate, and will have the necessary convention hall in which to hold your meetings furnished gratuitously.

We will also take pleasure in arranging excursions at greatly reduced rates, should you desire to visit Lookout Mountain, Mammoth Cave, and other noted places in this vicinity.

We deem it proper to state to you, however, that owing to the large number of associations which will visit us in 1897, we cannot arrange for the entire management of entertainments, programs, etc., prepared for the different conventions, but will aid your local committees all in our power, and have organized a special department for that purpose.

Trusting that you may decide to come to see us, we remain,

Yours very truly,

TENNESSEE CENTENNIAL,

By E. C. LEWIS,

*Director-General.*

CITY OF NASHVILLE,  
OFFICE OF THE MAYOR.

NASHVILLE, Tenn., June 18, 1896.

CARROLL D. WRIGHT, Pres.,

National Convention, Bureaus of Labor and Kindred Offices,  
Albany, N. Y.

Gentlemen :

The City Council of Nashville, Tenn., begs most heartily to unite in extending a most cordial invitation to your association to hold its annual convention in Nashville during our centennial year, 1897. We will receive you with open arms.

Respectfully,

NASHVILLE CITY COUNCIL,

By H. S. WILLIAMS,

*Pres't.*

Mr. Clute: Mr. President and Gentlemen of the Convention: I earnestly urge that you select Nashville as the place for holding your next annual convention. I have several reasons for extending this invitation to you. The chief one is a desire on my part to see a bureau of labor statistics established in every Southern state. The representatives of some of the leading labor organizations of the South will be in Nashville during the centennial exposition next year, and they would no doubt attend your meetings and thus be impressed with the importance of the work that is being done by our various state bureaus. In this way you can do much toward creating a public sentiment in favor of the establishment of similar offices in the Southern states. It would also give those of you who are interested in the South and its products a splendid opportunity to study our resources. The exposition will probably be similar to the one held at Atlanta last year, which was so largely attended by people from all sections of the country, but we are in hopes to give it a wider scope than characterized the Atlanta exposition, by giving more attention to our manufactures and our mineral products, especially the latter. At the same time all the labor-saving devices of the day will be shown, and several labor congresses will be held during the summer. I can have the date of our convention fixed so that we will meet at about the same time the labor congresses hold their sessions, and thus add to the interest of our work. I sincerely hope the association may decide in favor of holding its next convention in Nashville, and I assure you that if you come South next year you will be made welcome.

The convention adjourned to meet at 10 o'clock A. M., June 24.

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## SECOND DAY.

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The convention met, pursuant to adjournment, in the Assembly room of the State Capitol, with President Wright in the chair.

The Secretary-Treasurer submitted his report for the past year, which is as follows:

To the National Association of Officials of Bureaus of Labor Statistics and Kindred Offices in the United States :

The undersigned Secretary-Treasurer of your association herewith submits his report of receipts and expenditures for the official year ending with the convention :

## RECEIPTS.

Amount on hand at beginning of the year.....	\$ 0.34	
Amount received from sale of proceedings of the eleventh convention (1,290 copies).....	219.30	
Amount received as dues from various offices.....	90.00	
Return payments for expressage, etc.....	21.12	
Total.....		\$339.42

## EXPENDITURES.

To printing proceedings of eleventh convention, ....	\$222.93	
To paid for express charges.....	21.12	
To stenographer's bill.....	50.86	
To amount paid for typewriting.....	15.00	
To printing programmes.....	8.50	
Expended for postage.....	12.00	
Total.....		\$330.41

Respectfully submitted,

L. G. POWERS,

*Secretary-Treasurer.*

The report of the Secretary-Treasurer was referred to an Auditing Committee of three, consisting of Messrs. Thompson, of Indiana ; Clark, of Pennsylvania ; and Myers, of Maryland ; who reported in favor of the adoption of the report, and it was thereupon duly adopted.

Mr. Morse : Mr. President : I want to tender to the association an invitation to hold the convention of 1897 in the city of Detroit. I shall not take up the time of the convention by reading the letters with which I am fortified, but I will say that the invitation comes from the representatives of the city government, the Chamber of Commerce, the Manufacturers' Club, the Board of Trade, the Merchants' and Manufacturers' Exchange, the various newspapers, the railroad and steamboat companies, and the managers and proprietors of the hotels. I wish to say that Detroit is the only city, so far as I know, that has organized a convention league, for the purpose of encour-

aging associations of all kinds to hold their conventions within its limits. Detroit is one of the oldest cities in the United States, and one of the finest. We have the finest river front of any city anywhere. We are close to the dominions of the Queen. We are close to the mineral springs at Mount Clemens, close to the famous Belle Isle Park, and within two hours' ride of Put-in-Bay. Without taking up more of your time, I want to say, in conclusion, that if you cannot accept our invitation this year, please remember that the invitation is continuous, and that our latch-string is always out.

The President : If there is no objection, the invitation from Detroit will be referred to the Committee on the Selection of a Place of Meeting.

Upon motion of Mr. Horne, of Connecticut, a committee of three upon resolutions was appointed, consisting of Messrs. Wadlin, of Massachusetts ; Horne, of Connecticut ; and Clute, of Tennessee.

Mr. Ives : Mr. President : There was a matter referred to in your address yesterday which it seems to me it would be profitable for this convention to take action upon, and that is to see if there cannot be some steps taken by which we can get the commissioners of all the states to attend these conventions. Personally I have derived great benefit from the proceedings of the two conventions which it has been my privilege to attend. As you stated yesterday, it is this rubbing up together and touching of noses which enables us to find out what the others are doing. I know it has been very helpful to me. It has occurred to my mind that a committee might be appointed, for the purpose of drafting a letter that could be sent to the various executives of the different states, or to those who control the financial matters of the states, urging upon them the importance of these conventions and the benefit it might be to their commissioners if they were allowed to attend. In that way it might be possible to prevail upon some of the states at least to furnish the means to send their commissioners. It seems to me that if the matter was practically presented to the governors or comptrollers of the various states so that they would understand the benefit that would be derived from sending their commissioners of labor to our conventions, they would let them come and provide the means. It is a great hardship for those at a distance to attend on account of the expense. I hope some steps may be taken which will lead to



practical results in this direction. I therefore move that the Executive Committee be instructed to consider the expediency of endeavoring to interest the various state executives in securing a fuller attendance at future conventions.

The motion was carried.

The Committee on Election of Officers and Selection of a Place of Meeting reported that it had agreed upon the following list of nominees for officers for the ensuing year :

For President, Carroll D. Wright, of the District of Columbia.

First Vice-President, Horace G. Wadlin, of Massachusetts.

Second Vice-President, Charles H. Myers, of Maryland.

Secretary-Treasurer, Samuel B. Horne, of Connecticut.

Executive Committee : \* F. P. Clute, of Tennessee ; Carroll D. Wright, of the District of Columbia ; Samuel B. Horne, of Connecticut ; Charles H. Morse, of Michigan ; and James M. Clark, of Pennsylvania.

Upon motion of Mr. McDonough, of New York, the Secretary was instructed to cast the ballot of the convention for the candidates named by the committee, and they were declared duly elected as the officers of the association for the ensuing year.

The committee also reported in favor of holding the next convention in the city of Nashville, Tenn., and on motion of Mr. Morse, of Michigan, the report of the committee was adopted.

The President : The convention will now proceed to the discussion of the topic, "How best to investigate the subject of the municipal ownership of water, gas and electric-light plants." You will remember that at the convention held in Minneapolis it was voted, "That the executive officers of this association be authorized to invite to our next annual meeting some of the leading representatives of the economic schools of thought, at their own expense, to appear before us and give their views as to what fields of investigation the bureaus of labor might best exploit for the benefit of the social and economic advancement of our American life." In accordance with this vote of the convention, the Executive Committee, at a meeting held in Harrisburg in mid-winter, passed the following resolution :

\* F. P. Clute having resigned as Commissioner for Tennessee, A. H. Wood has been appointed by Governor Turney to fill the vacancy. Mr. Wood has been appointed by President Wright of this association to the place on the Executive Committee to which Mr. Clute was chosen.

"That the Executive Committee recommend to the convention the question of investigating the municipal ownership of water, gas, and electric-light plants ; this investigation not to be considered for or against municipal ownership, but for the purpose of ascertaining all facts bearing upon this question." The question before the convention for discussion, therefore, is, as stated, "How best to investigate the subject of the municipal ownership of water, gas, and electric-light plants," and I wish to state that unless the convention orders otherwise the chair will rule in the course of the debate that discussion or argument for or against municipal ownership is not in order, the question being simply as to methods and the practicability of making an investigation. It is for the convention to decide, by its vote, after the discussion, whether it will commit itself to the investigation, and not to commit itself to the question for or against municipal ownership, this not being within the province of the convention. The first speaker on our programme who will address the convention is Prof. Walter F. Willcox, of Cornell University, and I take pleasure in presenting that gentleman to you.

ADDRESS OF PROF. WALTER F. WILLCOX.

Mr. President and Gentlemen of the Convention :

Before proceeding to the question of the morning, allow me briefly to thank you for the honor conferred upon me. If I had consulted my own inclination, I should have followed the example of Prof. Ely and Mr. Atkinson and suggested the names of experts upon the question, who could aid you as I cannot hope to do. For while my work as a teacher has led me to consider certain theoretical aspects of the question of municipal ownership, it has not forced me to make such a careful investigation as to entitle me, upon that ground, to a hearing before a body like this. I should prefer to listen rather than to speak. But my point of view and my experience are so different from yours, that perhaps they may have in them something of suggestion, and if I can offer you anything in return for what you have given me, I shall be well satisfied. For I am deeply indebted to the officers of the bureau of my native state of Massachusetts and of the national bureau, and especially to your honored president, not merely for many personal kindnesses, but yet more for their illustrations of that rare scientific

spirit that patiently seeks for the truth as for hid treasure. I am confident that a closer relation and a better understanding between the teachers of social science and the scientific investigators, would help the teachers; I have never been so sure of it as now, after spending a day in this convention, what we teach may seem to some of you like theories not based on facts, an airy, unsubstantial structure. What you teach the public in your reports may seem to some of us like facts not linked together by any theory, a mass of stones, or at best, a mere foundation, and not a building. I am certain that the two belong together, and that either alone is sure to be one-sided, if not wrong. Your president, before the last convention at Minneapolis, pleaded for the same conclusion when he said. "A statistician should recognize the relation of the facts which he collects to other facts, and be able to see something of the philosophy and the economic and ethical forces underlying the facts which he presents, thus making his analyses vital." Both in the natural world and in the world of social action it is forces that link facts together and facts that reveal forces. We who are primarily interested in forces or principles are finding that to discover them we need a firmer grip of the facts; you who are primarily interested in the facts are finding, I take it, that to bring your facts together, you need theories, or at least hypotheses. If I did not think so, I should not be here this morning, for I have no new facts to contribute, but only a few theoretical considerations to submit.

And this brings me to the topic of the day, the municipal ownership of water, gas and electric-light plants, one of the more important questions now before our cities and towns, and apparently destined to attract yet more public attention in the immediate future. I can hardly think of a subject on which light is more needed by the public, and I hope the investigation projected will be taken up and carried through to a successful conclusion. At the same time, such a step should be taken only after great deliberation and full debate. My best service to you would be by aiding to start such a debate, and that, it seems, may be done most successfully by a frank statement of certain difficulties that present themselves to me, as likely to interfere with your entire success.

It may interest this body to know that nearly ten years ago a committee of the American Economic Association, including in its membership such familiar names as Prof. Adams, of the

University of Michigan, Statistician to the Interstate Commerce Commission; Prof. Dewey, of the Institute of Technology, the Secretary of the American Statistical Association; and Prof. Goodnow, of Columbia University, undertook an investigation into the facts pertaining to municipal public works in the United States, and were obliged to abandon the work after making an incomplete but valuable report. I quote a few sentences from the letter of the chairman transmitting the report: "A full and complete portrayal of the facts, they soon discovered, was impossible. To say nothing of the time which such a task would have required for its satisfactory completion, the money at the disposal of the committee was not adequate to the needs of so extended an investigation."

If this convention shall decide upon a co-operative attempt to investigate the municipal ownership of water, gas and electric-light plants, it is possible the members of that committee might be able to offer both encouragements and warnings.

Before entering upon the discussion, it is desirable to note the wording of the question. When your Secretary, Mr. Powers, wrote to me upon the subject, he transmitted, in addition to the two resolutions printed upon the program, a further resolution of the Executive Committee asking for an address upon "the practicability of such an investigation and the best method to be employed in ascertaining the facts," and further requesting the speeches "not to argue either for or against the system of municipal ownership." There are, thus, two questions before the convention.

1. Is the investigation practicable?
2. If so, what are the best methods to follow?

Now, on questions of this character the opinion of a college teacher is not entitled to great weight. He has had little experience in deciding what investigations are practicable. The methods he regarded as the best might be found inapplicable or misleading. Furthermore, had I not been requested to discuss these questions, I should feel it almost an impertinence to do so. I have no more right to advise you what investigations are practicable or how they should be carried on than you have to advise me how to teach my classes. But as through your Executive Committee you have asked for suggestions, I am sure you will take them in good part.

It seems convenient to group what I have to say under three

heads: first, certain theoretical considerations; secondly, some reasons for doubting the practicability of the investigation; and thirdly, assuming it to be practicable, some general suggestions regarding the methods.

In the first place I understand that the proposed investigation is to be conducted by statistical methods. I believe substantially all the bureaus here represented are statistical bureaus. Twenty-seven of the thirty-four, or about four-fifths use the word statistics in the official name of the bureau, and in the others I believe that the methods employed are dominantly statistical. The question then arises, Is the statistical method adapted to the investigation of questions of municipal ownership? To this inquiry an affirmative answer may be made without hesitation. But when the further question is put, May the statistical method grapple with all the facts involved? more consideration is needed. It seems doubtful whether all the relevant facts could ever be obtained by any statistical investigation, however painstaking and thorough. For example, it is often said by opponents of the increase of governmental functions that such an increase tends to decrease the opportunities for individual initiative and to undermine that self-confidence and self-reliance which are among the highest products of civilization. This statement may or may not be correct, but it will be obvious that the statistical method is not adapted to testing it. The amount of self-reliance in the country cannot be measured by any statistical criterion. On the other hand it is alleged that private control of water, gas and electric-light works increases social discontent, but this statement, also, is not to be tested by statistics.

The question, then, of the relative advantages of private and municipal ownership of these plants may be illuminated by statistics, it cannot be finally answered by that method alone. Many considerations also, of theoretical political economy and of practical politics are involved.

There is one phase of the subject, however, to which the statistical method seems especially adapted, viz., the question of the relative economy of private and municipal plants. Which costs the community more for the same service, a plant of a private corporation or a municipal plant? This question is hotly argued by the two sides and the evidence of impartial experts like the labor bureaus is sorely needed. I assume that this is the main question proposed by the Executive Committee.

In the light of what has been said, however, it is clear that municipal plants might be shown to be more economical, and yet for other reasons, not susceptible of statistical measurement, might be deemed on the whole less desirable.

The production of gas and electricity, and to a less degree the distribution of a water supply are subject to what economists call the law of increasing returns. This law affirms that an increase of the capital and labor devoted to the production of manufactured articles usually results in a more than proportionate increase of output. Thus, if the amount of capital and labor employed in a gas-plant be doubled, while other conditions remain the same, the output of gas would probably be more than doubled. Now when the law of increasing returns governs production, competition is an ineffective means of regulating price. It is likely to be superseded either by combination or by the triumph of one competitor and the downfall of the others. It is mainly for this reason, I take it, that society is now groping for some effective means of regulating price and securing the best service within the field of these so-called natural monopolies.

The selfish interests of private individuals are ever on the watch to take advantage of any social change or the development of a new social force, and these interests, while mainly beneficial, have often at the start pushed their self-assertion so far as to work harm to the community. Gradually the co-operation of individuals, expressed through social ethics and legal enactments, has controlled and checked their excesses by the assertion of the demands of the general welfare. So it was with the evils attending the rise of the factory system or the development of mines in England, and with the evils of unrestrained railway competition in both countries. So it has been in large measure with the growth of large cities themselves. At first, cities were mainly the arena on which the conflicts of individual interests were fought out, and only tardily have the social feelings come to cluster about them.

There can be little doubt that in the past at least, as Mr. Bryce said in 1888, "the government of cities is the one conspicuous failure of the United States." While in the late Middle Ages the cities of Europe were nurseries of corporate freedom and of the resistance to oppression, they have been in this country centers of misgovernment and of tyranny. But now we are in the midst of a great revival of municipal pride

and a great purification of municipal politics. If this be true, the arguments against the expansion of municipal activities, derived from the corruption of city politics, are losing their force.

The opponents of municipal ownership of such services frequently attempt to arouse prejudice and obscure the issues involved, by charging the advocates of municipal ownership with communism or socialism. While such charges will have little weight with thoughtful persons, it may be in place to point out that John Stuart Mill, perhaps the most well-known representative of the traditional political economy, and not regarded as favorably disposed to socialistic measures, or to the widening of the sphere of government, says, in his careful chapter on *Laissez Faire and its Limits*, "In the case of gas and water companies, the reasons preponderate in favor of their being performed, like the paving and cleaning of the streets, not certainly by the general government of the state, but by the municipal government of the town." I cite this, not in the interest of either side, but in the interest of legitimate investigation and argument and in opposition to all appeals to prejudice.

Let me pass now from these general remarks to the problem more particularly before us, and weigh a few considerations against the practicability of such an investigation.

A moment ago it was suggested that the cost of the same service could well be measured by statistics. Yet, on consideration, it appears that public and private plants do not render the same service except by accident, and hence assuming that the true cost can be obtained, it would be the cost of different services. The aims of public plants and of private plants are different. The aim of a municipal plant is primarily to satisfy the voters, and in subordination to that to be self-supporting or remunerative. The aim of a private plant is primarily to earn money for the corporation and in subordination to that, to please the patrons. Hence, the management of a public plant is tempted to make it appear that the plant is remunerative, by twisting the figures, if necessary, and at the same time be lavish with the light, as a means of securing the favor of the voters. On the other hand, the management of a private plant is tempted to keep its financial condition secret, or to represent it unfavorably to the public, in order to prevent competition or municipal interference. Hence I believe that in a large proportion of instances the facts will be difficult or impossible to



ascertain. In confirmation of this opinion I may cite the fact that the eleventh census failed to get returns from over one-fourth of the gas companies of the country, and this one fourth, we are told, included many large establishments. The census figures for electric lighting were yet more incomplete. If that was true of the census, it seems probable that a larger proportion of the companies would refuse to answer your inquiries, knowing that the results of your investigation might affect the permanence or the value of their franchises.

Even if both private and municipal companies should answer, their replies would be deemed untrustworthy by the other side. As evidence of this fact I cite the following from a strenuous opponent of municipal ownership: "Committees unacquainted with the business, and with no practical experience in electrical affairs, are appointed by city councils to investigate and ascertain the cost of producing light in cities owning plants. This is done with a view of purchasing a plant. The committees go to the officials of other cities who have no knowledge of the science of electricity or its practical application, and whose information regarding the working of their own city's plant has been obtained from employes who owe their appointment to the influence of some political wire puller whose interest it is to show a minimum of expense. Statements of this kind are used as authority regarding the cost of municipal lighting, notwithstanding the fact that they are discredited by men who have made it a study for years, have thoroughly tested every branch of the business, and are not beholden to a political boss for their position." \*

It has been said that private and public plants render different services. The service to a municipality is only a part, and often only a small part of the total service rendered. Frequently, perhaps usually, five-sixths of the service is rendered to private parties. A municipal plant seldom renders as much service to the citizens as a private plant, yet all these services should be included in the investigation.

To take the case of a water supply. How much weight should be given to the quality of the water furnished by public and by private agencies? How much to the health of the community under the two systems? It is practically impossible to obtain, in most of our cities, accurate statistics of deaths. Yet if municipal water service results on the average in a supply of

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\* M. J. Francisco, in *Engineering Magazine*, vol. 9, p. 43.



better water than private service, the difference must be recognized, or your figures of cost will not cover the ground.

Finally, and this seems to me the gravest difficulty, is it true that cities on the one hand, or private companies on the other, keep their accounts by any approximately common method? Is it not true, on the contrary, that they differ from one another much more widely than the bureaus of statistics of labor do in their accounts as indicated in the reports of yesterday, and when, in addition to these differences you have the desire to conceal or mislead, will it be possible, even with expert help, to unravel the facts and present them in a form admitting comparisons?

Such are some of the difficulties I see in the way of making the investigation successful.

The second point I am asked to consider is the methods to be employed. Now, it is a statistical commonplace with which you all are familiar, that the success of any investigation is largely dependent upon the knowledge and care with which it is planned. The plan cannot be made at once, or in a few days. It cannot be handed to you by any one outside your offices. You, yourselves, must formulate it after long and careful consideration of all the conditions. You know these, as I cannot. Hence I have no plan of the investigation to submit. It may be that in private conversation or by informal discussion, some suggestions may result from our meeting, some new points of view come to both of us, but the burden of forming a plan is yours and I dare not assume it.

Yet on this subject, also, a few suggestions may be made. The three topics should, I believe, be kept sharply distinguished in your investigation. I should prefer even to see three investigations rather than one, provided such a method is equally practicable from the administrative side. My reasons are that the technology of the three subjects is so different that different experts would be needed, and also that the arguments regarding municipal ownership are extremely different in the various cases. Water works owned by the municipality are practically universal in Germany, are found in about half the English municipal boroughs, and are found in the great majority of our large cities. Apparently no special grant of power by the legislature is required under ordinary circumstances for the authorization of municipal water works. The right to establish them is incident to the right to safe-guard the public health. Furthermore

the supplying of water does not involve so many industrial complications as the supplying of light, either by gas or electricity, and hence is better adapted for municipal management. I should suppose also that the difficulties in the way of ascertaining the facts would be less in the case of water works than in other cases.

If statistical investigations in this field are to reach definite results, certain units of measurement should be fixed at the start. They should be popular enough to be intelligible and accurate enough to be trustworthy. A ton of coal is a popular unit, but inaccurate, because its gas yielding power, the quality of the gas, and the character of the residuals are variable elements. A thousand cubic feet of gas, presumably under the standard pressure and at the standard temperature, is another popular unit, but this unit assumes that all illuminating gas is of equal quality, a false assumption. So the investigation must begin with a determination of the best practicable units of measurement. These will not be the most scientific units, but it is to be hoped that some improvement on such popular units as those just mentioned will be found possible.

One difference I have noted between the best statistical investigations made by other countries and yours, is that in presenting their results, the European statisticians are somewhat more likely to begin with a definition of the most important terms used in the subsequent discussion, the meaning of which can be at all ambiguous. The practice is worthy of more general introduction.

In attempting to fix the cost of producing a standard gas or electric street light (and what such a standard light is would call for careful definition), it must be remembered that the cost varies not merely with the cost of the materials, but also with the number of lights, and so the cost of distribution, with the manner in which the lights are put up, with the length of the contract entered into by the city, and with the other forms of municipal or private service made possible by the contract.

The influence of municipal ownership of gas and electric lighting plants, upon the price of light and power to private consumers must be carefully investigated. The corporate interest of the municipality cannot be so separated from the sum of the individual interests of its citizens, as that an arrangement which secures cheap and good service to the municipality, but entails dear or poor service to the citizens is to be desired.

The income of gas companies from municipal lighting is on the average perhaps about one sixth of their total income from lights. It should be ascertained whether municipally owned gas works render this service to citizens as cheaply and well as private companies do.

A careful investigation of the working of private companies would seem to be the best starting point. The advantages and disadvantages of the system of private ownership as free as possible from regulation or control by governmental authority, might first be ascertained and stated. Then the various methods which have been tried for regulating or controlling these private companies in the interests of individual citizens, as consumers, or in the interests of the city itself, as a consumer, should be studied, and their effects traced so far as statistics make it possible. I think it is fair to hold that the American people have at present an aversion to governmental ventures into the industrial field, and at the same time do not believe in the results of unrestricted freedom in the field of natural monopolies. Hence the alternative is either some form of governmental control or governmental ownership.

The arguments in favor of municipal ownership, other things equal, probably increase with the size of the city. Certainly in the case of water works in which the system of municipal ownership is most widely extended, we find that the larger the city the greater the probability that the municipality owns the works. From Census Bulletin, 100, of the last census, I learn that in 1890, of all the people in cities of over 100,000 inhabitants, about nine-tenths (89.4%) were supplied with water from municipal works. Of the people in cities of 50,000 - 100,000 inhabitants, about three-fourths (75.8%) were supplied by the city. Of the people in cities of 15,000 - 50,000 inhabitants, about three-fifths (61.3%); and of the people in cities of 10,000 - 15,000 inhabitants, only two-fifths (41.0%) got supplies from municipal water works. This may indicate either a difference in the arguments according to the size of the city, or that we are passing from private ownership to municipal ownership of water works, and that the transition has occurred first in the large cities where water works have been longest in existence.

This suggests a further line of investigation. The condition at the present time is of less importance than the changes now in progress. Municipally owned water works now have a history in this country, and it might be profitable to investigate that

history, to ascertain when water works were introduced into each municipality, what changes in the form of ownership or administration have been introduced, and what were the causes of such changes. A similar investigation into the various forms of public control or supervision of gas and electric lighting plants would also be of much value to students of the subject.

It is possible that specialists in one or another of these fields might aid in your work, by contributing notes or suggestions, or answering questions that arise in the course of your investigations. If the investigation is to be carried on under a common plan, but with complete freedom of action on the part of each bureau, as I suppose, it might be feasible for some committee of correspondence to be arranged for, to which difficulties calling for expert knowledge might be submitted and they might obtain the opinion of persons engaged in the business and in sympathy with the investigation. Of course the teachers of economics are not experts in any of these fields, and this suggestion is not made on their behalf.

In electric lighting plants you may frequently find both water power and coal employed, the latter to supplement the former. To separate those two sources of power will be difficult and yet necessary to the completeness of the investigation.

It is often alleged that the condition of laborers employed by a municipality is better in many ways than the condition of laborers employed by a private corporation to render the same services. This claim has been of weight in favor of the recent considerable extension of municipal functions abroad. On the other hand, it is asserted that even if the wages, the hours of labor and the conditions of employment are more attractive, the tenure of position is much less secure. Your investigation should not overlook these contentions.

In conclusion, I may venture to say that even if your results should prove to be mainly negative, they will be found of value. It is certainly highly desirable that the community should know what system produces the best results, and if you should find, as you may, that no definite answer to the question can be obtained, this fact would stimulate the demand for more uniform book-keeping by the cities and by private companies holding quasi-public franchises and might lead to legislation upon the subject.

The President : The next speaker on this subject is Edward

W. Bemis, late of the University of Chicago, and now of the university of the world. I have the honor of introducing to you Professor Bemis.

ADDRESS OF PROF. EDWARD W. BEMIS.

Mr. President and Gentlemen :

Your association has asked for a paper upon the propriety of an investigation by you of municipal and private ownership of gas, electric light, and water, and more especially of the methods to be pursued in such a study. The investigation is most germane to the work of your bureaus, since the wage-worker, in whose interest you are especially working, is most deeply concerned in cheapening these necessities of life, and equally concerned in securing such a relation to them on the part of our municipalities as will best develop civic pride and good government. Both results are likely to follow a wide dissemination of the actual facts on this much discussed subject. Further, it is only, I believe, through state bureaus organized and controlled in some measure by the forces of organized labor and the masses of the people, that a thorough publicity can be given to the facts regarding our municipal monopolies.

It might be supposed by anyone, and in fact has been supposed by the opponents of municipal ownership, that state gas commissions, created ostensibly to regulate through publicity and supervision, would throw the necessary light upon the subject. Surely the only alternative to public ownership is the fullest publicity as a basis for wise public regulation. Publicity is also important in furnishing data from which to judge whether public or private ownership gives the best results. To that end we have in this country the most ambitious law on the subject, and the most famous commission in the world. I refer, of course, to the Massachusetts Gas and Electric Commission, now in its eleventh year. This commission, whose chairman is present to-day, will of course greatly aid you in your work, while its refusal hitherto to reveal even averages of cost of gas and electric light of companies having substantially the same output greatly emphasizes the necessity of your taking up the subject. No private investigation can take the place of a public one, since we not only need to know the facts about present city-owned monopolies, but we ought to be able to compare the

various items of cost, such as labor, salaries, raw material, etc., in these, with corresponding items in private plants, of similar size or at least with the average of a few such plants. The facts for such a comparison can only be secured by a public statistical bureau that has already gained the confidence of business men by its suppression of the names of reporting corporations when it gives details. A state bureau has in other ways also a prestige that may help it in gathering information.

The easiest subject of investigation will be water works, for the business is a simple one, and in many states there is a nearly equal division between public and private management. But here, as in every other case, mistakes are easily made. Municipal book-keeping is often poorly done or does not reveal all the desired facts, while private companies are secretive. Personal visitation is absolutely essential to success. Too much emphasis cannot be placed upon this point. In all of the writer's efforts to get at the truth in these matters, he has found that even the fullest written report from an official would not dispense with the necessity of one and often several personal visits in order to observe or accidentally fall upon important points and facts that would never be secured by correspondence.

In the case of water works, such items as number of taps and gallons of water used per family, the number of hydrants, the estimated amount of total private consumption, the receipts of the same per gallon, and per family and tap, number of miles of main, sizes of main, and effect on consumption of any change from private to public ownership, will furnish data for many interesting comparisons. In all this, due regard must of course be had to comparing only where such conditions as natural difficulties in securing the water supply, cost of coal where pumping is necessary, population, etc., are nearly equal. The number of employés and their wages and salaries for similar work in public and private companies must be carefully studied, as also their permanency of tenure. Three or four items here, as in the other cases soon to be considered, may occasion difficulty.

First—Taxes. These are usually omitted from items of cost in public companies, but must of course be included in comparing with private. The average tax rate of private companies in the state per thousand gallons of water or per consumer can be computed and applied to the private companies. It will not do to apply to the cost of the public plants the local

rate of taxation, since this method overlooks the customary undervaluation for taxation purposes of all property, not the least being the property of powerful corporations.

A second difficulty is the method of treating interest. The bonds of a public plant usually bear a lower rate of interest than those of a private company. The only question is whether to include in the real cost of a public plant interest on the entire cost or only on the portion still unpaid for, *i. e.*, uncovered by any existing indebtedness. It might be well to present the figures in both ways, but if a choice must be made there seems no sufficient reason for including interest on such portion of the plant as has been paid for out of net earnings.

A third and greater difficulty is a proper allowance for depreciation. Provided a plant is kept in good repair and a considerable sum, say five per cent. of the value of plant in the case of electric light and gas, and perhaps three in the case of water, is yearly spent on extensions and reckoned as part of the running expenses, there is usually no need of further allowance for depreciation. A more accurate but not always more practicable way is to secure from unbiased engineers estimates of the yearly depreciation of different parts of a plant, and apply those figures as depreciation instead of the amount spent for extensions. It must be borne in mind, however, that while a private company must yearly collect a depreciation fund, a public plant belonging to the tax-payer, may let this rest in the hands of the consumer, where it can be put to more profitable use until such time as it may be needed, when it can be raised by taxation.

In all the study of water works, the data in the hands of M. N. Baker, of the Engineering News, New York city, and Prof. John R. Commons, of Syracuse University, Syracuse, N. Y., will be found invaluable.

With regard to electric light, investigation will prove more difficult, because the youth of the industry causes uncertainty on some items of depreciation and cost, but there are about two hundred cities that own electric light plants, and from them, with some effort, can be secured valuable data. From W. J. Buckley's "Electric Lighting Plants: Their Cost and Operation," published in 1894, and from Prof. Frank Parson's Arena Articles in 1895, some suggestive data for this investigation can be had, although it is hardly necessary to state to this assemblage of experts that only so far as your own original investiga-



tion may confirm, should the statements of other investigators be published by you as authoritative. Let me add that valuable suggestions of the data to be sought in electric lighting will be found in the blanks sent out by the Massachusetts Gas and Electric Light Commission and in Special Schedule No. 15 of Statistics of Manufacture, Eleventh census, entitled The Electrical Industry. The latter schedule, however, was too minute, and should be used only in connection with the special report of the eleventh census on the electrical industries in the state of New York, and merely as a supplement to the schedule of the Massachusetts commission just referred to. This investigation of electrical lighting by the last census, it should be added, was found impossible of prosecution without special visitation of the cities, and as that seemed impracticable, the investigation was abandoned.

An illustration of how not to investigate may here be cited. In the *Electrical Engineer* for September 5, 1894, a distinguished electrical engineer compares the cost of electric light in certain New York cities under private ownership with the cost in certain other cities under public ownership, to the disadvantage of the latter, but includes in the latter list of cities Alameda, Cal., Lewiston, Me., Fairfield, Iowa, and Little Rock, Ark., where the cost of coal is probably much higher than in the New York cities. Omitting the four cities mentioned, the comparison shows less cost in the public than in the private managed plants.

When Dunkirk, N. Y., several years ago, constructed a public electric-light plant, she only had to add \$10 a month to the wages of the firemen and engineers previously employed at the water plant, and now employed on both plants. Although it may be fair to apportion to the lighting plant such proportion of the wages of firemen and engineers as is the proportion of labor used on the electric plant, yet it is necessary to a fair judgment of such consolidated plants that all the facts be clearly stated.

Again, many public-owned plants, by reason of legal hindrances, or of the desire of the people,—at least of those owning private plants,—do not do commercial lighting, where charges are often higher than for street lighting, and hence comparison with private companies is difficult.

Many allowances must also be made for public plants in small places in view of the conclusion of the electrical engineer just quoted, that of thirty-four public plants studied by him,



one-half were in places "where it is very doubtful if a private commercial plant could be made to pay under any circumstances."

In the matter of electric-light depreciation we may note the view of one of the ablest electricians in this country, Mr. Alex Dow, superintendent of the Detroit public plant. He finds the usual depreciation to be nothing on land, about two per cent. on buildings and iron lamp-posts, two to two and one-half on conduits, four per cent. on towers and arc lamps, five per cent. on steam machinery, foundations, etc., seven per cent. on pole lines and overhead construction, and ten per cent. on electrical machinery. In case of the large Detroit plant this averages only 4.75 per cent. depreciation on the entire plant.

Inasmuch as a large part of a gas or electric-light plant works nearly as well the tenth year as the first, if kept in thorough repair, and only after fifteen to twenty-five years has to be renewed, we may rightly hold that, if the average yearly depreciation is five per cent., four per cent. a year is sufficient allowance for depreciation, for this sum left to fructify in the pockets of the taxpayer, even if worth only four per cent. interest to him, will enable an entire plant to be replaced at the end of twenty years.

We come now to the gas monopoly. Despite many prophecies to the contrary, the increase of electric-light has not hindered the growing use of gas, either in America or Europe. With every displacement of gas for street and office or even home there has gone an increased use of it for cooking and heating, while the introduction of the Welsbach burner and the cheapening of gas manufacture have vastly increased the demand for gas as an illuminant. When the price shall fall to seventy-five cents for illumination and fifty cents for fuel, as seems possible, especially after the necessity for interest payments under city ownership ceases, with the cancellation of bonded indebtedness, gas will prove as profitable in the poor man's kitchen as is coal and vastly more convenient and cleanly in preparing the early breakfast and late supper that distance of home from work requires.

Although some previous knowledge of the industry to be investigated is of aid to the investigator, he need not be an engineer in order to fill out schedules or make an all around study of the subject. Indeed, it is almost impossible to get much help from professional engineers, especially in gas, where

the number of plants and consequently their importance in the business world is small. In a recent famous gas case, where a city attempted at much expense to get expert testimony as to the cost of gas-making, only one gas engineer could be secured, but several of the many who appeared for the private company admitted on the witness stand that it was not considered good form for a gas engineer to testify for a city. The head of a large gas construction company has been warned by his business associates never again to give information to the speaker of the cost of gas making or of gas apparatus. Not long ago I applied to the able editor of a large paper devoted to the gas business for suggestions as how to persuade private companies to prove statistically the truth of their oft-repeated claim that the labor cost is much less in private-owned than in public-owned companies. The reply was to the effect that private companies did not propose to be so foolish, fearing that, even if they could prove their claim, they would thus merely stimulate public companies to greater efficiency.

In studying private and public gas works, you will naturally consider not only the cost of coal, oil, and other materials and the price of residuals, the candle power, number of consumers per mile of main and per thousand inhabitants, but also the number and pay of employes per thousand feet of coal, water, oil or mixed gas, their tenure of office, the leakage, the degree to which the works are kept up to date, and taxes, depreciation and original cost less depreciation or cost of duplication of plant by items as compared with present capitalization. It may here be mentioned that a prominent gas engineer estimates the following as the common weight and cost of laying pipe in ordinary streets where the paving is comparatively inexpensive :

Diameter of pipe.	Weight per foot.	Cost of laying per foot.
2 inch,	10 lbs.,	....
4 inch,	16.5 lbs.,	11c.
6 inch,	25 lbs.,	12.5c.
8 inch,	40 lbs.,	15c.
10 inch,	50 lbs.,	18c.
12 inch,	67 lbs.,	22c.
14 inch,	75 lbs.,	26c.
16 inch,	85 lbs.,	31c.

An American gas engineer has estimated the depreciation on a gas plant as nothing on the land, one and one-half per cent.

on the buildings, five per cent. on street lamps, seven per cent. on machinery, apparatus and tools, eight per cent. on services and ten per cent. on meters and other property, or about four per cent. on the entire plant. If this estimate be correct, three per cent. a year of the cost of the plant invested each year at four per cent., which would duplicate the entire plant every twenty years, would be sufficient allowance for depreciation.

No gas investigator can afford to be without John W. Field's invaluable yearly "Analysis of the Accounts of the Principal Gas Undertakings in England, Scotland and Ireland."\* The minuteness of this comparison is a model. I may be permitted to say that the analyses for 1894 and for 1895 show slightly lower labor, salary, legal, and total costs of the public companies, despite their higher candle power.

In closing, let me urge you not to undertake this investigation in your respective states unless able to give to the work the services of an unbiased investigator, not necessarily nor even preferably an engineer, but one familiar with the subject in hand, and who can be given the means to visit the typical plants selected for study. In the case of gas, most of the work will have to be done by the National Department, unless you investigate, as you well might, private-owned plants in your states, for nearly half of the few public gas plants are in Virginia, which has no state bureau of labor statistics. However, the great and typical fields of water and electric-light are open to the study of every bureau, and many of the suggestions in the latter part of this paper relative to the investigation of gas will apply equally well to water and electric-light.

The President: The next gentleman invited to address the convention on the subject under consideration is Mr. M. N. Baker, Associate Editor of the Engineering News, of New York city. Mr. Baker is not present, but he has sent his paper, and it will be read by the Secretary.

PAPER OF MR. M. N. BAKER.

In order to discuss intelligently the best method of investigating the municipal ownership of water, gas and electric-light plants, it seems desirable first to consider the object of these plants, more especially as to what constitutes a satisfactory

\* Published by Eden, Fisher & Co., 7 Clements Lane, Lombard, E. C., London, 12s. 6d.

service in each case, and the relation of each undertaking to municipal government.

The first object to be attained by the operation of water and lighting plants is efficient service, and the second, minimum cost to private and public consumers. There must also be considered the effect of ownership, be it public or private, or municipal administration, and on the people at large. Does either system more than the other tend to uplift or debase city government?

Let us first consider the function of water works and the measure of their efficiency. Such plants are built to supply water for domestic and industrial, or private purposes, and for fire protection, street sprinkling and sewer flushing, or public purposes. The efficiency of the service as a whole depends upon quality, quantity and pressure.

Quality is of the greatest importance, by far. It is to be considered first in its relation to health, and second, as to the fitness of water for household and manufacturing purposes. Quantity has heretofore been given much more attention than quality, so much so as to even encourage wastefulness. The amount actually needed depends on the number, character and occupation of the population, while local conditions materially effect the amount available at reasonable cost. Pressure is more easily governed than either quality or quantity. It is of great importance for adequate fire protection, but no rash conclusions should be drawn where a low pressure is found, for reliance is often placed on fire steamers. Pressure is also an element of quantity in the case of individual consumers, where a low pressure may fail to deliver water to the required elevation and thus yield but a dribbling stream from house faucets.

Cost of service is to be considered from both the private and public standpoint. How much the householders, the merchant and the manufacturer pay for water for their own use, and how heavy is the expense upon the taxpayers for water consumed by the city. Are the rates for public and private service so adjusted in relation to each other and the total cost of the service, as to bring an undue burden upon either water consumers or taxpayers, while the burden of the other class is proportionately lightened? This is a grave danger in the case of these and other similar undertakings.

From the above it appears that the four main points which

constitute the efficiency of a water-works plant, using efficiency in a broad sense, are :

- (1) Quality of the water.
- (2) Quantity.
- (3) Pressure.
- (4) Cost of service.

These are the essentials to be investigated in studying public ownership of water works, and in addition there must be considered .

(5) The relation of the water supply service in all its bearings to the city government.

Exactly the same points are involved in investigating gas and electric-lighting plants ; but, of course, with some modifications of detail. Thus, water and gas may be deteriorated in quality by the admixture of foreign matter, while electricity cannot—quality here pertaining to the service as a whole. Again, the quality of water, besides being of importance in other ways, has a most marked relation to health, for water is the great disseminator of typhoid fever, being none the less pleasing to eye and palate even when carrying the typhoid bacillus. The quality of gas relates more to its illuminating powers, and although poor gas may give rise to large quantities of deleterious products of combustion, yet it does not cause fearful epidemics which lay low large portions of the population of a city.

The environments of water supply sources, analysis of the water, the experience of manufacturers, the nature and extent of purification plants, and typhoid statistics afford means for studying the quality of water. Analysis of gas and actual measurements of the illuminating power of both gas and electric lights establish the quality of these commodities.

Quantity and pressure may be studied in obvious ways.

Cost is in many respects the most difficult element in your proposed investigation. The vagaries of book-keeping, both municipal and private, and the natural desire of private corporations to keep their financial affairs to themselves, are the first difficulties which occur to me. Next are the great divergencies in local conditions, natural and artificial, which make intelligent comparisons almost impossible. Obviously, it is not reasonable to say that because water, for instance, costs \$5 per unit here and \$7 there, the former place has the most efficient works. With the best possible engineering skill and manage-

ment, it may cost twice as much to supply water, gas or electricity, in one town as in another. Moreover, the investigator will speedily find that unit cost is often impossible of ascertainment, through lack of records, or unreliability when records do exist. Mere schedules of rates should be compared most continuously. They are formulated on widely different plans, and often are not based on the actual consumption, but on the mere number of fixtures supplied. A high rate per fixture may be accompanied by so great a use and waste as to make the unit cost much less than at other places having a low rate per fixture. Beside this, local conditions must also be considered as affecting fixture rates as well as cost units. And still further, and of great importance, low rates are sometimes made possible in the case of municipally-owned works by having recourse to the general tax levy to make up any deficiency in revenue. On the other hand, municipal works sometimes put the whole burden of their support upon private consumers entirely relieving the taxpayer who is not a consumer of public water or light, from expenses for the provision of fire protection to his own property, or the lighting of the street in front of his house or store.

As to the effect of these undertakings upon municipal government, it can only be said here that this question involves civil service, the corruption of public servants through the opportunities afforded by municipal ownership, and through the lavish expenditure, on the other hand, of franchise companies to secure from city councilmen and other officials, valuable privileges without compensation to the municipality as a whole, it being far cheaper to pay large sums to aldermen once for a given privilege than to cover into the city treasury liberal percentages of gross receipts year after year. There is also to be considered the relative amounts of friction between consumer and provider under the two classes of ownership, and the legal questions involved under the two systems.

Having attempted the merest outline of an investigation, I find I have occupied so much time that I would be a trespasser on that of others should I go far into the details of the inquiries to be made. It does not seem to me that these can be settled here to-day. Much time and thought is necessary for the evolution of the details and forms of inquiry blanks. I shall only say, and that I urge as of the greatest importance, that the final scope of your inquiries, and also their minutest details, should

be determined by those who have had experience in such work, and that an attempt be made to harmonize the character of the three proposed lines of investigation.

As to how the desired information should be secured when once its character is determined, I would suggest that the groundwork, at least, would be found in the following publications: Brown's Gas Directory, which I think has now been extended to cover electric lighting; Johnson's Electrical Directory; and the Manual of American Water Works. As editor of the latter work, I am now engaged in collecting information for a fourth edition, which will contain descriptions and statistical matter relating to the water supplies of about 3,000 cities, towns and villages in the United States. The inquiry blank, which is being used for this purpose, accompanies this paper for reference purposes.

The books named will at least furnish lists to work from, officers of the various plants, and in many, if not all cases, the ownership of the works in question. Some indication may also be found of the character and extent of the works.

As to how the desired information shall be collected and studied I must leave to my associates in this discussion, and to the body through whose courtesy I am given a hearing on this important subject. I can say that the country is being flooded with all sorts of inquiries relating to the undertakings in question, and that disappointment is in store for the investigator who expects to receive replies from more than from 20 to 35 per cent. of the inquiries which he sends out.

I would suggest for consideration.

(1) Can the special inquiries which you finally decide upon be coupled with those being made by any other investigators to mutual advantage, in so far as the information is not already available or under collection?

(2) Can the work be done, wholly or in part, by state labor organizations, subject to some central supervisory committee?

(3) Is it a more proper field of inquiry for the United States Department of Labor, especially as some states doubtless lack organizations to conduct the work, while not all the organizations in existence could or would take up such an investigation?

(4) Should not the information secured, however obtained, be compiled, or edited and discussed, by some central body, in order to bring out the salient facts for the whole country in proper relation to each other?

## SCHEDULE USED FOR

## The Manual of American Water-Works for 1896,

BY

## THE ENGINEERING NEWS,

TRIBUNE BUILDING, NEW YORK.

INFORMATION REGARDING THE WATER-WORKS OF.....	.....
Who owns works?.....	Changes in ownership (private to public or reverse), with date.....
For works built since Jan. 1, 1890. {	Date put in operation.....
	Name and address of designing and constructing engineer.....
	.....do., contractor.....
	Provisions of franchise as to : Length..... years from 18.....; purchase of works by city.....
	Regulation of rates by the city.....
	Exemption from local taxation.....
	Compensation for public service.....
	Terms and conditions of contract supplementary to or independent of franchise, including length and date of expiration.....
	What legal difficulties have there been between the water company and the city? (Please state nature, date and how settled).....
For private works only.	



Source and mode of supply?.....

Pumping machinery: Make, style and daily capacity in gallons of each pump.. ..

Coal: Kind and average cost per 2,000 lbs.....

Filters: Kind and daily capacity, gallons.....

Reservoirs: Designate whether impounding, storage or distributing, with location and capacity, in gallons, of each.....

Stand-pipe or tank: Material, size, capacity; character, material and dimensions of trestle or tower.....

Date last fiscal year closed.....(Please give all figures for this date as far as possible). Mains .....miles.

How is cost of extensions to mains met?.....

Taps or service connections: No. in use .....; who taps street mains, and what fee is paid to water-works?.....

Service pipe for house connections: Material.....; who pays for same?.....

Meters: No. in use.....; who owns?.....; controls?.....; repairs?.....

where consumer does not own meter, what yearly rental is charged? \$.....; what classes of consumers are supplied through meters only?.....; can you compel use of meters?.....; can any consumer have a meter?.....

Remarks on meters.....

Fire hydrants: No. in use, public.....; private.....

Daily water consumption, gallons: Average.....; maximum.....; minimum.....

Remarks on consumption.....

Pressure: Ordinary.....lbs.;.....fire.....lbs.; are steam fire engines used?.....

Cost of construction of works to close of fiscal year.....

Capital stock,  
close fiscal year: { Common: Authorized, \$.....; paid up, \$.....; dividend fiscal year.....  
Preferred: Authorized, \$.....; paid up, \$.....; dividend guaranteed.....

Amount of floating debt, if any, close fiscal year, with rate of interest.....

Bonded debt, { \$..... at .....%; due..... \$..... at.....%; due.....  
close fiscal year : { \$..... at.....%; due..... \$..... at.....%; due.....

Amount of sinking fund, if any, close fiscal year, how invested and rate of interest.....

Expenses, { Operating expenses, including maintenance and repairs (not extensions), \$.....  
fiscal year : { Interest, \$..... ; Taxes, \$.....

Revenue, { Private consumers for metered water, \$..... ; unmetered water, \$.....  
fiscal year : { Fire protection, \$..... ; street sprinkling, \$.....  
City : { sewer flushing, \$..... ; public building, \$.....  
other purposes, \$.....

To what extent are deficits (excess of operating expenses, maintenance, interest and sinking fund charges) met by general taxation, in the case of public works?.....

Name and address of : Prest..... Secy.....  
Treas.....Supt.....Ch. pump. eng'r.....

What improvements are projected and what steps have been taken towards making them?.....

Has your city a sewerage system for the removal of : Household wastes .....Storm and surface water.....

Please send us : (1) Schedule of water rates, including meter charges now in force, (2) A copy of your last annual report, if you have not already done so. (3) A copy (in case works are owned by a company) of your franchise.

Date.....Signature.....P. O. address.....

The President: The next gentleman who was invited to address the convention is Mr. Osborne Howes, of Boston, Mass., a writer of some note. Mr. Howes was unable to be present, but he has sent his paper to the Secretary, who will read it to the convention.

PAPER OF MR. OSBORNE HOWES.

Gentlemen of the National Association of Commissioners of Labor:

In considering the question of investigating the municipal ownership of water, gas and electric-light plants, the first question to be asked is, How do these services conform to the conditions which should govern public ownership and control? In other words, are these services of a class which should on general principles be public services, and if so, why? It seems to me that one defect in our present method of reasoning on the subject is, that we have no definitely drawn line separating those services which under the best conceivable conditions properly should be, from those which should not be, public services. The test—and so far as I have been able to examine the question, the only test—to be applied is the test of monopoly. If control by means of monopoly is advantageous, then, other things being equal, public ownership and control is desirable. If, on the contrary, the best results are reached through the instrumentality of competition, then, other things being equal, no matter what the service may be, public ownership is not desirable.

This test I hold to be fundamental, and without going into an extended argument it may be said in support of it, that it has, consciously or unconsciously, determined the line of practical advance that has been made in municipal ownership in the experience of our own and other countries, although it is quite at variance with the views held in this country by Nationalists, and on the other side of the Atlantic by Socialists. It does not require much explanation to make it evident that if a municipality, as, for example, the city of Fall River, attempted to run the various cotton mills now located within its municipal borders, the result would be not only financially disastrous, but as an outcome of the absence of the ordinary incentives of competition, the improvements in production that now may be confidently counted upon to take place as time goes on, would

either not take place or would only be realized in a minor degree. On the other hand, there is good reason on the grounds of experience for thinking, that if the city of Fall River were to establish a new water supply, assuming the field had not already been occupied, it could undertake and put through the work at prices nearly if not quite as satisfactory as those which would attend the work of a private corporation, while it does not need to be said that the municipality would not take an unwarrantable advantage of its entire possession of the field, while it would realize that there might be general gains made to the municipality as a whole by the sale of water at low prices, even though these did not bring in what under the ordinary conditions of private investment would be considered a fair commercial return. The maintenance of two independent sources of water supply and the competitive distribution of water by rival companies would obviously be attended by a waste of capital, and probably in the long run, through a combination of corporate interests, by an increased charge to the consumers. It is desirable in a service such as a water supply that there should be but one system, for in this way mains and pipes of sufficient size to meet the entire demand of the municipality can be put down at much less expense and inconvenience than if two or more systems are installed, even when neither of these is adequate to supply the entire demand. This and a number of other illustrations that could be given bearing upon the economy of a single service, are so elementary that practically every one realizes their force.

But besides this economy in the larger centers of population of this country a monopoly in water supply is essential to the safety of property. The need of an extraordinary supply in the event of a great fire renders it necessary that the reservoirs and mains should be much larger than would be called for to meet the ordinary daily demands for household and manufacturing purposes. Competing water companies would rarely if ever go to the great extra cost which such increased facilities would entail. A water company which possessed a monopoly of the field might do this; but the chances are that even in such a case the provision made to meet an exceptional demand would not be adequate, and even if made it would probably be found that the interest upon the largely increased investment could not be easily collected, and if collected would be secured, wholly or in part not as it should be by a charge upon the

property thus safe-guarded, but by an added tax imposed upon the takers of water.

But if, as seems necessary, for the creation of an adequate supply, and the proper allotment of the expenses of construction and maintenance, a water supply system should be a monopoly, then under the general rule I have advanced it should be a public and not a private monopoly. Speaking of local experience—that of the city of Boston—I think I am justified by experience in saying, that while the cost of constructing and maintaining small civic enterprises, or those which in their daily operation call for the employment of a large number of men, is considerably greater under public than under private or corporate control, this adverse difference is not found to exist in the case of large engineering enterprises, especially those in which the work of construction is given out to contractors.

There is, besides this, a simplicity in the problem of a water supply which differentiates it from either a gas or an electric-light service. When once it has been provided, modern invention plays but a small part in the way of reducing its cost of operation. Improvements consist in securing greater purity, in increasing the force, and in diminishing the waste of the water, but there is apparently no way by which the processes of production can be revolutionized thereby bringing about an enormous saving in expense.

There is in the investigation of public ownership of water plants one possible source of error to be guarded against—and this doubtless holds true of gas and electric plants—that is, the disposition of municipal authorities to understate the costs of construction. An instance of this is found in our Boston experience. In the year 1876, about thirty years after the commencement of the Cochituate water works, a report was prepared by the city auditor giving the cost of the undertaking up to that date. It was therein stated that the net cost of construction, including various additions, was \$13,471,812.41. As the city was at that time receiving an annual revenue from the sale of water of approximately \$950,000, the inference to be drawn was that as a financial investment the works were a decided success. But having occasion at about that time to go through the municipal expenses in detail, I found that the result given above was not arrived at on the basis upon which an ordinary business investment would be figured. In other

words, if the receipts of each year were deducted from the expenditures of all kinds, and an annual interest charge was computed on the sum left, instead of thirteen and half million dollars, the cost would be found to be more than forty million dollars. I found that during a series of years large appropriations were made out of the annual tax levy, to make good deficiencies in income and to pay for new construction, which apparently were ignored in the accounts, and against which no interest charge was made, as would have been the case if a corporation had raised the money and spent it for a similar purpose. It was not on the part of the city auditor an attempt to deceive, but simply an error growing out of the manner in which a city official is inclined to look upon a municipal undertaking. I would not have it inferred from this that I consider the water works owned by the city of Boston as an undesirable public undertaking. On the contrary, I think that they are worth to the city, in the advantages afforded, to say nothing about the appreciation in the value of land acquired, all that they have cost the people. But the difference in estimates of expense that I have pointed out, in a work where the conditions are as simple as they are in procuring and maintaining a water supply, indicate the great care that has to be taken not to be misled by official statements in endeavoring to ascertain the economic advantage or disadvantage of municipal ownership.

When the field of inquiry is shifted from water to electricity or gas the problem becomes more complicated. In the two last services, particularly in the former, not only is invention constantly changing conditions, but besides this the systems of maintenance are so uncertain and varying that it is almost impossible to be sure that comparative statements of results are to be depended upon. Thus the statements of the cost of public lighting in Chicago by electricity that have been put out by the municipal authorities have been disputed by persons who have made a careful analysis of income and outgo and who, on their side, assert that the cost per light per annum is more than twice as great as the sum given by the municipal officials.

It is unquestionably true that the allowance for depreciation in the value of plant—and this with electric-lighting plants, in view of constant improvements that are being made is exceedingly large—has rarely been given its proper proportions in the statements of municipalities that have adopted this form of

public lighting. Thus in the matter of extensions a different method of book-keeping has commonly been adopted by those controlling public services from that followed by private corporations. It is, I believe, the custom of the latter when the the generating station and main lines have been constructed, to charge ordinary extensions and enlargements to the maintenance, and not to the construction account, a practice directly the reverse to that pursued by most of the municipalities. While argument might be made in the defence on both sides of this question, it is obvious that where a company adopts one method, and a municipality the other, a simple comparison of the costs of the respective services, which makes no allowance for these differences, is, for economic purposes, absolutely worthless.

Another factor which enters into the calculation in an electric-lighting service is the element of political control. In a public water service the number of persons employed, considering the magnitude of the investment made and the income received, is relatively small. When the plant has once been established it may almost be said, in contrast with other great public services, to run itself. But with an electric-lighting plant the conditions are entirely different. Judged of economically, success or failure may depend upon the skill and good judgment shown in conducting the enterprise. This is the case with private companies, and it may account for the variation in results obtained where the experiment of public control is attempted in different municipalities. On general principles it may be said, that where the control of a public system of electric-lighting rests in the hands of those whose appointments are due chiefly to political influences, the losses resulting from incompetency and the inefficient performance of duty, may fully equal if they do not exceed the loss, which the community not infrequently sustains in having to pay in increased charge for lights to an electric-lighting company, the interest upon bad investments, upon the money spent in purchasing the useless because duplicate property of competing companies, and upon stocks and bonds which have been issued but which represent no actual investment of capital. In a word, no investigation into this field of possible public activity will be of profit, which does not make liberal allowances for the part which good and honest business management plays in producing satisfactory results.

The question of a public gas service occupies, it seems to

me, a position midway between the water supply and the electric-lighting services. It is not as simple as the former, but is far less complexed than the latter. The argument can be made in favor of a municipal gas-lighting plant that it comes more nearly than an electric-lighting plant to the classification of a service where the establishment of a monopoly is desirable. Except in the relatively few places, where the electric feed wires are placed in underground conduits, it is questionable whether there is any special advantage in having the electric-light service of a city under a single control. Where a large area has to be covered it is more economical for an electric-light company having entire possession of the field to maintain several stations than it is to have only one large central station. Besides this, every material increase in demand for light or power necessitates additional installations of dynamos and wires; hence there is not in this class of service, after a reasonable expansion has been reached, that saving in expense which commonly attends carrying on business upon a large scale. On these various accounts the merits of monopoly play a less important part in electric-lighting plants than in some other quasi-public services.

But the gas plant problem is of a different character. With this service the best results are obtainable through the creation of a monopoly. To say nothing of digging up the public highways in order to lay mains and pipes, which at a relatively slight additional expense can be constructed of sufficient size to meet all local demands by a single system, the manufacture of all of the gas needed for a large city can be carried on with greater economy at one properly located works, than if the production is sub-divided among a number of smaller establishments. Unlike an electric service, where a large part of the income received has to be paid out in the cost of production and maintenance, a large part of the income received from the sale of gas is needed to pay interest upon the money invested in the plant—the cost of manufacture being much the smaller part of the sum—hence the larger the demand, if the facilities are adequate, the less the cost of production.

Under such circumstances and the existence of a monopoly it may easily happen that the welfare of a community—so far as this is contingent upon a gas supply—will be dependent upon the public spirit shown by those in control of the service—a state of mind which is not always found in those who manage



such corporations. A relatively small supply of gas sold at a high price may bring in to a gas company as much net profit as would be obtained by the sale of a large volume of gas at a low price, and as there would be less trouble in carrying on the former class of business, the tendency of human nature to follow the line of least resistance would induce a company to follow the easier policy. This has proved to be the case in our Massachusetts experience. For several years past the gas company in the city of Lowell has sold its production at a price from 30 to 40 per cent. lower than the prices demanded by the gas companies of other cities of the state which have had equally good facilities for production and sale, depending for its profits on large production and widespread use, while in the other instances the reverse policy has been pursued. The advantage to the community in the case of Lowell is too obvious to need argument, and the method adopted is one which a public service would be much more likely to employ than a private company.

It will be seen from the foregoing that in my opinion the primary question in an investigation of this kind is whether the best results are to be secured by monopoly or by competition, and that in the event of the latter alternative municipal ownership is undesirable. Assuming the general advantages of a monopoly, then while municipal ownership and control should be desirable, it may easily be that local conditions stand as a barrier in the way. It is with municipalities as with individuals, no two are exactly alike. One man may undertake a great enterprise and by foresight, judgment, economy and industry make an unqualified success. Another man, undertaking the same work and with the same opportunities, would end in financial failure. It is impossible to lay down any general rule to be applied to specific cases, and yet every person at this conference must from his own experience know of communities where public enterprises upon a large scale might be judiciously undertaken, and, on the other hand, must know of other communities where the local political conditions are such that any great public work undertaken would almost inevitably entail twice the cost that would come from similar operations if carried on under the direction of a private individual. This and the tendency in official reports to minimize actual expenditures are circumstances which must qualify what might otherwise be obvious conclusions.

The President : Before declaring the question open for general discussion, the chair would like to have the privilege of calling upon two or three gentlemen not connected with the association, but who have given the matter under consideration a great deal of attention, and I would ask Hon. James W. Latta, Secretary of Internal Affairs of Pennsylvania, and ex-officio head of the Bureau of Industrial Statistics of that State, to favor us with some remarks on the subject of municipal ownership.

REMARKS OF HON. JAMES W. LATTÄ.

Mr. President and Gentlemen :

I am somewhat astonished at being presented to an audience of scientific people as a gas and water expert. I am for the first time informed that I have given this subject a great deal of attention. I can say with much satisfaction, that I have learned a vast deal about it this morning, and have been very greatly instructed by the information that has been given to this convention by the able gentlemen who have appeared here to-day, and I am sure that much good will come to the members of this body from this discussion. I have been forcibly impressed, in looking at the portraits which adorn these walls, with the fact that all of the Speakers of the New York Assembly (whom I believe these portraits represent), from the Bald Eagle of Westchester, yonder, all the way around to the latest incumbent of that honorable position, exhibit a remarkable unanimity in the wearing of a moustache. If there be that much unanimity in the opinions of the members of this convention on the subject of the municipal ownership of water, gas, and electric-light plants, there is no necessity of putting an injunction upon the convention that it shall not take one side or the other of the question.

In our city of Philadelphia there has been much discussion in recent years in regard to the water supply. I am told that in a recent paper read in the Engineers' Club of Philadelphia, the question was raised as to whether it was better to have a source that was pure or to purify the water after it left a source that was impure, and one of the gentlemen present, in discussing the matter, stated that he preferred a pure source to filtration, because he believed in innocence rather than repentance. (Laughter.) I suppose that there is less trouble in securing a

pure source and in purifying from an impure source in the case of water than in that of gas, because I fancy that the manufacture of gas, to satisfy the consumer, is almost wholly dependent upon how well the purification shall succeed, for gas at the commencement is a very dirty product, and when it gets to be an illuminant the object of the manufacturer and the hope of the consumer is that very much of that dirt and impurity shall be removed, and that the gas shall be clean and pure in order to give satisfaction to those who use and consume it. As has been remarked here, the city of Philadelphia, which has been my home since the day of my birth, owns its gas plant. For a long time the cry in that city used to be for "dollar" gas; for a long time the city of Philadelphia was weighted under the load of gas at \$1.80 per 1,000 feet. Now the consumer has reached the goal and acme of his hopes, and Philadelphia supplies its people with gas at \$1.00 per 1,000 feet. I was surprised to learn in the city of Washington the other day, where the debate on gas was under way in the Senate of the United States, that we did not have the purest gas in the world, if we did have pretty nearly the cheapest. I suppose Philadelphia was the first city to begin the public manufacture of gas in this country. I do not know whether that is a fact, but it is nearly so. I think in 1796 the question was first agitated there in a small way of the use of gas in halls, theaters, and auditoriums,—what few there were,—and the first private house that ever had gas introduced into it as a matter of private consumption was situated in the city of Philadelphia. This was about 1816. Some of the scientific people of that good old town of ours very persistently and very imperiously commanded the authorities to have nothing to do with the product at all. The most learned men—men of scientific attainments, men of legal attainments, and men of all professions—signed a protest as late as 1835, in which they urged the people to have no dealings with the gas producers. However, from 1796 up to that time there had been a persistent outcry against municipal ownership, and private, too. It was claimed that gas was as ignitable as gunpowder, and equally as dangerous, and as fatal in its effects. But eventually a gas works was built by subscription, with the option that it might be purchased after a certain number of years had gone by, and I think in 1841 the gas plant of Philadelphia passed into public control, and has been so from that time until now.

The water supply of Philadelphia, when the pump and the well were passing into oblivion for larger communities, found its source of power in the overshot wheel. Then public ownership was almost immediately assumed, and the creation of a loan for this purpose was ordered as early as 1799. It was a non-paying, unresultful operation at first, I think. It cost about \$500,000, and it had about 2,000 consumers or renters. The expenses of its maintenance alone, without making any provisions for the interest on the capital invested, was about \$10,000 per annum more than the receipts; but it has been a successful enterprise for many years, and it now realizes a handsome income for the city. It is impossible, I suppose, without a good deal more of detail than we are able to secure at the present time, to state just what financial advantages the citizens of Philadelphia receive from the municipal control of our water works; but I think it is a fair estimate to say that the service that costs the consumer in Philadelphia \$15.00 per annum would cost the consumer who lives in a town where the enterprise is conducted by private parties about twice that amount, and I do not suppose we can ask anything better than that at the present time.

The question of electric-lighting is one that is creating a good deal of stir in our city at the present time. We had great deal of agitation of that subject in our legislature a year ago, and I suppose we are likely to have agitation on that and other questions as long as men are in competition with each other. There was no trouble in regard to these matters in the olden time because such enterprises did not exist to the extent they do to-day, and besides there was not very much capital seeking investment. Capital is seeking opportunity for investment now, and when more of it gets into active use, business will be in better shape; but we have been very successful in our end of the state under the condition of affairs as they now prevail. (Applause.)

The President: Prof. John R. Commons, of the University of Syracuse, is with us to-day, and as he has given the subject of municipal ownership a great deal of study, I am sure the convention will be pleased to hear from him.

## REMARKS OF PROF. JOHN R. COMMONS.

Mr. President and Gentlemen : I thank you for your kind invitation to address you. I will not say very much, for I can add but little to what has been said. There is only one of the industries under discussion here to-day that I have investigated to any extent. I have paid considerable attention to water works in Indiana and in New York state, and I will make a few remarks on that particular industry, although I do not know that what I may say will prove worthy of your consideration. There is one point upon which I might touch, that has not been mentioned here, and that relates to the starting-point of an investigation of this kind. It has been said here, and in the meeting yesterday especially, that your business as statisticians is to deal solely with facts, and that you have nothing to do with theory. Back of this question of public and private ownership is a theory upon which you must throw light, and that is the problem I am interested in,—what light will a statistical investigation, properly conducted, throw upon certain principles of public economy? For example, these three industries which you take up here are industries in which there is a distributing plant going into the homes and families of the community. These industries, therefore, are to be looked upon, not as ordinary private industries, but as a co-operative business of the consumers. The municipal feature being introduced into the operation of these industries, they must not be conducted as private corporations would be, with the idea of balancing cost and receipts and getting a net result ; but the municipality takes them up as the representative of all the consumers,—the homes, the families of the people. So there is a very vital difference, and that difference must be worked out by directing the investigation along fruitful lines. It would have a bearing on the question of interest and of taxes. For example, I found in Indiana a number of small cities and towns which have recently put in municipal water works, and they have from the first adopted the policy of paying the interest and sinking fund out of the taxes of the community, and allowing the receipts from the consumers to meet only the running and operating expenses, paying fixed charges out of the taxes. They seem to take that as a matter of course. Unconsciously, without any elaboration of theories, they had adopted the principle that a water works plant is an agency of the consumers, the working people, not the

property owners, but all the people of the community, to furnish a vital necessity. That is the reason why, as a city increases in size, it becomes necessary for the municipality to take over the water works plant. The city of Syracuse, where I reside, has now reached a population of 120,000, and within the last two years the municipality has been compelled to take over the private plant, after considerable litigation. One line of investigation that ought to be carried out, it seems to me, would be to take all these particular localities where they have had at one time private plants and these have been transferred to the municipality, and investigate those plants historically. The city of Syracuse would be an excellent example. I and my students have been working on that to some extent, and the results are very striking indeed,—taking up the various items which the speakers have mentioned here as points for the main investigation. So the question of taxes and the question of interest must be looked upon from that standpoint. I am not prepared to say that I know just what direct bearing that would have on your investigation; but this I do say, that your statistical investigations ought to bring out those facts which would enable us theorists to reach some conclusion on this very important subject.

While listening to your discussion I made a few notes, and perhaps I may be allowed to dwell for a few minutes on one or two of them. There is first the question of consumption and the extension of mains. For example, in Syracuse, when the municipal plant was acquired they immediately extended the mains into all outlying suburban districts, placing them in all the localities where the people had formerly depended upon wells and cisterns, and that has brought about certain results outside of what I suppose is the legitimate scope of your inquiry, namely, the effect of an undertaking of that kind upon values of property in the municipality, of land values in the suburbs, and the effect upon the building of houses. It has greatly stimulated the building of houses, and it has influenced the rates of insurance. This latter point, the rates of insurance before and after municipal ownership,—a comparison of rates of insurance in different localities under these different conditions,—is of great importance, and it seems to me should be considered by you.

As to the method of investigation, I believe Professor Bemis is perfectly right in saying that it requires a personal investigation of each plant. I have been compelled to depend upon

Baker's Water Works Manual and such slight personal investigation as I and my students could make. The results are not satisfactory, as you of course know, but this seems to me to be the proper way, and as you have asked me to give suggestions, I should say, with my inexperience as a statistical investigator, that the proper way would be for these different subjects to be divided up amongst the different bureaus or commissions. It would be quite proper for the National Department of Labor to take the gas industry in this country and to make the investigation in foreign countries, which certainly ought to be added to the contribution on this subject. Let the National Department take the gas industry, and I believe there is but one state where it would be possible to secure any practical results of electric-lighting under private management, and that is Massachusetts, and that by virtue only of the fact that Massachusetts has a commission which is already legally empowered to secure the information from electric-lighting companies; but even there the electric-lighting plants under municipal control have not been in operation long enough to furnish good results. An investigation of electric-lighting in Massachusetts would be more valuable than in any other state, if my observation is correct. The water works plants should be investigated by each of the bureaus in its own state. That is a simple problem. It is one which would furnish a criterion for future investigations of gas and electric-light as to the methods and as to the principles of co-operation of consumers. It would bring out the theoretical principles adequately, and it does not require expert capacity on the part of special agents. It can be carried out to great advantage by each bureau. It seems to me, in view of the present equipment of the various bureaus, that the three lines of investigation I have indicated are the most fruitful

I thank you for your attention.

The President: We are exceedingly fortunate in having present with us this morning a gentleman connected with the only commission in the United States raised by law for the control of gas and electric-lighting. I take pleasure in introducing to you Hon. F. E. Barker, Chairman of the Board of Gas and Electric-Light Commissioners of Massachusetts.

MR. BARKER.

Mr. Chairman and Gentlemen of the Association :

I hardly think I am ready to speak on this subject at this time and in this place. I am very glad to be here, and have listened with much interest to the papers and the discussion upon this topic, but have not prepared myself to talk upon it. Your president, whom I have had the pleasure of knowing for some years, and who comes from the same state, being in a position to realize how little I know about statistics and statistical methods, gave me an invitation to attend this convention to see, I suppose, if I could learn something, and I have come more to indulge that hope than to assist you in matters with which you are all so familiar.

The subject has been so ably presented in the opening paper and the ground has been gone over so thoroughly that I could in any event add but little.

Moreover, I have heard the merits and demerits of municipal ownership and control so much discussed, and have given this particular topic so much study that I fear it would be nearly impossible for me to speak upon it without the risk of being called down by your vigilant president for some apparent effort to argue in favor of one side or the other of this important question. I have found the subject exceedingly interesting, and there is so much to be said upon both sides that I have not yet ventured to take any positive position upon one side or the other, so that if I seem to do so now it must be only seeming.

Having for ten years had to do with the gathering of statistics relating to gas and electric-lighting companies, the dissemination of information about them and the burden of governmental regulation of them, I cannot help thinking that such an investigation as you are now considering would be likely to present serious difficulties. I am confident, however, that such an inquiry, intelligently and successfully prosecuted, would prove of substantial public advantage. Few, if any, subjects of equal importance seem to me so lacking in reliable and detailed data. This is due in part, I believe, to the fact that even the parties engaged in the business do not themselves possess the necessary material. The gas business, up to a comparatively recent period, has been an extremely profitable one. Strict economies of administration were of minor importance, and the necessity for a rigidly accurate system of accounts was therefore but little



felt. Although the companies in our own state are among the oldest in the country, the general condition of their accounts when first we began to scrutinize and deal with them, greatly surprised us. A uniform system of accounts is of the highest importance in statistical work, and it may be doubted whether reliable statistics are possible without it. We have succeeded in great measure in securing this among the gas companies of Massachusetts, and while I know that many companies outside of our own state have adopted our system of accounts, there is yet, according to my own observation, great lack of uniformity not only through the country at large but within the limits of single states. The fact that the business has come to be much less profitable than formerly has imposed upon the managers a desire to compare among themselves reliable data, and to this end to seek uniformity of accounts and records, so that the present tendency is strongly in that direction.

The fact that without legislation in your respective states to assist you, the information from private corporations must be entirely voluntary may prove a serious difficulty even where the managers possess accurate and reliable data. The condition of their business and the welfare of their companies may seem to them to make it inexpedient or against their interests to publicly exhibit the information. I have found it necessary to cultivate to some extent the acquaintance of engineers, and to study the workings of many plants throughout the country, but I have have found managers, especially in the larger cities, reluctant to disclose even the annual output of their companies. The reason for this, of course, is found in the natural reluctance of business men to exhibit their private affairs, and in the fear that any information may be used to the injury of their corporation, either in the encouragement of a rival enterprise or in some of their other relations with the municipality. The Massachusetts law, which compels companies to exhibit exhaustive data, seems to recognize that this fear has some foundation, because it couples with the power to collect data, the power to protect a company against unreasonable exactions by the municipality and to preserve its territory against the inroads of rival concerns if the board to which the information is given deems such a course to be in harmony with the public interest.

If an attempt be made to collect information respecting the electric-lighting business, one difficulty peculiar to that, I think, will be the failure of the managers to utilize in their records

and accounts any common standard or unit. The English Board of Trade some years ago established as a unit for the measurement of electrical output the kilowatt of energy, or the kilowatt hour, but the use of this, although the best term known, according to my observation, has not been generally adopted in this country. Indeed, I am of the opinion that very few electric-lighting companies make an attempt to determine the quantity of their output except as measured by the dollars which they receive. The gas companies have their unit in the thousand feet of gas, the whole management of the business revolves around that unit, and in well-managed works a careful record of the make and output is kept. Such methods, however, have rarely been adopted by the electric-light companies. Even in our own state we have been unable to secure the keeping of such records by the electric-light companies, over which we have supervision, and we have only just succeeded, after three years of effort, in securing legislative authority to compel such records to be kept, the effort for such authority having been opposed by the companies, who feared it might be against their interests.

Although the unit of output and manufacture in the gas business is well understood and generally adopted throughout the country, other units, such as the ton of coal, the chaldron of coke and the barrel of tar, differ widely in different localities. The ton of coal might seem to be a term of precision, but it varies in different works by nearly twelve per cent., some reckoning the short ton, others the long ton, while in some of the Central and Western states the companies do not reckon coal by the ton at all, but by the bushel. I have found engineers unable to answer the inquiry as to how many of their bushels it would take to make a ton; the question was new to them.

I think too much stress cannot be laid upon the importance of having this information gathered, if it be gathered at all, by persons who are familiar with the business to be investigated, or at least that the bureau under whose immediate supervision the information is gathered may have the active assistance of such persons. No collection of data would be complete without some attention to the matter of depreciation and a consideration of what is a proper charge for this item. It is certainly a part of the cost of operation as much as either coal or labor, but it is one that is often overlooked, not only by the municipal authorities but by the companies, and is one about which engineers and managers have only limited data

and widely differing opinions. Depreciation should not only account for the actual deterioration of the apparatus due to its use, but should include the reduction in the market price of apparatus, and the loss upon apparatus which becomes commercially useless through the progress of the art, as well as those appliances which may become valueless not because they are worn out or out of date, but because the growth of the business in that particular locality makes it no longer economical to use them and, although in condition to do the work for which they were originally designed, nevertheless become practically useless through the necessity for a reconstruction or rearrangement of the works to meet new conditions. Charges for depreciation by different managers will usually depend upon their view of the relative importance of these items and upon the degree of profit which the business brings.

I ought perhaps to apologize, Mr. President, for the rambling way in which I have made these suggestions through lack of previous preparation. I am sure this discussion will be of public interest and advantage. I hope to have the pleasure of conferring more directly with some of the gentlemen whom I see here and whom I have known heretofore only through correspondence, and I shall be very glad to give the association and its members, individually or collectively, any information or assistance in my power in a matter of such interest and importance as you are now considering.

The President: The Treasurer of the American Statistical Association, to which I believe many of you belong, is present, and has consented to make a few remarks on one feature of our proposed investigation. I have the pleasure of introducing to the convention, Mr. John S. Clark, Treasurer of the American Statistical Association.

REMARKS OF MR. JOHN S. CLARK.

Mr. President and Gentlemen:

I feel, in rising before such an audience as this, very much as Mr. Mark Twain did on one occasion, when he was called upon to address an association on a subject of which he knew nothing; he thought he could speak from an unprejudiced standpoint, inasmuch as he knew nothing about the subject!

While I am not particularly conversant with the details of

your subject, it is one that interests me profoundly, particularly in its broad relation to social well-being. Those of us who are studying the broad social questions of the day, see vast aggregations of people coming under new urban conditions so characteristic of our time, and see that when men come together in these large aggregations, new issues at once confront them,—social issues of the utmost importance. These questions which you are discussing,—the question of water supply and also the illumination of great municipalities,—are not merely questions of immediate physical convenience, of bringing water into the houses so that it may be drawn by means of a faucet and providing an illuminant so that it may be had by turning a screw; they are questions which seriously affect the social well-being of the citizens of those towns or cities and of the nation as a whole. The time has been when the minority of the people lived massed in towns (small towns at that) and the majority under rural conditions. The case is rapidly becoming reversed. We cannot much longer look to genuine country life for the nation's vigor. It behooves us to watch and work for the improvement of urban conditions; to make city life itself thoroughly wholesome and healthy, if we want to keep a sound physical basis for the national life. This question of water supply and illumination has a great influence on the physical health which underlies mental and moral vigor in our great municipalities. As Professor Bemis and Professor Commons have said, it is necessary to look into individual cases in order to get all the bearings of this important question,—the effect the extension of water mains have on the value of property in various parts of a municipality, the effect upon the health of the inhabitants, all these things are essential parts of the main question and interests us according to the standpoint from which we look at the subject. I have chosen this line of thought, because, as a citizen visiting your association, I feel that this question of water supply and illumination are important to the social well-being. Can those necessities be best supplied by private corporations? I take it that if it can be shown that private corporations can supply our municipalities with water and illumination of the best quality at the cost of four or five per cent. on the investment necessary for carrying on the enterprises, there will be very little agitation looking to a correction of any abuses that may occur; for we see that when we want to borrow money for municipal purposes on municipal

credit, we can get the money for from three to five per cent., or in extreme cases for six per cent. If I remember rightly, Professor Bemis has called down upon his head some very emphatic blessings because he has rather doubted the contention that the private supply of these necessities could *not* be secured at a cost of three or four per cent. The great question before you, as to how municipalities can best be supplied with these necessities and at the cheapest cost, is one in which we are all intensely interested. I do not suppose that if it can be shown that they can be supplied more cheaply and economically through private enterprise than under the direction of the municipalities there would be anybody disposed to question that line of policy. What you want, and what we all want, is to get the best service at a reasonable cost.

On motion of Mr. Wadlin, of Massachusetts, the question of the expediency of undertaking the investigation of the municipal ownership of water, gas, and electric-light plants was referred to the Committee on Resolutions, with the understanding that when that committee reports the subject will come before the association for further discussion.

The convention adjourned to meet at Saratoga, at eleven o'clock A. M., June 25.

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### THIRD DAY.

The convention met, pursuant to adjournment, at the Grand Union Hotel, Saratoga, with President Wright in the chair.

The President: The unfinished business is the discussion of the expediency of undertaking an investigation relating to the municipal ownership of water, gas, and electric-light plants. You are familiar with the action of the Executive Committee, in which they recommended to the convention the question of investigating this subject, the investigation not to be considered for or against municipal ownership, but for the purpose of ascertaining all facts bearing upon the question. The matter was referred to the Committee on Resolutions yesterday for

action, and if that committee is ready to make a report that would bring the question formally before the convention for discussion. The chair awaits the pleasure of the convention.

Mr. Horne : The Committee on Resolutions, of which Commissioner Wadlin is chairman, has prepared a resolution, in response to the action of the convention yesterday, and in the absence of Mr. Wadlin, who was obliged to return to Boston last night, the duty of presenting that resolution devolved upon me. The resolution is as follows :

*Resolved*, That it is expedient for the offices represented in this association to undertake an investigation of the private and municipal ownership of water, gas, and electric-light plants, substantially as recommended by the Executive Committee, and that for the purpose of determining the methods and limits of such an investigation and the preparation of blanks to be used therefor, the matter is referred to a committee consisting of the President of this association and two others to be appointed by him, which committee shall report its conclusions and recommendation to the various bureaus by correspondence.

The President : You have heard the resolution reported by the committee. The adoption of this resolution commits the convention to the investigation as recommended by the Executive Committee and leaves the preparation of blanks and the arrangement of details to a special committee consisting of the President of the association and two members thereof. The question is upon the adoption of the resolution.

Mr. Meriwether : I thoroughly believe in the importance of investigating the subject of such municipal franchises as street railways, water works, gas works, etc., but I do not see in what way these investigations can be conducted with special reference to the question of municipal ownership of such corporations.

Yesterday, Professor Bemis alluded to certain errors made by private investigators who had failed to take into account the cost of coal in determining the question as to whether or not municipal ownership was desirable. Such errors as these seem to me small compared with other difficulties that present themselves. Investigation may show in the case of one city that public construction and operation of a water works or a street railway may be less than private construction and

operation, but, after all, this will not throw much light on the question whether or not it would be cheaper in any other city; nor whether it would be cheaper for another city to build water works and street railways rather than to permit private corporations to build them. This for the reason that political conditions in one city may be very different from political conditions in any other. The patriotic interest displayed by the citizens of one city may be so great that public operation of street railways, etc., may prove a great success. On the other hand, patriotic sentiment in another city may be so lacking that the affairs of that city may be largely in the control of what may be called the "freebooting" element, and public ownership of street railways and water works in such cities may mean the enrichment of corrupt city politicians at the expense of the rest of the citizens.

How can the statistical method be used to throw light on the question as to whether or not the civic sentiment of a given city is sufficiently aroused to guarantee success in the conduct of such corporations as water works and street railways?

In his valuable work on municipal government, Dr. Albert Shaw describes the great success which has attended the municipal ownership of street railways in Glasgow, Scotland. The result of the investigation of this subject by our labor bureaus may show a number of instances in the United States where municipal ownership of water works, etc., has proved an advantage to the public, but after all this has been done, it seems to me it would be erroneous to conclude that because Glasgow and certain other cities had found the experiment to be successful that therefore it would be successful in any city that might care to adopt it.

It does not require investigation to prove that what a private corporation can successfully accomplish can also be accomplished by a municipal corporation, providing the municipal corporation is composed of men of integrity and business ability, willing to devote their talents to the public cause. This much needs no proving, and the rest—as to whether a given city's civic sentiment is sufficiently aroused to insure good business management of city affairs—can hardly be demonstrated by the statistical method.

In Missouri we have already taken up the question of street railway franchises, and while the information obtained may prove of value in showing what these corporations receive from

the public and what in return the public receive from them, and what the public might with reason demand from them ; still I do not think anything we have done, or could have done, will throw much light on the question whether St. Louis will do well to take charge of these corporations and operate them ; that point cannot be determined until we can ascertain the extent to which earnest and patriotic citizens take an interest in the government of the city.

It can be said without fear of contradiction that in any city where a private corporation operates gas or water works successfully the municipal government could run these same works with equal success, provided the municipal government is composed of the right class of citizens.

Is there any way to determine whether in a given community the better class of people take sufficient interest in the city government to make it safe for the public to operate its own water works, street railways, etc. ?

I am frank to say that in my own city of St. Louis the better class of citizens have not taken that interest in city government which would lead me to hope for the wisest or most economical operations of street railways were the city to undertake their management ; to such an extent has the city government been turned over to self-seeking politicians it has proved impossible to prevent the House of Delegates and Council of St. Louis from *giving* away to private corporations franchises which might easily have been sold for millions of dollars had our city fathers been half as solicitous for the welfare of the public as they were for their own welfare.

I am heartily in favor of the investigation, and will do all I can to forward it ; because the more the public knows about these franchises and semi-public corporations the better it will be ; but as I understand the situation, I cannot see much ground for hoping that the present investigation will materially aid in solving the question whether it would be an advantage or disadvantage for municipalities to own this class of corporations.

The President (from the floor, Mr. Meriwether having been called to the chair) : I will state to the convention that the Executive Committee, in seeking some line of inquiry which could be taken up by the bureaus at large, hit upon this topic of municipal ownership. It may not be known to all of you that the convention itself was organized for the very purpose of aiding in securing uniform investigations throughout the



states; but up to the present time no investigation, conducted by all the bureaus simultaneously and on a uniform basis, has been undertaken, for the reason, first, that the bureaus were created at different times, some being now nearly a generation old and others having been in existence but a short time; so that when some of the newer bureaus have sought to take up a uniform investigation they have found it to be impossible, because the inquiry which they desired to enter upon had been carried through by some of the older bureaus. That is one reason which has prevented so far any general investigation by all of the bureaus. The second reason why uniform work has not been undertaken is the difference in the industries of the various states represented in the convention. Without elaboration, you will see at once that a bureau situated in a state devoted to a certain line of industries would naturally want to prosecute investigations relating to those industries, while the bureau in another state devoted to an entirely different line of industries would feel called upon to give its attention to the industries carried on in its own state; therefore the convention has never been able, up to the present time, to enter upon a uniform and simultaneous investigation. The question of the municipal ownership of gas, water, and electric-light works seemed to the Executive Committee to furnish the basis for an investigation which could be entered upon by all the bureaus at the same time and upon uniform blanks to be used by each and every one of the commissioners, provided the convention should see fit to take up the investigation at all. The theory of statistics which actuated the committee was not whether municipal ownership was desirable or undesirable, but whether any investigation could be instituted which would enable municipalities and the citizens thereof to determine whether there was any advantage to the consumers in such ownership, or whether on account of the cost, they should continue in the old way. That was the theory of the committee in making the recommendation that this convention consider the expediency of making a uniform investigation relative to such ownership. Now, I think that the papers read before the convention yesterday are very able, and that they point out to us most clearly the obstacles and difficulties to be met with in such an investigation, should the convention see fit to enter upon it. It is one of the most difficult undertakings upon which we could enter, and so far as my own view of the case is concerned, I am free to say

that if we go no farther than to print the papers and remarks of yesterday we shall do a great public service.

A great many people think it is very easy to make such an investigation as that contemplated—that all we have to do is to make a few inquiries of each establishment involved and print the result. That sounds exceedingly easy, but it is a most difficult thing to do. Dr. Willcox pointed out the difficulties, and he was supplemented by Prof. Bemis and others, who dwelt upon the difficulties in detail. Mr. Barker, who is at the head of the only gas commission in the country, showed, furthermore, how difficult it is, even for a commission with the laws of its state behind it, to collect this information. I agree quite fully with what Mr. Barker, the chairman of the Massachusetts commission, has said, and yet, notwithstanding all these difficulties, I believe that this convention, or the various bureaus composing it, can conduct an investigation which will result in certain lines of information which, if not complete, if not adequate to determine the question of the desirability of municipal ownership, will at least stimulate the interest of the people of the whole country, so that the question shall become a familiar one to them. The question of municipal ownership of gas and electric-light plants and water works is no longer a question even of municipal socialism; it is purely a question of business. If one community finds that another neighboring community can supply its inhabitants with electric-light or gas-light or water at a less rate than a like community operating under some other method can perform the same service, then that information of itself is sufficient to stimulate an investigation of the facts underlying the business operations of these corporations. So, if the convention should see fit to take up this investigation, we can ascertain at least some of the more easily obtainable information, if not the more difficult. I believe, furthermore, from my experience in conducting investigations into the cost of production, a most difficult thing to do, that we shall find a sufficient number of concerns that will give us concrete, representative information. We must not expect to get information from each and every one of the private corporations now engaged in these business enterprises, but we will get here and there crucial information which will be beneficial in forming a fairly accurate conclusion. That much we can do, no matter what the difficulties are. We can get the cost of supplying electric-light, gas, and water by the municipal concerns,

and we can get the price which the constituents of those concerns have to pay for these commodities. Whether we can get the cost and the price of these commodities as furnished by private corporations is a more difficult question, but we certainly can get the price to the consumer. We do not have to depend upon the good-will of the managers of a private gas works to get the price of gas to the consumer; that can be ascertained independently of any courtesy on the part of the management. I believe that here and there, as I have said, the management will give us the cost of gas in the receiver, and by units which shall be fairly representative of conditions in every community. If we can do this, even in a partial way, we shall be contributing to the intelligent discussion of the whole question of municipal ownership. We can, without any difficulty, ascertain the extent to which municipal ownership has thus far been carried. There can be no opposition strong enough to prevent that,—there can be no antagonism, either on the part of municipalities or of private corporations, that will prevent us from securing accurate information as to the extent to which municipal ownership has already been carried, and if we accomplish nothing else, that information alone will be worth all the efforts we may make as the result of our deliberations here to-day. I hope, therefore, notwithstanding all the difficulties and obstacles that face us in the consideration of this investigation, that the resolution may be adopted, and it is just and fair to you for me to state, here and now, before you vote upon the question, just what you can depend upon so far as the United States Department of Labor is concerned. Should this resolution which has been reported by the Committee on Resolutions be adopted, and the committee raised under it, can frame uniform blanks, which I confess is one of the most difficult features of the whole business,—but if the resolution is adopted and the committee is able to frame uniform blanks which will enable us to conduct an investigation on a scientific basis all over the United States, the department which I represent will take up those states which have no bureaus, thus completing the whole chain; and furthermore, should any one of the bureaus represented by a commissioner of labor not be in a condition to enter upon the investigation at the time the others decide to begin it, we will take that state also, so that, with those states which have bureaus of labor and which enter upon the investigation, and the work which the Department of Labor at Washington will do, we will

have an investigation which will cover every one of the states and territories of the United States, thus giving to the public a complete statement of the extent to which municipal ownership has been carried in this country. Furthermore, we will undertake to make a compilation of the literature already existing upon this subject,—a compilation from official reports at home and abroad,—putting that into concrete, abstract form, and furnish every bureau in the country with a copy, so that you will be at no expense whatever for that part of the work.

Mr. Simmerman: Could that be done within the next six or eight months, so that we could have it for use next year?

The President: Yes. That compilation would not be a very difficult matter, as the literature up to date is not extensive. We will make that compilation and furnish a copy of the results to every commissioner of labor in the country, so that he can incorporate in it his own report, thus relieving him of that expense. Furthermore, if this resolution should be adopted, and, if any one of the commissioners should so desire, or all of them,—it had better be all,—we will undertake to tabulate the results for each state and furnish each bureau with that complete tabulation, not only for the state involved, but for all the states, so that each commissioner can have all the facts for the whole country in tabulated form. Furthermore, should any bureau that undertakes to carry on this investigation find that it needs more assistance than its own appropriation will warrant, I will see that its force is supplemented from Washington. (Applause.)

Now, this investigation, should the resolution be adopted, may be an abject failure; but I assure you, Mr. President and gentlemen, that there is a great deal of success sometimes in failure. If this body, representing thirty-three or thirty-four states of the Union, cannot make a success of an investigation entered upon with earnestness and with sincerity on this line of subjects, then the question of municipal ownership will have to take a new lease, and there will have to be something else besides information and positive data upon which to form conclusions, and it will have become then a political issue without the facts, as so many issues are at the present time. It is our duty to our constituents everywhere, it seems to me, to see to it that they be informed on this great question, which is being agitated more and more every year, and informed with all the accuracy that it is possible to put into the information. If we fail, any body of men would fail. Again, there is another con-

sideration, which is not a public one, but which touches us individually and officially, and that is that every man in the United States, whether he believes in municipal ownership or whether he opposes it, will welcome this investigation in the warmest way. Business men have said to me, "I hope your convention will undertake this investigation, because we know nothing about the subject; we do not know how far it has gone. We believe it is a business matter, after all, and we want to be informed upon it." But beyond the satisfaction of giving not only the friends but the opponents of municipal ownership the facts, so that each side can shape its conclusions according to them, it is one of the very best things this convention can do for its own welfare, for no other single investigation which I can call to mind will so thoroughly solidify the interests of all the bureaus of labor statistics in the country and so thoroughly bring them to the notice of the citizens of the United States as being united in a great public work. So from every consideration,—the public interest, the interest of our respective offices, the interest of this convention,—it seems to me that we ought to adopt the resolution which has been reported by the committee. (Applause.)

The President resumed the chair.

Mr. McDonough: After listening to the very clear and concise statement of the President, it seems to me that the members of the convention must thoroughly understand the question, and as time is precious, I move that the resolution be adopted.

Mr. Schilling: I merely wish to remark that the only disappointment I felt yesterday morning, in listening to the papers presented on this subject, came from the fact that it was simply a question as between the present private, monopolistic control and municipal control, in the sense in which we commonly understand those terms,—that is, whether or not the community should own and operate its own plant. There was nothing said yesterday, or even this morning, in regard to the Detroit or Toronto method, and it seems to me that it is very important that we should give that our attention.

The President: I think that would legitimately form a part of the investigation.

Mr. Schilling: I really think that should be made a part of the investigation. I believe you will find that most private cor-

porations depending for their existence upon franchises pay larger dividends, especially in large cities, than are received in other lines of enterprise. That fact alone convinces the average man who pays any attention to the matter that something is wrong somewhere. Furthermore, it will be found that the people who are making these investments can afford to pay large bribes for their franchises, and that they periodically come together and by a purely arbitrary rule determine what those franchises are worth for the coming year, and then issue and sell stocks to cover the increased valuation. The other side of that is municipal ownership and control, where we are confronted with the other evil, frequently mentioned, that these institutions become the home of all the political heelers,—the incompetent men who in other walks of life have demonstrated their inability to carry on the struggle for existence,—where every politician who has any influence can unload some of his friends. So we are confronted with those two phrases of the subject, both offering very serious obstacles. Upon the one side the people are plundered ; upon the other side they provide, as it were, a stamping ground for all the incompetent people of the community, and the pay-rolls are lumbered down with more people than are necessary to carry on the work. Now it seems to me that a middle ground, under such circumstances, is a very proper thing to consider. In my judgment the Detroit and Toronto method, under which the citizens give franchises to these organizations, but impose certain conditions, such as that they cannot employ their men more than so many hours, that the minimum wage shall not go below a certain point, that at certain hours in the day tickets shall be furnished to the working people at reduced rates, etc., would offer a possible solution to the problem which we are trying to solve. There remains, of course, the question whether it is better that the city should receive an annual bonus from the corporation for the privilege of operating the franchise, or whether the cost of service should be reduced to the lowest possible point, leaving the bonus in the pockets of the citizens individually.

After some further discussion, the resolution as submitted by the Committee on Resolutions was unanimously adopted, and the President selected Mr. Meriwether, of Missouri, and Mr. Wadlin, of Massachusetts, to serve with him on the committee created by the resolution.

Mr. Horne, of the Committee on Resolutions, submitted the following resolution, which was unanimously adopted :

*Resolved*, That the thanks of this association are hereby tendered to Governor Morton for the complimentary banquet tendered to the association during its visit to Albany ; to Commissioner McDonough and ex-Commissioner Dowling, and the former's assistants, for their efficient arrangements, which have contributed so largely to the success of the convention ; to the Delaware and Hudson Railroad Company, the Albany Railway Company, and the Albany and Troy Steamboat Company for transportation furnished ; to Mr. Thorne, manager of the Harmony Mills, of Cohoes ; Major Arnold, of the United States Arsenal at Watervleit ; Professor Boss, of the Dudley Observatory, and to Mr. Frederick Easton, Superintendent of Public Buildings, for courtesies extended to the association.

On motion of Mr. Ives, of Connecticut, the thanks of the convention were tendered to Prof. Walter F. Willcox and Prof. Edward W. Bemis for the papers which they read before the convention ; to Mr. M. N. Baker and Mr. Osborne Howes for the papers which they forwarded for the consideration of the convention ; and to Hon. James W. Latta, Hon. F. E. Barker, Prof. John R. Commons, and Dr. John A. Clark, for their remarks before the convention ; and the Secretary was instructed to record this action in the minutes of the convention.

On motion of Mr. Morse, of Michigan, the following resolution was unanimously adopted :

*Resolved*, That the thanks of this convention are due and are hereby tendered to Colonel Carroll D. Wright, President, and Hon. L. G. Powers, Secretary of the convention ; that very much of the success of this and preceding conventions of the association has been due to the able and impartial manner in which Colonel Wright has presided over its deliberations, and to his untiring perseverance as a member of the Executive Committee ; that as Secretary for the past two years, Hon. L. G. Powers has brought to the performance of his duties exceptional abilities, which have contributed greatly to the successful transaction of the business of our conventions, and that this association fully appreciates the many courtesies received from him.

On motion of Mr. Schilling, of Illinois, the Secretary was instructed to tender an invitation, on behalf of the convention, to Hon. Carroll D. Wright, President of the Association, to deliver an address on "The Industrial Development of the South," at some convenient time during the convention at Nashville next year.

The convention adjourned *sine die*.

## SOCIAL EVENTS OF THE CONVENTION.

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The social features of the convention added much to the pleasure of all those who were present.

On the adjournment of the morning session of the first day, the members were presented to His Excellency, Hon. Levi P. Morton, in the Executive Chamber, by Commissioner McDonough. It was a pleasure to all to grasp the hand of the affable, cultured gentleman, who has risen from the ranks to the high position held by him,—Governor of the Empire State.

On Tuesday evening, a trolley ride over the electric railway system of Albany was taken, on invitation of Commissioner McDonough, giving all an opportunity to view the beautiful city of Albany. A visit was also made to the Dudley Astronomical Observatory, a gift to the city by former and present residents. Besides providing the funds for the building and purchase of apparatus, a fund sufficient to build dwellings and pay the salaries of the staff was also given. All that was possible to add to the pleasure of the party was done by Prof. Boss. As the heavens were clear a good opportunity was given all to view Saturn with its rings and satellites.

On the second day, in the afternoon, the trolley cars were taken to the United States Gun Works at West Troy, where the process of making modern guns was shown and explained by Major Arnold, U. S. A., Superintendent of the works. The buildings are situated upon land comprising one hundred and thirty-seven acres. The main building is 1,000 feet by 150. Two hundred and fifty men are employed, working eight hours per day. One hundred and thirty-seven are skilled mechanics, the best that can be obtained. Fifty guns per year are now being finished, of the following calibre: 4, 6, 8, 10, and 12 inches.

The visitors were told that the works were "christianizing the world" by making war terrible. After nearly two hours



spent here the cars were again taken and a visit was made to the large cotton mills of The Harmony Mill Co., at Cohoes, where the process of weaving cloth was seen for the first time by many of the party. The visit here was cut short on account of the time spent at Watervleit. The return to Albany from Troy was made by boat, through the courtesy of the Albany & Troy Steamboat Co.

In the evening, a complimentary banquet was tendered those attending the convention by Governor Morton.

Colonel Carroll D. Wright, the President, presided. A toast to Governor Morton, proposed by the President, was drank standing, and was responded to by Colonel Ashley W. Cole, Private Secretary to his Excellency. For three hours conversation was as brisk as proper attention to the "menu" would allow, after which speeches were made on call of the President, by Messrs. Meriwether, of Missouri; Clark and Latta, of Pennsylvania; Matthews, of Maine; Morse, of Michigan; Myers, of Maryland; and Schilling, of Illinois. The company was favored with the presence of three ladies, wives of members of the association.

On the third day of the convention, at the close of the session at Saratoga, the members in attendance were invited by ex-Commissioner Dowling, of New York, to enter carriages, and an enjoyable ride was taken about the beautiful village. A visit was made to the "Hilton Park," comprising several hundred acres and which is accessible to visitors at all times. The evening train bore nearly all of the party—a few being obliged to return home—to Boston for a visit to the Massachusetts Bureau, a special car being provided for the party.

At 9 o'clock Friday, Commissioner Wadlin, assisted by the veteran statistician, Charles F. Pidgeon, Chief Clerk of the Bureau, explained the methods used in tabulating by mechanical devices, the data gathered for the census and other reports of that Bureau. It was a most profitable visit to all and many wished that more time could be spent in securing further information concerning the methods employed. One hundred and fifty clerks are employed, all under civil service rules.

A tour of the State departments in the Capitol completed the morning's programme.

After dinner, Commissioner Wadlin provided open carriages and a drive was taken through Cambridge (stopping at Memorial Hall), Brookline, Roxbury, and the public park system.

With a beautiful summer sky, the enjoyment was unalloyed. The hospitality of Commissioner Wadlin was further shown by inviting all present (twenty-five) to an evening's entertainment at the theatre.

This closed the convention of 1896. All present felt that Messrs. Wadlin and Pidgeon "were jolly good fellows." While in the historic Assembly Room of the Massachusetts Capitol, the members were called together by Commissioner Meriwether, of Missouri, and the following resolution offered by Mr. Ives, of Connecticut, was unanimously adopted :

*"Resolved,* That the thanks of this convention are hereby tendered to ex-Commissioner Dowling, of New York, for the courtesies shown them at Saratoga, and to Messrs. Wadlin and Pidgeon, of Massachusetts, for the varied information and pleasure given them during their visit to the old ' Bay State. ' "

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