

*Bulletin de l'Institut International de Statistique.* Tome II, Année 1887. Rome, Imprimerie Heritiers Botta, 1887.—Two parts, large 8vo, 374 and 346 pp.

The second volume of the *Bulletin* of the International Statistical institute proves of how great value the institute is going to be. The first part is devoted to the proceedings at the meeting in Rome, and the second to various papers, among which are the continuation of the elaborate statistical survey of the populations and areas of the earth by Levasseur; a short essay on the statistics of prices, by Professor Wagner; an article on Italian emigration on the basis of the Italian report of 1886; the usual bibliography of recent statistical works, etc.

Every one interested in statistics will turn to the proceedings at Rome with a great deal of curiosity. There was present at the meeting a very distinguished body of men. Among them were Bertillon, Bodio, Cheysson, Engel, Ferraris, Foville, Hasse, Inama-Sternegg, Juglar, Keleti, Körösi, Laspeyres, Levi, Lexis, Luzzatti, Martin, Mayr, Messedaglia, Mouat, Neumann-Spallart, Palgrave, Perozzo, Rawson, Say, and Wagner. Many of these men had taken an active part in the old statistical congresses, and the question is whether the new organization can avoid the mistakes of the old and confine itself to really scientific work. The trouble with the old congresses was that the body became too large by the admission of people who were not really statisticians but who had a popular interest in the matter. As a consequence the work of the congress generally consisted in making demands, for the mass of the members readily saw the desirability of exhaustive statistics on a great variety of subjects without knowing the practical difficulties in the way of getting them. The institute is composed largely of men engaged in statistical bureaux, and they will not be apt to err in this direction.

As was to be expected and as is desirable, the institute occupied itself largely with statistical method. The papers covered two very important points: first, as to getting and classifying the statistics themselves, whatever they may be; and second, how to make the principal statistics internationally comparable. No more competent body of men to deal with such questions could have been assembled, and the papers and ensuing discussions cover almost the entire field of statistical science and are of great value. It will be possible to mention only a few in this review.

Mr. Giffen presented a paper describing the method of the Board of Trade in collecting the statistics of wages lately ordered by Parliament. Two points are to be noticed, *viz.*, that the wages are to be obtained from employers and in great detail as to subdivision of employments, and that an attempt is to be made to classify the wage-earners propor-

tionately to the amount of wages received. The first proposition will result in returns similar to those obtained by the Massachusetts Bureau of Labor in 1884. The second will give us new measurements of the well-being of the community such as we have never yet had.

In the committee on the statistics of prices, Mr. Giffen and M. Beaujon presented papers on the vexed question of "index numbers," both giving an account of different systems and making suggestions for improvements. The former thinks that wages of labor should be made one element in the index number, and that different articles should be weighted according to their importance in trade. The latter desires an index number for retail trade as well as wholesale, and that the composition of the number for each country should be determined by experts, according to the relative importance of different commodities in consumption. It is safe to say that we are very far from any satisfactory statistics of prices, and neither proposition does much toward solving the problem.

M. Ferraris made an important proposal: that the statistics of the movements of the precious metals should be gathered from banking-houses and transportation companies rather than at the custom-houses, and showed from examples how much more complete the former were.

Many interesting papers were read on the possibility of making the statistics of different countries comparable with each other. M. Körösi proposed a plan for using a similar classification in the statistics of population. Mr. Bateman pointed out that our statistics of imports and exports were not reliable, because the method of valuation was not the same in different countries; that the distinction between domestic exports and exports of articles of foreign manufacture could not be accurately carried out, because imported articles often entered into the manufacture of the former; and that the statistics of the country of destination were defective, because the shipper himself very often did not know the final destination of the goods. M. Luzzatti made a very valuable report from the committee on public debts. He showed that the common use of statistics of public debts for purposes of comparison was defective, because it did not observe that in some countries the unfunded as well as the funded debt was included in the statement; and that the purpose for which the debt had been contracted was often ignored, although it was an element of the greatest importance in judging of the real burden on the people. He also raised the rather novel question whether pensions ought not to be considered as a debt-charge, like the payment of interest, which they resemble in many respects; and the proposition seemed to meet with some favor.

Finally, there was a very instructive effort to bring statistics into the service of social science by determining statistically the question of the well-being of the community. Of this character were the papers by

Engel, "Sur la consommation comme mesure du bien-être des individus, des familles et des nations"; Keleti, "Sur l'alimentation en Hongrie"; and Neumann-Spallart, "Sur la mesure des variations de l'état économique et social des peuples." These three distinguished men are working at the problem of indicating, by statistics of the production and consumption of the principal articles, the increase or decrease of comfort in different countries, or in the same country at different periods. Neumann-Spallart has even promised to give the results of his investigations in a future number of the *Bulletin*, and to illustrate by geometrical curves the rise or decline of well-being in the principal countries of the world. The discussion brought out a good many dissenting opinions as to the possibility of doing anything of the sort, but if it could be done it would be the greatest triumph that statistical science has as yet achieved. Enough has been said, however, to show how fruitful the labors of the Statistical institute promise to be.

R. M. S.

*Laws of the United States Governing the Granting of Army and Navy Pensions, together with the regulations relating thereto.*

Issued by JOHN C. BLACK, Commissioner of Pensions, Washington, 1887. — 8vo, 140 pp.

Some of the departments at Washington appear to have taken up the very sensible idea of publishing in convenient and accessible compilations the national legislation on special topics. The volume here noticed is one of these publications. The object is to save officials the labor of looking through the numerous and imperfectly indexed volumes of the statutes at large for the various acts bearing on particular subjects. The student who has occasion to investigate any question in the fields already covered by these compilations, will find his labor greatly shortened by their use, and is likely to meet with statutes which otherwise he might overlook.

Of particular value for study are the *Laws relating to Loans and the Currency, Coinage and Banking*, issued by the Treasury Department in 1886 in a volume of 459 pages. Another useful volume is *Laws relating to the Construction of Bridges over Navigable Waters of the United States*, a book of 335 pages, issued in second edition in 1887. Other recent issues are the *Immigration Laws of the United States* (state and national), and *Quarantine Laws* (state and national), both issued in 1887 by the State department.

It is pleasant to see the government at Washington, which already provides with such great liberality for the study of the natural and physical sciences, taking steps to aid research in the legal and economical sciences as well. These have heretofore received less favor.

G. H. B.