

“(1.) That the collection, tabulation, and publication of statistics for the whole Union should devolve upon the central office (excepting certain sections of statistics in regard to which existing arrangements were deemed to be sufficiently satisfactory).

“(2.) That the publication of statistics should be effected by the central office in sectional form according to the subjects dealt with, instead of in the previous form of one annual publication.

“(3.) That, in the absence of any reliable statistics in the following respects, advantage should be taken of the powers conferred by the Act—(a) To take a complete annual census of manufacturing industries; (b) similarly to take a complete quinquennial census of agricultural and pastoral production, and a census annually in less detail; (c) to make investigations as allowed by the Act in regard to rates of wages, hours and conditions of labour, the cost of living, and kindred matters.

“(4.) That in respect of various other matters where little or no statistical information has been available the deficiency should, as far as possible, be made good at the earliest opportunity.

“(5.) That, in spite of the abnormal conditions induced by the war, having in view the changes and developments to be expected after the cessation of hostilities, the work of obtaining accurate and sufficient data as to all the resources and affairs of the Union was one of pressing necessity.

“(6.) That an official year-book of the Union, giving in abstract all available statistical and official information, should be published annually.”

The policy adopted in South Africa of having a Statistical Council, comprising both official and non-official members, to advise and assist the Statistician has much to commend it. The Council has power to co-opt other officials when dealing with the statistics connected with their administration, and aims at linking up the administrative with the statistical in each case so as to facilitate their co-operation. I discussed the work of the Council with the Statistician for the Union Government, and he assured me the arrangement was working very well indeed.

In Australia each State has a separate Statistical Office under a Government Statistician, while the Commonwealth Bureau of Statistics in Melbourne, under the control of the Commonwealth Statistician, Mr. Knibbs, is responsible for the Commonwealth statistics. The work there is largely centralized, and there is a very close co-operation between the State Statistical Offices and the Commonwealth Bureau.

In India there is a Director of Statistics, and during the sitting of the British Empire Statistical Conference in London a special Committee comprising all the representatives of the colonies and protectorates attending the Conference made the following recommendation for consideration of the Colonial Office:—

“That in all colonies and protectorates not possessing an adequately organized Statistical Office there should be instituted at the earliest possible moment a Statistical Council comprising the Colonial Secretary, the Collector-General or principal Customs authority, and one or two other officers of standing and experience, to deal with all questions affecting the statistics collected and compiled in the colony or protectorate.”

Thus throughout the several parts of the Empire there has been a movement for the centralization and specialization of statistics as a field of its own apart from administration. There is also a strong feeling for centralization and unification in the United Kingdom itself, but so far, owing to what may be termed the vested interests of the several administrative departments concerned, it has not found concrete expression in the formation of a central Statistical Bureau. The calling of the Conference itself is merely another expression of the same idea, and of the desire to have a proper statistic showing the drift of the Empire as a whole. It is satisfactory, therefore, to find that the policy of centralizing statistics which is being gradually adopted in New Zealand thus finds confirmation in other parts of the Empire as the correct one to follow for producing a complete and accurate statistic. Centralization has only been partially carried out in New Zealand, and its extension requires careful consideration in each case.

(2.) APPLICATION OF MECHANICAL APPLIANCES FOR STATISTICAL ANALYSIS AND ACCOUNTING WORK.

During the course of my tour I took every opportunity of inspecting all kinds of adding, computing, and tabulating machines. Among those inspected the following deserve special reference:—

Adding, Computing, Sorting, and Tabulating Machines.

Dalton.—A ten-key electrically driven adding and listing machine, somewhat after the style of the Burroughs adding and listing machine in the Census and Statistics Office, but, owing to its having only ten keys, the Dalton is capable of being operated much faster. It has special facilities for computing also, but is primarily an adding-machine. I should like to see one obtained for use in our Statistical Office.

Madas.—This is a computing-machine very like the Millionaire, but with special facilities for division. A Madas would be very useful in conjunction with the Millionaire, and I recommend that one be obtained for the Statistical Office.

Moon-Hopkins.—This is a combination typewriter and computing-machine, manufactured in New York. It is specially adapted for commercial work, invoices, &c., all extensions and additions being made by the machine. I was much impressed by it, but it has not yet been adapted for English money. The manufacturers are unable to supply the local demands, and are therefore not yet considering the foreign market.

The Pierce Tabulating-machine.—The Pierce is a new machine, of which there are as yet only one or two in actual use, but is wonderful and almost superhuman in its operation. Each machine has to be specially built for the work to which it is to be put, and is not adaptable for other purposes. I was told of one being obtained for the War Risk Insurance Department at Washington. It is to be operated by a keyboard similar to that of an ordinary typewriter. A master card is first made. It will at the one operation both type the matter to be put on the card and punch a series of holes on the card which symbolizes the same matter. The master card will show the name and number of the insured, amount insured, the rate of premium, how