

The Co-Ordination of Vital Statistics in Canada

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It is unnecessary to emphasize the importance of vital statistics for Canada. Not only are they necessary in preventing crime and in facilitating the transfer of property, but they lie at the basis of public sanitation and afford a measure of national efficiency from the most important standpoint of all, namely, the biological. As this Bureau has been the prime mover in calling the present conference, a brief statement of its point of view and a summary of past history and of present conditions in Canada may be of service.

Vital Statistics are a part of the scheme of population statistics, or demography, which is perhaps the leading subject with which this Bureau has to deal. Two kinds of records are required in almost every accounting system: First, a periodical stock-taking, and second, a day-to-day record of transactions. In population statistics, the stock-taking, is, of course, the decennial census; the day-to-day part consists of two records: first, migration into and from the country, and second, the natural increase or decrease through birth and deaths within the country; i.e., Vital Statistics.

This Bureau accordingly comes to the problem of Vital Statistics from two distinct angles. In the first place, we take the Census. Now, the merchant who takes stock relates that process carefully to his day-books and ledgers, and so ought the Census to relate its broad decennial inquiry to the needs and object of Vital Statistics. Secondly, though the day-to-day recording of Vital Statistics is done by the Provinces (civil rights, the protection of which is an important object of Vital Statistics, being assigned to the Provinces by the B.N.A. Act), this Bureau is also specifically instructed to compile Vital Statistics annually, doubtless in appreciation of the fact that such statistics are necessary for dealing with certain national problems—immigration, for example—and also that Vital Statistics even from the purely local standpoint must, if they are to be of real value, rest on the broadest possible basis. Side by side with this mandate, goes another in our Act which implies that the Bureau ought to avoid setting up independent machinery for Vital Statistics, but should work through the Provinces. At any rate the machinery for so doing is provided.

Now up to the present this Bureau has found it quite impossible to fulfil either of these functions properly. The reason lies in the Provincial situation. One Province has no vital statistics. In the others, legislation and methods differ often in the widest way. For example, the statistical year is not uniform; the international classification of deaths is not universally followed; and each Province has its own scheme for the collection, compilation and presentation of these statistics. Take the highly important matter of the form of death certificate as an instance. Of the 24 items which such a certificate usually covers, two of the provinces omit 16, another 15, another 13, whilst the lowest number of omissions is 3, and this does not include other items of the 24 which differ in what they call for.

Administration is of first importance in Vital Statistics. The best legislation in the world will yield statistics that are worse than useless, if it is not administered efficiently. Now, standards of administration differ as between province and province and from time to time in the same province. I might instance a rather remarkable increase in the birth rate in a certain province recently, the explanation of which lies, not in any gain in reproductive force among the population, but in the energy with which the province in question has addressed itself to securing better registration. The gain, accordingly, is in departmental efficiency, and it is a very fine thing, but it is disconcerting to have the news of it given out in the form of a rise of the birth rate. It will easily be seen that unless methods, as well as legislation, are standardized, no combination of vital statistics is possible. Accordingly, though this Bureau have made an annual practice of bringing together the more recent provincial Vital Statistics, we have always, for the above reasons, prefaced the figures with a note that they must not be made the basis of any calculation of mean birth or death rate, which signifies, being interpreted that we are without true Vital Statistics.

The same factor has militated against careful delimita-

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tion of questions in the decennial census. Under a proper scheme, while the local authorities keep account of births and deaths from day to day, there are certain data of first-rate interest to Vital Statistics which the Census can obtain more readily. The Census has not always obtained these data, but we can plead in extenuation that it is hard to relate the Census inquiry to a system of vital statistics when the latter does not exist.

Two interesting attempts to improve matters may be briefly mentioned. Thirty-five years ago the Dominion Government instituted a plan for compiling the annual mortality statistics of cities of 25,000 and over, by subsidizing local boards of health to supply the information under special regulations. A beginning was made with the five cities of Montreal, Toronto, Hamilton, Halifax and St. John, by 1891, the list had grown to twenty-five. This was in the days when the only records of birth and deaths were those of the municipalities. With the organization of provincial bureaus of vital statistics, the Dominion work was abandoned. Its demise, however, was soon after marked by a significant incident, namely, a conference of Dominion and Provincial officials summoned by the Hon. A. R. Angers in 1893, which passed a resolution calling upon the provincial and federal authorities to co-operate in the work of collecting, compiling and publishing the vital statistics of the Dominion. That resolution has laid a long time dormant—exactly a quarter of a century—but we may hope to-day that its slumber is at length to be disturbed.

The other attempt to meet the situation was made through the medium of the Census. The framers of the original Census Act seemed to have thought that they might bridge the chasm in so far as mortality statistics are concerned by instructing the Office, when taking the Census, to ascertain the number and causes of the deaths occurring in each household during the preceding year. But the results were not happy. It is a fundamental rule of Census-taking that you should not ask questions involving the use of memory or of scientific knowledge. The reason is obvious. Most of the people are not scientifically minded, and neither are the eight or ten thousand enumerators that the Census must employ at \$2 or \$3 a day to make its inquiry. In actual experience it was found that our enumerators missed twenty per cent of the deaths. (Incidentally we found that we got a good number that the local records missed.) The cause may be set down to migration of population, lapse of memory or knowledge in the person supplying the information, and the difficulty of guarding against careless enumeration. Moreover, the information we did obtain was unsatisfactory, especially in the all-important matter of the cause of death. Even had the results been otherwise, mortality statistics at ten year intervals are of comparatively little use. Moreover, we need birth rates and marriage rates only less insistently than death rates. The inability to get accurate and reliable vital statistics through the decennial census has been recognized in the United States, France and Germany for many years, and it is high time that we ceased so abortive an undertaking here.

Now what is the remedy? It lies, we think, in taking up the matter where it was left by the Conference of 1893 and in framing a plan for permanent Dominion and Provincial co-operation. In this it has seemed a natural part for the Bureau to take the first step. We have no right, as we have no inclination, to say to any Province how it shall conduct its affairs. But Vital Statistics are scarcely on that footing. As already said, their value in relation to perhaps their most important ends, lies almost wholly in the breadth of the basis on which they rest, and a Province which does its work in a watertight compartment is losing half the results. In fact, the basis of vital statistics is not even national. At the close of the war, an imperial conference on statistics is to be held, in which an inter-Imperial system of Vital Statistics is one of the items for discussion. Canada will, of course, be represented at that conference. It goes without saying also that we should be able to compare notes with the United States in such a matter. In fact, Vital Statistics are international in scope and interest.

What this Bureau has done in taking up the matter is, I think, known to all present. First we drew up a memorandum to which was attached a model bill, model forms of registration and model regulations for procedure in detail,