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Annual

Report of the

DOMINION BUREAU
OF STATISTICS



DOMINION BUREAU OF STATISTICS
DEPARTMENT OF TRADE AND COMMERCE

ANNUAL REPORT

of the

DOMINION BUREAU OF STATISTICS

FOR THE FISCAL YEAR
ENDED MARCH 31, 1950


Price, 40 cents

TO HIS EXCELLENCY FIELD MARSHAL THE RIGHT HONOURABLE VISCOUNT
ALEXANDER OF TUNIS, K.G., G.C.B., G.C.M.G., C.S.I., D.S.O., M.C., LL.D.,
A.D.C., GOVERNOR GENERAL AND COMMANDER-IN-CHIEF OF THE DOMINION
OF CANADA.

May it please Your Excellency:

The undersigned has the honour to forward to Your Excellency the
report of the Dominion Statistician on the activities of the Dominion Bureau
of Statistics for the fiscal year ended March 31, 1950.

Respectfully submitted,



Minister of Trade and Commerce.

OTTAWA, JUNE 15, 1950.

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REPORT OF THE DOMINION STATISTICIAN

THE RIGHT HONOURABLE C. D. HOWE,
MINISTER OF TRADE AND COMMERCE,
OTTAWA.

Sir,—In the fiscal year ended March 31, 1950, besides carrying on the regular work of its Divisions, the Bureau of Statistics had to undertake several special projects. Outstanding among these was the Trial Census taken in October, 1949.

A Trial Census, as the term implies, is a test restricted in its field of application, yet sufficiently comprehensive to furnish a verification of the procedures planned for the complete census. Since plans for the 1951 Census include some radical changes from previous practice, a Trial Census was essential in order to discover weaknesses in questionnaires, instructions, tabulations, and other procedures that would affect the cost, accuracy and speed of the full undertaking. The taking of national censuses at regular intervals is the largest statistical task of governments and such considerations bespeak the utmost care in preparation. A description of the organization, procedures and results of the Trial Census is given at pp. 17 to 19.

At the end of March, 1950, final plans for the taking of the 1951 Census were being pushed forward rapidly though of course a great deal remained to be done. Since the Trial Census aimed at reproducing as nearly as possible the actual conditions of the Decennial Census, the general planning is considerably ahead of any previous census.

Among the more important of the other special tasks undertaken in the fiscal year were:—

The entry of Newfoundland into Confederation increased the work of the Bureau. A Regional Office was set up at St. John's for the purpose of carrying out the same type of sample survey of the Labour Force as is done in other parts of Canada. The staff of that office is also being used to collect general statistics by personal contact with individuals and firms. Statistics for Newfoundland, comparable to those for other provinces, will be developed as rapidly as is practicable, but the groundwork must be well done if reliable results, comparable to those of other provinces with which they will in future be published, are to be assured. Experience has shown that the personal contact approach, while requiring more time, will produce the best results in the end and create an atmosphere favourable to willing co-operation.

During the year the Bureau of Statistics completed the tabulation of the 1945 Census of Newfoundland, the original data for which had been collected by Newfoundland itself. Early in 1949 this Bureau issued a bulletin containing a comprehensive list of tables of existing statistical information on Newfoundland. It also collaborated with the Department of External Affairs in the production of the printed booklet entitled **Newfoundland, Canada's New Province**. The Department of External Affairs, with the exception of one chapter prepared by the Geographical Bureau of the Department of Mines and Resources, wrote the text. Statistical materials, layouts and certain designs were provided by this Bureau, which undertook the task, in collaboration with the Department of External Affairs, of preparing and editing the booklet for publication.

A special supplement was issued with the Canadian Statistical Review of February, 1950, entitled **Canada at the Half-Way Mark of the Twentieth Century**.

Professor C. L. Barber, Professor of Economics, University of Manitoba, was secured for summer employment to examine and make a critical appraisal of the work being done in the Industrial Census. His report contained excellent suggestions for a better utilization of the valuable materials collected. Some of these are long-term projects but effect is being given to others immediately, as for example, the use of the commodity approach in tabulating industrial census statistics (in addition to tables of production by industries).

During the year the first tabulations of the Survey* of Income and Expenditure, made in October, 1948, were published. These showed the post-war consumption and expenditures in five principal cities. The average expenditure and income of families and single persons were shown for those five cities and the ways in which people have distributed their expenditures among such broad groups of items as food, rent, etc., during the post-war period.

One of the tasks allotted to the Bureau of Statistics by the Statistics Act is "generally to organize a scheme of co-ordinated social and economic statistics pertaining to the whole of Canada and to each of the provinces thereof". There now exist many and varied arrangements with Provincial Governments to that end. Improvement in these arrangements and the maintenance of effective co-operation require periodic conferences between ranking personnel of this Bureau and of the provinces specializing in specific statistical fields. During the past year there were such conferences or meetings of continuing committees covering: Public Finance (provincial and municipal), Hospital Statistics, Criminal Statistics, Vital Statistics and Agricultural Statistics. At all of these conferences and meetings real progress was made towards improvement in the statistics relating to the various fields. The Conference on Statistics of Agriculture, for instance, discussed the proposed schedules for the 1951 Census of Agriculture, with a view to reducing the number of questions of the very lengthy questionnaire used in 1941 and 1946. The objective was to reduce costs, speed up the compilation and improve the accuracy of the data.

Requests for New Statistical Series

The Bureau is under constant pressure to start new statistical inquiries and has to say "no" to a great many. With the comprehensive statistical coverage which now exists, embarking upon a new series is justified only if the information is essential, either in the formulation of government policy or, if it is going to be of real assistance, in leading to better business or social improvement. Many requests that do not measure up to this level have to be rejected. One statistical series for which there has been reiterated demands would, it is estimated, cost about \$300,000 per year to compile and even then would give a misleading and partial statistical picture. Data for a complete picture are unobtainable. Another recent request for a new statistical series would have cost about \$100,000 a year without adding importantly to the information already available.

Numerous other instances could be quoted, less costly individually, but in the aggregate involving considerable expenditures. These were not deemed to be of a standard of importance to warrant additions to staff and could not be handled at present by existing staff.

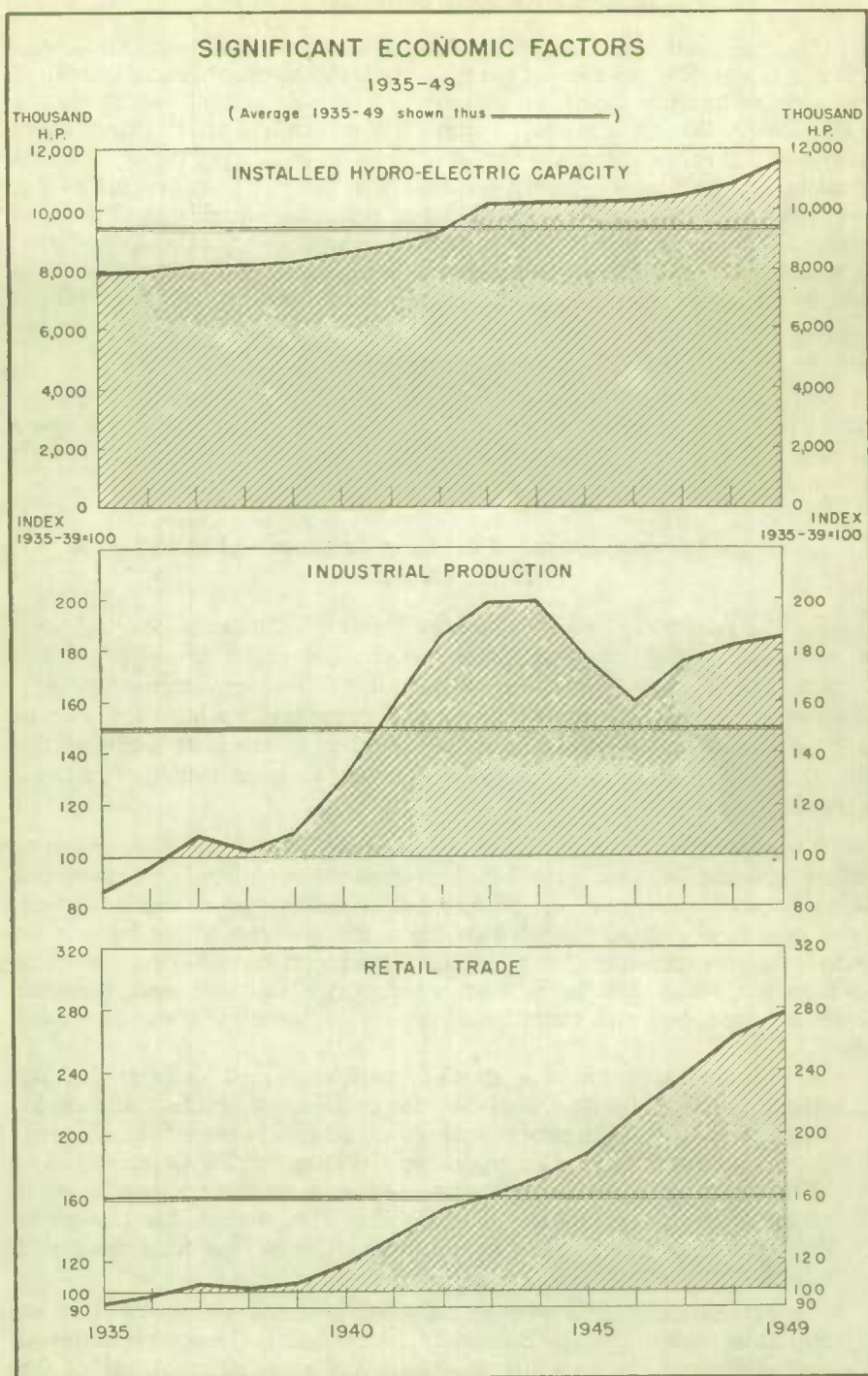
Efforts towards Increased Economy in Bureau of Statistics Administration

For the past three or four years the Bureau of Statistics has had, as a prominent part of its program, the streamlining of its operations. The demand for statistics from the general public, from government departments and agencies and from international organizations has increased to such an extent that special efforts have had to be made to increase the efficiency of operation, and at the same time to keep staff and general costs to an essential minimum.

It was decided at the outset to set as an objective the improvement of Bureau operations to the extent that any examination from outside would yield a high efficiency rating. A great deal has now been accomplished. It will take time to reap the full benefits of the changes which have been made but new procedures have already introduced many savings, work of questionable value has been eliminated, more efficient and speedier methods introduced and output speeded up. Some concrete examples are:—

(1) The creation of a small Organization and Methods Section whose function it is to ensure the use of the most efficient and up-to-date equipment, to improve work-flows, eliminate superfluous operations, make suggestions for improved working conditions, standardize stationery and forms, and improve in other ways the business aspects of the Bureau's activities. This Section also studies the design of questionnaires with a view to the most efficient type for subsequent tabulation.

(2) Arrangements were made with the manufacturers of business machines installed in the Bureau to have one of their experts stationed in the Bureau permanently to ensure the most efficient use of the equipment.



(3) A limited cost-accounting system was set up to study the costs of various operations, the data to serve as a guide to the most economical use of personnel and materials.

(4) Tabulating machines were centralized to ensure full-time use and actually resulted in some reduction in staff. A radical change was made in the layout of the tabulation machines resulting in a more efficient flow of work and greatly improved working conditions for the operators.

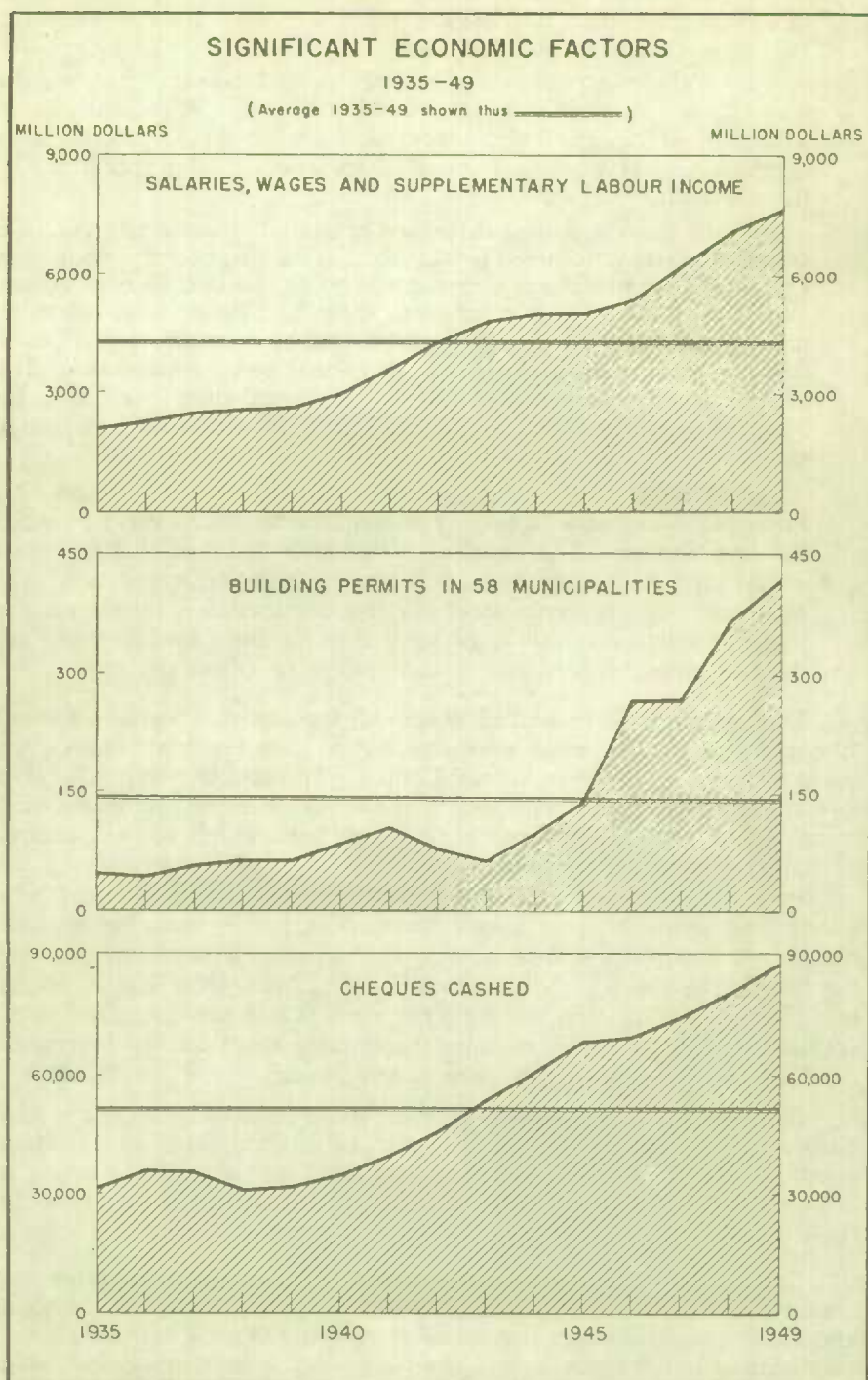
(5) A more economical method of tabulating certain broad fields of statistics was introduced by substituting the peg-board system, combined with a special form of questionnaire, for the double-bank adding machines. The adding machines, which had been in operation for many years, were due for replacement and by substituting peg-boards there was a saving of \$100,000 in capital equipment alone. This system has resulted in much saving of clerical time: one job in the Merchandising Statistics Section showed a saving of 27 clerk-months of time over former methods.

(6) During the year suggestions were made to the Department of Public Printing and Stationery that it should take over the D.B.S. Printing Section. The conclusion had been reached that this move would promote economy and efficiency in printing operations. The agreement which established the transfer included provisions that the Unit would continue to be located in the Bureau of Statistics and that the work of the latter would always be given priority.

Elimination or Reduction of Work.—A few statistical series which no longer filled an urgent need were eliminated. An important change was made in the work of the Industrial Census. Hitherto between 30 and 40 thousand full schedules have been sent out yearly containing many questions. More than half of these were for small firms which, in total, account for some 5 per cent of the gross value of product. These small firms now are sent a very simple annual form asking for only a small fraction of the information required from larger firms. Every five years or so more complete information will be obtained to serve as a bench-mark. This has been done also for contractors. Out of 27,000 some 10,000 will be sent the short form. The sampling principle is also being applied where applicable. This not only reduces the questionnaire burden to industry but lessens considerably the work of the Bureau.

Efforts are also being made to develop a Census of Industry questionnaire which will be more adapted to actual accounting practices in business concerns and which will have the twofold advantage of making it easier for firms to complete the schedule and ensuring greater uniformity in the statistics which the Bureau compiles.

Savings in Publication Costs.—The use of Vari-type printing commenced in the Bureau late in September, 1948, and came into full operation last year. Not only can work of high quality be turned out very much faster but the cost is greatly reduced. Saving on 1946 Census volumes will be \$55,000, and it is estimated that the 1951 Census volumes



can be produced at a saving of \$200,000 by the offset method as compared with letterpress.

An Advisory Board of Publications was formed in the Bureau in September, 1948. The main function of the Board is the constant review of the Bureau's publishing program, with a view to the elimination of unnecessary publications; the combining of related reports where savings can be effected thereby; ensuring that each publication meets a specific need; improvement in such matters as layout, the structure of tabular and accompanying textual matter, and of editorial standards; and the attainment of uniform standards as between Divisions of the Bureau.

Some 80 per cent of the Bureau's reports have already been examined with the following results:—

(1) One hundred and fifteen publications previously issued as reports will appear as Reference Papers or Memoranda. These will be announced in the Daily Bulletin and may be obtained on request but will no longer be sent out on the All-Publications or Special Lists because they are more or less technical in character and, while very important to a limited number of users, are not of general interest.

(2) Thirty-one bulletins have been combined, thus reducing them to 20. In addition, these have in many cases been shortened considerably through the elimination of repetitious material and other redundant matter.

(3) Substantial savings are being made by eliminating the reprinting, for purposes of permanent record, of periodical publications made by offset process in the Bureau of Statistics. Offset reports will be printed once only, by Vari-type, in such form as to permit of binding into one volume covering a year. Thus double editing, double proof-reading and double printing costs are avoided. For example, in the Census of Industry the practice has been to issue a rotaprint report for each separate industry as soon as complete returns were available. These were later combined into a manuscript for type-set printing and a complete volume issued as, for example, that covering chemical industries. This involved a costly job of preparing manuscript, composition of type, proof-reading, etc.

The new plan eliminates the volume printed by letterpress. Reports will be prepared for each industry by offset printing in such a way that they will be part of a complete volume. The various parts will be bound together into a single volume for the industry as a whole when the last individual industry is complete.

(4) Minutes of the meetings of the Board show that, of the 356 reports reviewed during the fiscal year, savings were made in at least 200 cases and in addition 14 reports were discontinued entirely. These savings ranged from relatively small amounts up to one-third of the bulk of some reports and in the aggregate reached a substantial total of text and tabular composition. In addition, the issuing of information as Memoranda and Reference Papers instead of regular reports resulted in important savings in printing and material costs.

Growth of the Dominion Bureau of Statistics

The war and post-war periods brought about an unprecedented demand for statistics. The increased complexity of the world's social and economic problems, the trend toward social security, the acceptance by governments of responsibilities concerning high employment all led to increased needs for statistics at the national level. This growth in the statistical needs of national governments has been accompanied by an increase in the needs of non-governmental users of statistics, due, among other things, to greater industrialization and a growing awareness of the value of statistics to business efficiency. Added to this is the existence of the United Nations, its specialized agencies and numerous commissions, all of which have created a demand for statistics at the international level far beyond anything experienced in the past. The corresponding increase in the administrative functions of government have created an urgent demand for reliable statistics as an aid to administration and policy-making at the higher level.

Expansion of the Bureau, therefore, was inevitable. A Bureau of pre-war size would be quite inadequate to cope with the essential statistical needs of governments and business to-day. The streamlining, described previously, and the centralization of statistical activities have kept costs to a minimum. The numerous new departments, economic research branches, control boards, government corporations and commissions that have come into existence since 1939 use statistics as the primary material of their studies and research. Their needs must be met by the Bureau or they will be forced to create statistical units of their own. In the latter case the cost would exceed considerably that of expanding the central organization to meet individual requirement and many of the advantages of centralization inherent in a co-ordinated over-all statistical plan administered by one organization would be lost.

Such economies of centralization include the following:—

(1) Fewer highly trained persons such as mathematical statisticians or economists are required in a Central Bureau because a small group can service efficiently all the divisions of statistics. If statistics were decentralized in Departments, every Department would need specialists in several fields for its statistical unit and the total number would be multiplied several times.

(2) In a Central Bureau there must be a large pool of costly and specialized tabulation equipment, and the problem of keeping it fully occupied is one that can be planned and met. Smaller units on specialized work would not be fully occupied. Only in a large unit like the Bureau is it economical to have a highly paid expert to look after the machinery and to keep abreast of the latest improvements in labour-saving devices.

(3) There is an enormous saving in time and energy when such over-all series as the National Accounts and National Income are in a Bureau which covers all statistical fields. Such series draw from

almost every Division of the Bureau, and it is much easier to direct the work of each Division towards the National Income objective than it would be to depend on various Departments co-operating toward that end.

(4) It is a great saving of time for the public and to government officials to be able to go to one source for statistical data rather than having to draw parts from various Departments. This is particularly true of economic research units.

(5) A Central Bureau is more likely to be considered by the public as an objective fact-finding body not influenced by other than purely statistical aims.

(6) In Canada the implementation of "A scheme of co-ordinated social and economic statistics pertaining to the whole of Canada and to each of the provinces thereof" requires constant and careful liaison with departments and agencies of the Federal and Provincial Governments on the one hand and with numerous business and other organizations. This can be achieved much more economically and effectively by a Central Bureau.

Since 1939 the Bureau staff has approximately doubled. The Statistics Vote (exclusive of administration and census votes) has increased from less than \$1,000,000 in 1939 to approximately \$3,500,000 for 1951 or by $3\frac{1}{2}$ times. Total ordinary expenditures of the Federal Government were approximately \$400 million for the fiscal year ended March 31, 1940, and approximately \$2,400 million for the fiscal year ended March 31, 1950, or six times those of 1939. These figures reflect the higher price level as well as the increased functions which the Government has been called upon to perform. In the main, the growth of the Bureau has been the direct result of the expansion of government functions. For instance, such policies as govern tariffs, taxation, unemployment insurance, old-age pensions, etc., must be planned, their incidence studied and the extent of the burdens that they impose in relation to the national economy known, before they are put into effect. Reliable statistics alone can provide the necessary foundation for such knowledge.

The following outline gives the main direction in which growth of the individual Divisions of the Dominion Bureau of Statistics has taken place since 1939. It will be observed how closely they follow the expansion of the field of government in the decade.

Agriculture Statistics.—Since 1939 the statistical needs of the Agricultural Prices Support Board, marketing boards such as the Meat Board, Dairy Products Board, Special Products Board, have had to be met.

The need for current statistics on the cash income of farms has been urgently pressed.

Other developments that have influenced requirements in the agricultural field include the demand for quarterly statistics on coarse grains, indexes of the physical volume of farm production and special indexes of farm prices.

The statistical requirements of the Food and Agriculture Organization of the United Nations have been largely a post-war development that is continuing.

A small research section on methods was set up to devise improvements in crop estimating and generally to ensure the use of the most up-to-date methods in statistics of agriculture.

Demography (Census).—Since the introduction of old-age pension schemes this Division has required 50 additional clerks working continuously to search for proof of age in census records.

International Trade Statistics.—The number of entries for trade statistics has increased considerably. The staff in the Balance of Payments Section has been increased to cope with the tabulation of travellers vehicle permits transferred from the customs ports to the Bureau of Statistics.

Labour and Prices.—The increasing importance of cost-of-living indexes and their relation to policy have required greater checks on the accuracy of basic data and Regional Price Representatives had to be appointed to do field work. A new series of international comparisons of trends in the cost of living was developed to assist the Departments with salary and allowance problems connected with representatives abroad.

A statistical series on monthly labour income was developed as an integral part of National Income estimates and for current publication.

Payroll statistics were started in 1941 to establish monthly trends in weekly earnings of salary and wage workers. Since 1944 statistics of hourly earnings and hours worked have been published monthly.

The development of economic research units in various Departments created a demand for many additional continuing compilations of earnings data.

The unemployment insurance statistics series requires about 60 clerks. There was, of course, no unemployment insurance in 1939.

In the past year employment statistics have been transferred to the Bureau from the Department of Labour and 14 clerks are engaged in this work.

Public Finance Statistics.—Since 1939 the Bureau has taken over the scheme of Public Finance Statistics developed by the Rowell-Sirois Commission, which provided for considerable expansion to meet official requirements.

Health and Welfare Statistics.—This Division has grown to keep pace with the new statistical requirements made necessary by the creation of the Department of National Health and Welfare and the developments in the social security field. A national register of vital records (births and deaths) based on a Federal-Provincial Agreement had to be set up to verify applications for family allowances.

Other requirements have been some expansion in the records of communicable diseases and morbidity statistics, and improvements in hospital and criminal statistics. The strength of this Division has increased by 75 since 1939.

Transportation and Public Utilities.—Shipping statistics have been transferred to the Bureau from the Customs and Excise Branch of the Department of National Revenue. Also there have been developments in statistics of motor carriers and civil aviation.

Census of Industry and Merchandising.—A new unit requiring 14 clerks was created to collect and compile statistics of capital investments and to obtain data for the annual forecast of such investments. These statistics are considered to be a highly important indicator of current economic prospects.

A new section was set up to develop fisheries statistics for the Department of Fisheries.

The needs of the Central Mortgage and Housing Corporation, Economic Research Units of various Departments, the Department of Agriculture, and Industrial Associations required additional staff for statistics of construction, processed feeds, honey and various other industries.

Soon after the War, work of continuing importance was transferred from War Departments and agencies such as the W.P.T.B. to the Bureau. These transfers involved about 60 clerks—a very small fraction of the numbers employed in the units during the War. The following fields of work were involved: Metals Control, Oils Control, Steel Control, W.P.T.B. (Construction materials, textiles, and prepared food statistics, inventory data), Timber Control (monthly production stocks and shipments of lumber), Coal Control.

Research and Development.—This Unit and the Special Surveys Division were created as a result of a recommendation made by an Inter-departmental Committee on post-war statistical needs. Its function is the development of national income statistics and contributing series of economic statistics. A measurement of national income and expenditure, and gross national product and expenditures is an indispensable as a guide to government policy. The National Accounts when analyzed by sectors illuminate statistically the state of the economy as no other statistics can.

One example of the importance of the National Accounts is the fact that gross national product is a component of the basis for payment of subsidies to the Provincial Governments. This unit, which has 30 well-trained statisticians, did not exist in 1939.

Special Survey Section—Sampling Organization.—This also is a post-war development. It was created so that the Bureau might make use of the economies and speed of the sampling technique. It conducts the quarterly survey of the Labour Force based on a one per cent sample of the population which produces an over-all picture of the size of the Labour Force, the number employed and unemployed, etc.

Numerous other sample surveys have been made by this Unit, including those made for other Departments and agencies of the Government. It made the Survey on Incomes and Expenditures in the autumn of 1948 to secure data for a revised basis for the cost-of-living index, and the Trial Census last autumn was handled mainly through the six Regional Offices which were established originally as the basis for sample surveys. These offices will be key points in the decentralized plan for the 1951 Census in which the sampling organization will play a prominent part. The unit has a staff of 85 including 51 in Regional Offices.

Administration.—The increase in size of this Division has been commensurate with that of the Bureau as a whole. It has practically doubled in number but includes new units for Vari-typing, cost accounting and the organization and methods section that more than justify their existence by the over-all economies they effect in the work of the Bureau as a whole.

H. Marshall

Dominion Statistician.

June 1, 1950:

THE ORGANIZATION AND PURPOSES OF THE TRIAL CENSUS

A sample of heterogeneous districts representing as many and as varied conditions as possible was selected for the trial. Seven sections across Canada were included, three being urban in character, three rural, and one semi-rural. Administration and processing of returns were handled by the Bureau's Regional Offices, each being responsible for its own area. In the rural districts, grain, vegetable, live-stock, dairy and poultry farms—ranging from commercial to self-sufficing—were covered. Residential, industrial and transient sections of urban areas were sampled, also areas inhabited by foreign-born population.

In the Trial Census, field supervisors were an innovation. Officers from the Bureau gave them special training and they in turn instructed the enumerators. During the training and the subsequent enumeration senior officials of the Bureau acted as observers to ascertain: the adequacy and accuracy of this "second-hand" imparting of instructions to enumerators; the effectiveness of the various training guides, manuals and aids which were at the disposal of the enumerators; and to obtain first-hand knowledge of actual field conditions. Some 100,000 persons were included in the enumeration.

The new methods and procedures which the Trial Census was designed to test and the main findings were as follows:—

(1) **Type of Schedule.**—The use of 'mark sense' documents* as individual schedules for both population and housing data instead of the usual cumbersome line schedule. This form of schedule has now been adopted for use in the 1951 Census. While the experimental electro-graphic pens used for marking these documents showed some defects in the field, the data gathered on their performance have resulted in a re-designing of the pens and most of their shortcomings have now been eliminated.

(2) **Inquiries, Definitions and Concepts.**—The desirability of new queries, the phraseology of questions and the practicality of definitions were carefully studied by observers who accompanied enumerators on their rounds. The items proving most troublesome to enumerators and respondents were distinguished and revised. The new agriculture definition of a 'farm' proved highly acceptable, enumerators experiencing little or no difficulty in ascertaining, at each household, whether a farm schedule should be completed or not. In the Trial Census each population document was addressographed for identification purposes. New identification techniques have now been developed, eliminating this relatively slow and costly process and easing the enumerator's burden of keeping cards in a strict numerical order. This change will result in a great saving for this operation not only of clerk-hours but also in the total number of documents it will be necessary to supply for the 1951 Census.

* In a 'mark sense' document a question is answered by making a mark in a prearranged space instead of writing the answer in full. Special electronic machines read the marks and produce a punched card.

(3) **Field Organization.**—Decentralization was the keynote of the revised field operations planned for the Trial Census. Five Regional Offices across Canada operated as sectional centres, controlling the enumeration in their territories and supervising the office processing of returns to the card-punching stage. Rapid communication between each centre and Ottawa was maintained by the use of teletype equipment. Thus constant touch was maintained with the progress of enumeration across Canada and the problems arising in any section of the country together with the recommended solutions were simultaneously transmitted to all centres. A test of the procedures for handling the recognized problems of administration and delineation of authority, caused by decentralization, was carried out. In addition, unforeseen problems likely to cause difficulty in the 1951 Census were uncovered and procedures for handling them are being evolved.

(4) **Instructions and Instructional Methods.**—The training guide and manuals developed for field supervisors and enumerators were assessed as to their explicitness and completeness. New training methods, such as practice enumeration during instructional sessions, and use of film strips as visual aids were tested. The film strips, since they are costly to prepare and require projectors for screening, proved economically impractical. It is now proposed to present the film-strip material in a cartoon book form. This type of presentation will have the added advantage of being at all times available to enumerators for review purposes. The most desirable number of 'spare' enumerators that should be instructed to provide a pool of surplus trained personnel, available whenever enumerators drop out due to sickness, discontent, unfitness, etc., was determined.

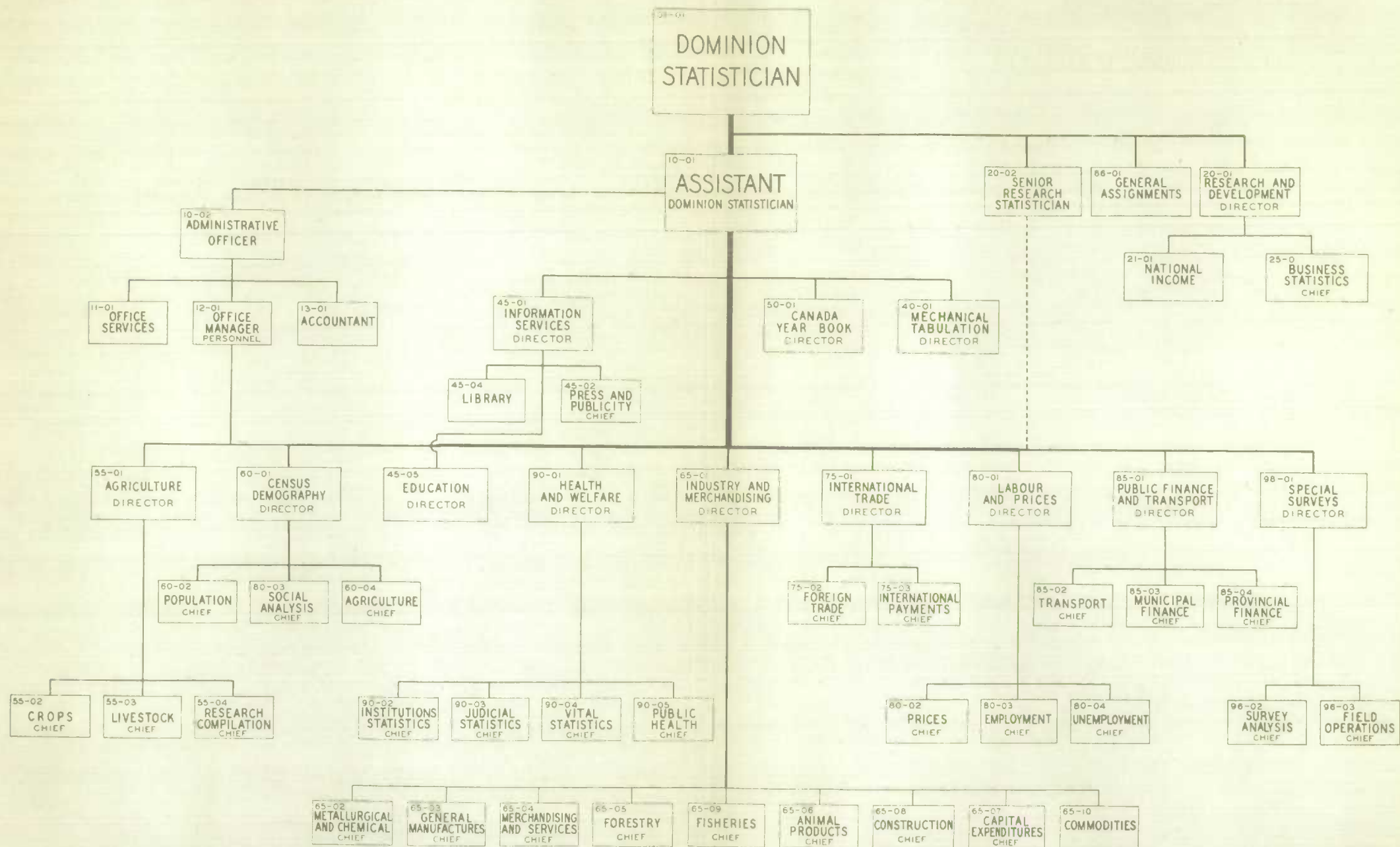
(5) **Enumeration Methods and Techniques.**—The many problems in handling and using mark sense documents in actual enumeration were carefully studied during the Trial Census. The equipment supplied and its use by individual enumerators was thoroughly checked under field conditions. As a consequence, several items of equipment have been redesigned to provide enumerators with more durable and efficient material. New techniques for gathering agriculture information on farms straddling enumeration-area boundaries were put into practice, together with revised procedures for handling call-backs and refusals. A special "T" night operation, designed to complete the enumeration of transients in one evening, was carried out in the Test Census as a result of which a modified plan is now being considered for use in 1951.

(6) **Office Procedures.**—A test of the administrative procedures for handling, filing and reproducing mark sense documents was carried out in each Regional Office. Editing and coding processes were reviewed and those requiring revision ascertained. Various systems for the routing of schedules were experimented with and the most expeditious method computed. A careful record of each clerk's work hours on the various operations was kept from which a production rate on each office procedure was calculated for use in planning the time schedule for the 1951 Census.

ORGANIZATION CHART

DOMINION BUREAU OF STATISTICS

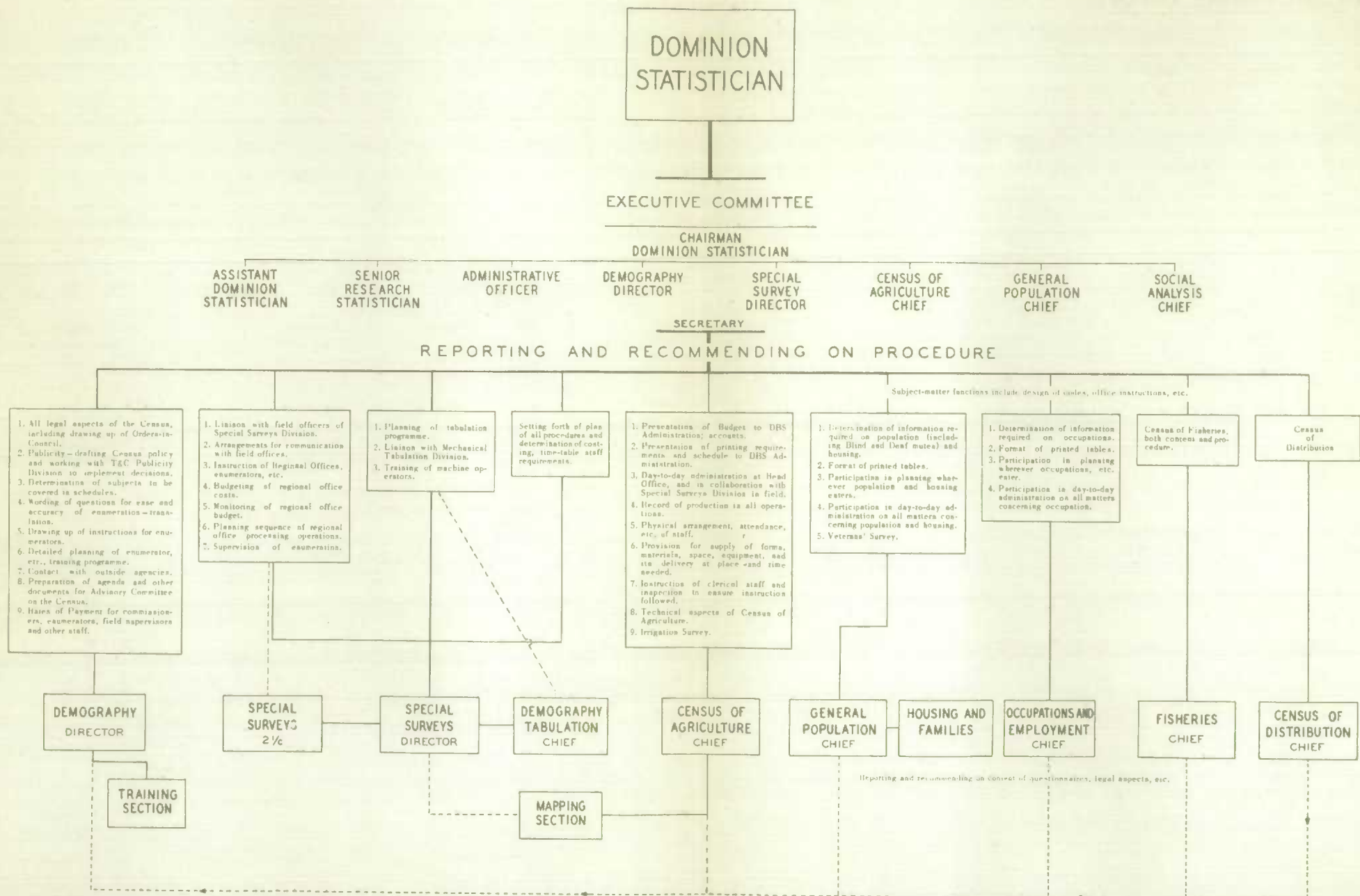
DOMINION BUREAU OF STATISTICS



FUNCTIONAL CHART

CENSUS OF 1951

ALLOCATION OF D.B.S. FUNCTIONS IN TAKING THE 1951 CENSUS



(7) **Tabulation Program.**—Testing of the punch-card design and observation on a complete set of runs of the proposed tabulation program were required. Since the new tabulating machines, devised specifically for census operations, were not available in quantity at the time, the full machine-processing of documents and punch cards could be carried out in only one of the five Regional Offices. At this centre, however, a close check was made of machine performance rates on the various runs and an exploration of the full capabilities of the various machines undertaken.

While carrying out the machine processing of documents and punch cards it soon became evident that the hand-editing of documents to correct errors could be eliminated. The newly devised electronic statistical machine not only quickly and accurately rejects punch cards containing errors but indicates, by general groups, the type of error present on the card. Thus, a much more economical editing procedure is possible. The correction of errors on documents will now be made only after the location and designation of the type of error present on the punch card for that document. While a new punch card will have to be made for each document corrected, this can be done so rapidly by the document punch that the added time taken in this process is more than compensated for by the increased saving in the time needed to find the documents containing errors and to locate the position of the error. Further tests have since been carried out to ascertain the best procedure for correcting these document errors.

(8) **Cost and Production Estimates.**—The Trial Census also provided estimates of cost and production rates in both field and office operations. Each enumerator was required to keep an exact record of the time spent in actual enumeration and the number and type of schedules completed. As mentioned previously, the office staff were required to fill out work-time cards for each operation in which they were engaged. These data have now been used in planning time schedules, allocating personnel, and in estimating total costs of the 1951 Census.

It is thus seen that the Trial Census has provided not only a testing ground for untried procedures and schedules, but also has served as a research laboratory in which the study of clerk and machine rates and the accuracy of recorded data has been carried out.

DETAILED REVIEW, BY DIVISIONS

Administration

Personnel

The staff of the Bureau of Statistics at Mar. 31, 1950, numbered 1,413 (1,005 temporaries and 408 permanents), an increase of 62 over the same date in 1949. Additions during the year numbered 343 and separations 281. New positions authorized by the Treasury Board during the year numbered 133, including 40 temporary positions for student assistants, increased staff for regional offices and personnel for the new regional office at St. John's, Newfoundland. Permanent appointments during the year totalled 67. As a result of reorganization of unemployment insurance statistics, 15 personnel from the Department of Labour were transferred to the Bureau. Eight employees took furlough leave during the year—resulting in a loss of 238 working days.

Training courses were organized in collaboration with the Staff Training Branch of the Civil Service Commission and the Department. Refresher courses in typing, shorthand and English were held throughout the year. In addition, training was given to staff members in the Vari-Typer Pool, the Mechanical Tabulation Division and the Comptometer Pool.

The most important organizational change during the year was the centralization of Mechanical Tabulation and its organization into a separate Division.

Drafting

This Section provided drafting services for all Divisions of the Bureau, as well as for other Government Departments and agencies. The volume of work during the year increased by 4.3 p.c. compared with the previous year.

Office Services

A total of 425 requisitions were raised on the Department of Public Works for goods and services and 349 requisitions were reported as complete. An office inter-communication system installed early in the year has resulted in a considerable saving of time for the administrative officers of the Bureau.

Supplies

A total of 1,346 printing and stationery requisitions to the amount of \$389,009.53 was submitted to the Department of Public Printing and Stationery. This compares with 1,291 requisitions to the value of \$379,251.30 for 1948-49.

Printing

This Unit completed 5,064 individual printing jobs, compared with 4,513 for the previous year, comprising reports, daily and weekly bulletins,

weekly statistical supplement letters, schedules, etc. Impressions made during the year were as follows: mimeograph, 1,834,601; multigraph, 2,115,430; rotaprint, 20,246,756; total, 24,196,787.

The Photographic Unit photographed and processed 11,636 pages compared with 11,950 in the previous year, and produced 7,558 contact prints.

Addressograph

Forms addressed during 1949-50 numbered 3,672,530 compared with 2,518,511 for the previous year. Plates embossed and corrected numbered 187,884 compared with 129,574.

Stenographic Pool

During the year, 6,636 letters were transcribed from shorthand notes as compared with 9,659 in the previous year. In addition to routine typing of forms and labels, pages of typed matter (including metal and wax stencils and pages of various dimensions for photographic processing) numbered 18,044.

Mail and Messengers

During the year approximately 3,380,819 pieces of mail were deposited with the Post Office, at a total cost of \$165,476.87.

Vari-Typer

This Unit was established on Apr. 1, 1949. During the year Vols. I, II, III and 290 pages of Vol. IV, **Census of the Prairie Provinces, 1946**, were composed in addition to forms and schedules related to the October, 1949, Trial Census. A recent estimate made by the King's Printer places the savings to be made for the four volumes comprising the Quinquennial Census, by using the Vari-typer process of type-composition and printing by offset, at over \$50,000.

Accounts

In addition to the regular duties including routine submissions to Treasury Board for authorization for expenditure and returns re personnel for the Department of Finance, some additional work was necessary in this Section because of the payments to the 160 enumerators engaged in the Trial Census and the auditing of travelling expenses of the members of the Census Division staff and of the Field Supervisors of the Trial Census. The checking of the Trial Census enumerators' accounts by the Regional Offices worked out satisfactorily and assisted in expediting payment.

Supplementary estimates for 1949-50 were prepared in August, 1949, and the Main Estimates for 1950-51 were prepared in October and November and submitted on Nov. 25, 1949.

A Departmental Banking Account for each of the six Regional Statistics Offices, effective Apr. 1, 1950, was set up during March. Under this system each Regional Office has an Accountable Bank Account rather than an individual Standing Accountable Advance as in the past, thus permitting closer control of funds issued as accountable advances.

Contributions made by members of the Bureau to the "Blue Cross", "Physicians' Services Incorporated" and "Associated Medical Services" were remitted through the Accounts Section.

Health Clinic

The Office Management maintains close liaison with the Health Clinic. Figures of the number of visits, etc., to the clinic are shown in the following statement:—

Total visits	14,344
Male	4,942
Female	9,402
First visits	10,962
Repeat visits	3,382
Nature of Visits—	
Illness	5,907
Accident	857
Consultation	1,256
Return to work visits	6,324
	14,344
Returned to work	14,032
Sent home	312
	14,344

The Health Unit interviews all personnel upon their return from sick leave. It offers constructive welfare counselling to those who are affected by chronic absenteeism.

Where the Health Unit is not in a position to help the individual, the resources of the Health Division of the Department of National Health and Welfare are called upon.

Advisory Board of Publications

The Advisory Board of Publications, established Sept. 1, 1948, under the Chairmanship of the Assistant Dominion Statistician (Administration), had been in operation for 18 months at the close of the 1949-50 fiscal year. The Terms of Reference under which it was set up are given in detail in the Annual Report of the Dominion Bureau of Statistics for the year ended Mar. 31, 1949 (pp. 13 to 14). The main function of the Board is the constant review of the publishing program of the Dominion Bureau of Statistics with a view to: the elimination of unnecessary publications; the combining of related reports where savings can be effected thereby; ensuring that each publication meets a specific need; and the examination and approval of 'copy' for each new publication before such 'copy' is set up in type. The Board reports to the Dominion Statistician periodically on all matters that come under review.

During the fiscal year 1949-50, 25 meetings of the Board were held as compared with 8 during the seven-month period Sept. 1, 1948, to Mar. 31, 1949. The Dominion Statistician occupied the Chair at the two first meetings (Apr. 4 and Apr. 7, 1949). At the meeting held on Apr. 4 all

senior Directors of Divisions were in attendance: the Dominion Statistician emphasized the purposes for which the Board had been set up and the need for the full co-operation of all in achieving its aims. Under his leadership broad general principles were established that the Board would be called upon to apply later with such modifications as circumstances called for. A method was worked out whereby specialized reports which, although very important from the standpoint of the relatively few people who use them, are seldom of general interest, would be distributed only to those who have need of them.

The main efforts of the Board at later meetings centred around the application of the principles laid down in the first two meetings to the reports and publications of the several Divisions and the Board probed deeply into such matters as layout, the structure of tabular matter and the textual matter accompanying it, the improvement of editorial standards, etc. The procedure followed was to have present at the meetings the Directors of the Divisions whose reports were under review, along with those of their Chiefs who were in close touch with the work, and to discuss with them in detail each individual problem as it arose, the Director having full opportunity and encouragement to present his case. Questions discussed covered a wide range and included such matters as: the possible economies to be made by combining related reports; the condensation of the data published; the elimination of certain reports altogether, or certain types of information carried in reports, where the original need had been outgrown; and those reports that should be published in bilingual form.

Another important field explored by the Board on the suggestion of the Dominion Statistician was the possibility of effecting substantial savings by eliminating the reprinting at the Government Printing Bureau, for purposes of permanent record, of periodical publications printed by offset process within the Dominion Bureau of Statistics. (See Report of the Dominion Statistician, p. 5.)

During the fiscal year 1949-50, the Board reviewed in detail 356 or about 78 p.c. of the regular publications of the Bureau. These include all those of the Industry and Merchandising Division, all the publications of the Agriculture Division and those of the Vital Statistics Section of the Health and Welfare Division (see accompanying statement). In addition 11 reports of a special nature, or published at irregular intervals, were examined and reported upon.

It is not possible to estimate with any degree of exactness the improvement and economies that have been effected, due to the nature of the work and the fact that much of it does not lend itself to measurement as dollar savings. These savings ranged from relatively small amounts up to one-third of the bulk of some reports and in the aggregate reached a substantial total of text and tabular composition. Substantial savings were made in consolidation of reports and distribution that have resulted from the assignment of specialized reports to the "Reference Paper" and "Memorandum" categories.

**Summary of Reports Reviewed by the Board of Publications,
Fiscal Year 1949-50**

Division and Section	Reports Published and Reviewed by Board	Reports Discon- tinued	Reports Combined	Reports Transferred to the Reference- Paper Class	Reports Transferred to the Memorandum Class
	No.	No.	No.	No.	No.
Agriculture Division	92	3	4	3	38
Industry and Merchandising Division	251	11	24	4	65
Animal Products Section . .	9	1	2	—	1
Construction Section . . .	1	1	—	—	—
Fisheries Section	8	—	—	—	—
Forest Products Section . .	36	—	—	—	18
General Manufactures Sec- tion	46	—	9	2	28
Merchandising and Services Section	28	3	4	1	4
Mining, Metallurgical and Chemical Section	123	6	9	1	14
Health and Welfare Division— Vital Statistics Section . . .	13	—	3	6	—
Totals	356	14	31	13	103

The Board, at most of the meetings, also dealt with an accumulation of questions of policy and procedure that had been referred to it for decision, and issued directives thereon for the guidance of all Divisions.

The pricing policy of Bureau reports came up for discussion at several of the meetings and real progress was made in laying down a uniform schedule of prices that places the reports of all Divisions on a comparable basis in this respect. In general prices were raised substantially. Since the pricing policy is closely tied in with distribution, the distribution lists were checked and analysed on the basis of information requested by the Board from the Director of the Information Services Division.

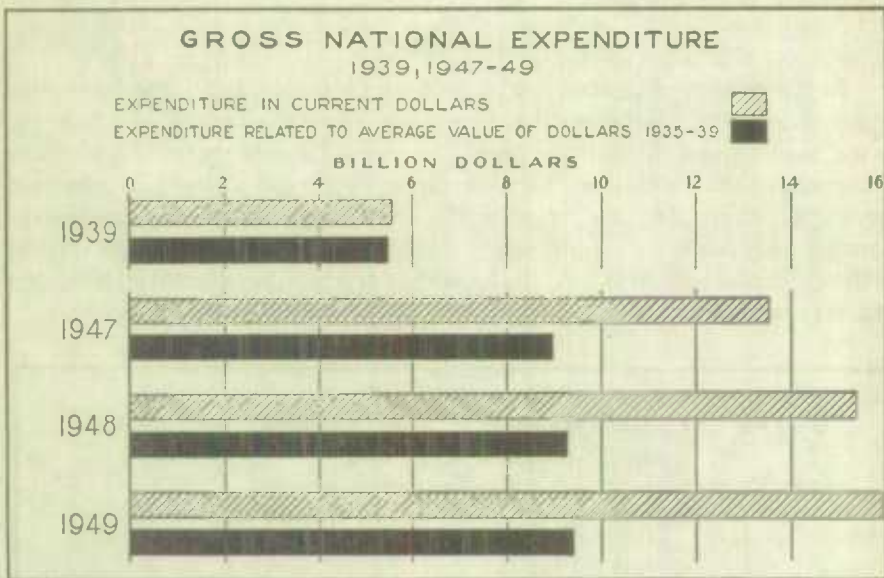
Research and Development

National Income

During the year a number of projects previously initiated were brought to completion. Quarterly estimates of gross national product and expenditure and personal income and its disposition were made available on a restricted basis for interdepartmental study and use. Release to the public had been delayed because of substantial gaps in the data and the necessity for further refinements. Preparatory work was done on the survey of quarterly corporation profits and, to further this project, arrangements for receipt of data on quarterly revenues and expenditures of Provincial Governments were made. A survey of inventory accounting methods of Canadian manufacturers was published as a Reference Paper

in May, 1949. The industrial distribution of national income and provincial distribution of personal income were completed and published in September, 1949. Details of production and consumption subsidies paid by all governments were made available.

Work began on the deflation of the components of the gross national expenditure to constant dollar terms for the years 1926-49. Estimates of the savings of Canadian policyholders through life insurance companies for the years 1926-48 were published for the first time. A number of longer-term projects were carried a stage further, e.g., a special sample of corporation statistics was carried out in collaboration with the Department of National Revenue, and the survey of family expenditure and income-size distribution.



The Third Certificate of the Dominion Statistician was prepared in September, 1949, on a basis of the estimates of gross national product, as required by the terms of the Dominion-Provincial Taxation Agreements. This Certificate was the basis of federal payments totalling approximately \$80,000,000. In March, 1950, a similar Certificate was prepared under the terms of the recent Agreement between the Province of Newfoundland and the Government of Canada.

Business Statistics

The recomputation and improvement of the index of industrial production which, in the light of changing conditions, has taken on added significance in recent years has been a major task during the year.

The computation of the data on products or materials and on man-hours in each industry for the period 1935-47 was completed and, at the end of the fiscal year, results were being checked and analysed. In the

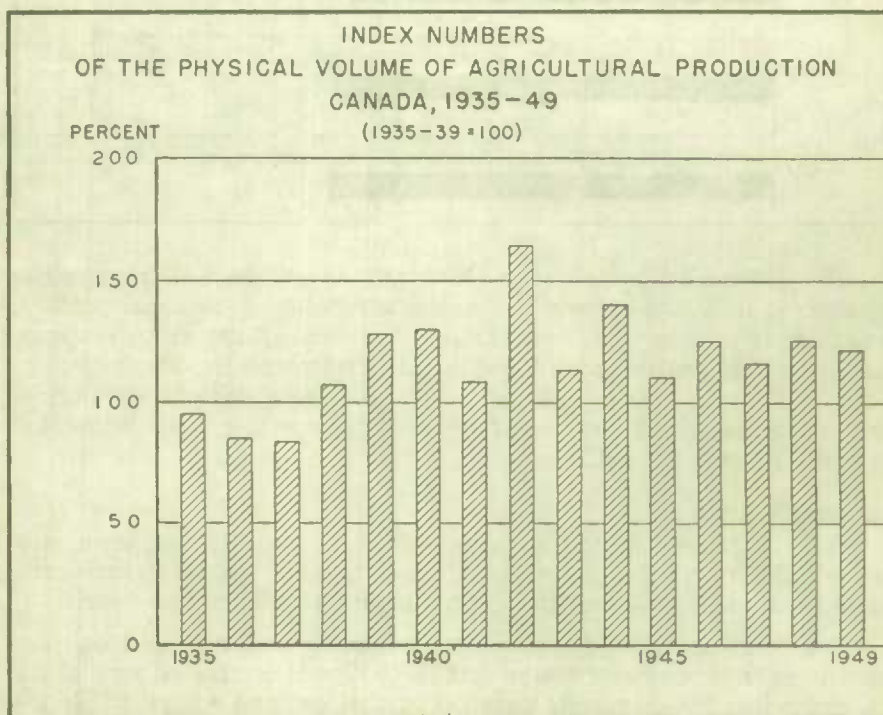
attempt to measure the volume of production on a net basis, advantage was taken of the data, possessed by few other countries in such detail, on products, materials used, and fuel and electricity consumed. Significant results were obtained for 12 industries and work was progressing on others.

The Section undertook for the Interdepartmental Committee on Labour Statistics an investigation of measures of industrial productivity. Results were calculated for some industries and work was progressing on others.

The annual reports, *Survey of Production in Canada, 1947*, and *Cheques Cashed in Clearing Centres, 1949*, were published. Tables were prepared for the *Canadian Statistical Review* and the regular reports *Cheques Cashed in Clearing Centres* (monthly) and *Commercial Failures* (quarterly) were released.

Agriculture

In the collection of statistical data on agricultural products there was close co-operation between the provinces and the Bureau of Statistics, as well as between the Bureau and the Federal Department of Agriculture and such agencies as the Board of Grain Commissioners. To this end several subcommittee meetings of the Interdepartmental Committee on Agricultural Statistics were held during the year. An Agricultural Statistics Conference was held in December at which provincial statisticians and representatives of the Department of Agriculture were present.



In addition to these and other interdepartmental meetings connected with agriculture at Ottawa, members of the Agriculture Division staff attended several conferences, not only to maintain liaison between the various agencies with which the Bureau co-operates, but also to improve the basis of statistical estimates and determine requirements. Among these were: the Annual Outlook Conference, United States Department of Agriculture, Washington, D.C.; the Annual Meeting of the American Farm Economics Association, Laramie, Wyoming; the Annual Meeting of the Canadian Agricultural Economics Society and the Agricultural Institute of Canada; the Annual Meeting of the Canadian Meat Packers Council, Toronto, Ont., and the Annual Meeting of the National Dairy Council, Montebello, Que.

Crops

In addition to the regular routine work of this Section, special work included: the compilation of basic data on major field crops for inclusion in the projected **Handbook of Agricultural Statistics**; and the preparation of summary data and the all-Canada food balance sheets for the **Canada Year Book** and for the Food and Agriculture Organization.

In the interest of developing and expanding sources of basic data, the Chief of the Section made three field trips. Two of these were made in the company of the Agricultural Statistician for the Province of Quebec: the results of these investigations were satisfactory. The third trip covered the annual study of crop conditions from Ontario westward through to the interior of British Columbia: provincial officers responsible for agricultural statistics were interviewed and joint decisions made relative to crop estimates and other work of the Division. With the assistance of seed and canning companies, estimates were also made for a number of special crops for which basic data cannot be obtained by the mailed questionnaire method.

Live Stock and Animal Products

The Live Stock Section prepared estimates of live-stock and poultry numbers on farms based on semi-annual surveys at June 1 and December 1. From these surveys and other data, estimates of total meat production and consumption were compiled. The regular annual surveys were conducted to determine wool production and fur-farming operations. Monthly surveys undertaken in this Section included: manufactured dairy products, fluid-milk sales, farm-milk production and utilization on farms, egg production, and storage stock holdings of meats, dairy products, eggs, fish, fruits and vegetables.

Findings of interdepartmental committees, set up to survey the existing statistical series, led to considerable revision and some simplification of questionnaires and presentation of material in reports. New statistical series on the monthly production of stocks of margarine and of process cheese were started.

Research and Compilation

Excellent results were obtained in the June Survey for Saskatchewan by the use of the addressograph list from the 1946 Census for distribution

of schedules. Compared with the former method of distributing forms through schools, there was an increase of 200 p.c. in replies received. Preparations were made to have a second province covered in the same way in the June Survey of 1950. The Compilation Unit added pegboard questionnaires for the following surveys during the year: monthly farm prices, monthly dairy correspondents, monthly poultry correspondents, annual maple products and semi-annual surveys of honey and vegetables.

The Farm Finance Unit issued the regular reports on farm income, wage rates and index of farm prices. The first report of the series, **Index Numbers of the Physical Volume of Agricultural Production**, was published in August, 1949. An advance preliminary estimate, **Farm Cash Income, 1949**, was issued soon after the close of the year. A detailed study of the dairy correspondents sample was undertaken by the Research Unit and recommendations were put into effect. Processing procedures for the June acreage and live-stock surveys in Ontario and Manitoba (which Provinces undertake their own compilations) were reviewed and comprehensive record forms were prepared with a view to the closer integration of the statistics of these Provinces with those compiled by the Agriculture Division. A preliminary study of available data on farm labour was completed. Progress was made in the continuing study of the agricultural universe in the Prairie Provinces, utilizing Card H, Census of Agriculture, 1946. Two other investigations were begun in this Section: sales of fluid milk and a monthly poultry survey. The Chief of the Section aided in the establishment of official acreage estimates in 1949 and the estimate of wheat conditions based on weather factors.

Canada Year Book

Editorial

The planning of the 1950 edition of the **Canada Year Book** was started at the opening of the fiscal year.

The printing program was designed in co-operation with the Printing Bureau so that the copy to the Printer and galley proof, first page proof, revises and final pages were co-ordinated into a working schedule, with the objective of publishing the 1950 edition during June of that year. By the end of March, 1950, the edition was in final signature form and all but a few signatures had been passed for press.

The translation work on the French edition had been begun but the actual type composition was delayed due to the fact that the 1948-49 **Annuaire** had not been cleared through the press at that time.

During the year, eight reprints were made from the 1950 English **Year Book** and in all 1,700 copies of **Year Book** reprints were sold. These reprints of special articles from the **Canada Year Book** are in wide and increasing demand.

The brochure **Newfoundland—Canada's New Province**, prepared by the Department of External Affairs in collaboration with the Dominion Bureau of Statistics, was released by the Minister of Trade and Commerce in March, 1950. While the background and historical text of this handbook were prepared in the Department of External Affairs, the statistical

material, illustration selection and arrangement, and the layouts and design were provided by the Year Book Division which also had the task of preparing and editing the book for publication. This work began in the early summer of 1949 and necessitated close co-operation with the Department of External Affairs over a period of eight months.

The 1950 Official Handbook **Canada** was prepared and put through the press in the period October, 1949, to March, 1950.

Distribution programs for the **Canada Year Book**, the **Official Handbook** and the **Newfoundland** brochure were planned and the required circular letters, descriptive literature and posters designed and prepared.

Special editorial work was done for the Dominion Statistician and other Divisions of the Bureau including: the preparation of the regular quarterly reports and the **Annual Report of the Bureau**.

Economic Mapping

Regular and special maps and charts were prepared for the Division as well as for the Departments of Trade and Commerce and National Health and Welfare. About 100,000 official maps and charts, prepared by the Division, were sold to private publishing houses, universities, etc., during the year.

The Interdepartmental Committee established for the work on the projected Atlas of Canada invited the Dominion Bureau of Statistics to submit the **Year Book** series of base maps and to suggest adaptations of the individual maps to suit the needs of the Atlas. Later, a number of subcommittees were organized to draw up certain suggested outlines for the various chapters of the Atlas with details of the actual type of maps or charts to be included. The Dominion Statistician accepted the chairmanship of the Subcommittee on Commercial and Social Data. A complete outline of the suggested contents for this section of the Atlas was prepared in this Division for that Subcommittee and, after it had been analysed in detail, was sent with sets of charts to the Chairman of the Executive Committee.

Information and General Inquiries

The regular series of statistics were supplied each month to the following international organizations:—

United Nations, Lake Success, N.Y.

Ambassador for Argentina (through the Under-Secretary of State for External Affairs).

International Civil Aviation Organization (ICAO), Montreal.

International Labour Office (ILO), Geneva, Switzerland.

The usual revisions of material relative to Canada which appears in 25 to 30 standard annuals and almanacs of leading countries and other important international publications were made, with the object of supplying accurate statistical information through these important channels.

Included in the list of publications so served were: United Nations Statistical Yearbook, 1948, Heaton's Handbook, World Almanac, Whitaker's Almanack, Ayer's Directory, Moody's Government Manual, Canadian Almanac and Directory, Statesman's Year-book, New International Year Book, Statistical Year-Book of the World Power Conference, Year Book of Labour Statistics (ILO).

During the year, about 450 miscellaneous inquiries were answered, varying in nature from simple requests to those that required special attention and a considerable amount of research. In answer to special requests from Canada and abroad, general information on Canada was supplied to 14 industrialists.

The key card index system, installed in 1949 to co-ordinate all valuable general information originating from a wide variety of national and international sources, was kept up to date during the year. The central focal-point files, that form a part of this system, cross-reference, by subject and correspondent, all international publications and communications.

Census

During the fiscal year the outlining, mapping and describing of the enumeration areas of the various provinces, in preparation for the 1951 Census, were continued.

Approximately 2,500 inquiries for information on population, agriculture, housing, etc., were dealt with; some 31,000 applications for verification of age for pensioners, and 25,400 applications for proof of age were received and the necessary searches made of early census records. The micro-filming of early census records was continued.

The Director and other officers of the Division attended a meeting of the International Staff Conference on Census Planning and meetings on census methods at Endicott, N.Y. The Director also attended a meeting on Population Growth and Immigration at McMaster University, Hamilton: while in Hamilton he met with City Hall officials to discuss census tracts for the city.

In order to test the more recent methods of census-taking, including a plan for decentralization, this Division conducted a Trial Census (see pp. 17-19) which commenced on Oct. 24, in seven regions across Canada. This necessitated the drawing up of eight questionnaires relating to agriculture, fisheries, housing and population, the instructions to enumerators and field supervisors, and office processing plans, including those for tabulation. Officers of this Division trained the field supervisors and office processing staff. A great deal of study was given to the results of the Trial and plans were being formulated with respect to the 1951 Census at the end of the fiscal year.

Social Analysis

A bulletin entitled **Province of Newfoundland, Statistical Background** was prepared and published. Due to the great demand for this publication, a reprint was made later in the year. The annual estimates of population by age for 1948 and 1949 and by racial origin for 1947 and 1948 were

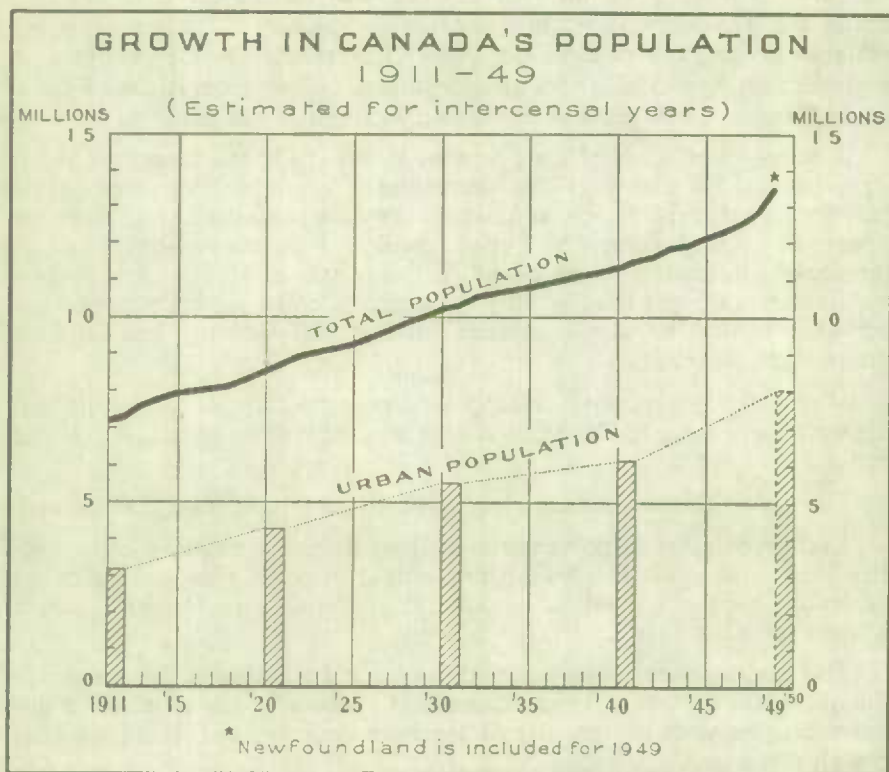
prepared and printed. Annual bulletins on **Estimated Population by Marital Condition and Sex 1931-1948** and **Estimates of Households and Families 1947-48** were published, together with the annual report on **The Control and Sale of Alcoholic Beverages in Canada 1949**. A monograph on **Women in Gainful Occupation** was begun, as were studies on statistical legislation in Canada and on Canadian-born population in the United States, the latter using 1940 Census data of the United States.

Agriculture

The last bulletins giving information from the 1946 Census of Agriculture were printed and the printing of the final volumes proceeded with. The 1951 Agriculture Questionnaire was reviewed as a result of discussions with officials of various Departments. The data tabulated for the Newfoundland Census of Agriculture and Fisheries (1945) were prepared in volume form and printed.

Population

The last of the bulletin series on population for the 1946 Census of the Prairie Provinces was released and the printing of the final volumes proceeded with. **Population 1945, Census of Newfoundland, Vol. I** was published. The final draft of the 1951 population questionnaire was made.



The Land Use Survey of urban centres in the Prairie Provinces was completed during the fiscal year.

Occupations, Earnings and Employment

The tabulation and analysis of information on occupations for the 1945 Census of Newfoundland was completed and the information printed in Vol. I. The final tabulations for **Census of the Prairie Provinces, 1946, Vol. II. (Occupations, Industry and Employment)** were completed. The classification of occupations for the 1951 Census was started and the coding studied.

Dwellings, Households and Families

Two bulletins giving information on households and families for the 1945 Census of Newfoundland were prepared and released, and the final tables on households and families for that Census prepared for **Census of Newfoundland, 1945, Vol. I**. Two bulletins entitled **Families by Mother Tongue** and **Families by Marital Status** for the 1946 Census of the Prairie Provinces were published. Final tabular material for **Census of the Prairie Provinces, 1946, Vol. III (Housing and Families)** was prepared.

Education

The report **Elementary and Secondary Education in Canada 1944-46**, was published early in the year. Work was started on 1949 returns, though some data required to complete the picture for 1948 were not available at the close of the fiscal year. Compilation of the first returns received from Newfoundland was undertaken. The report **Higher Education in Canada, 1946-48**, was completed as regards compilation.

A survey was made of the financial assistance in the form of scholarships, fellowships and part-time employment available to post-graduate students in Arts and Science, and the results were published as a Reference Paper. A second Reference Paper, dealing with present-day costs of attendance at university, was based on the results of a questionnaire to a representative sample of university students. Copies of both papers were requested by the Royal Commission on National Development in Arts, Letters and Sciences.

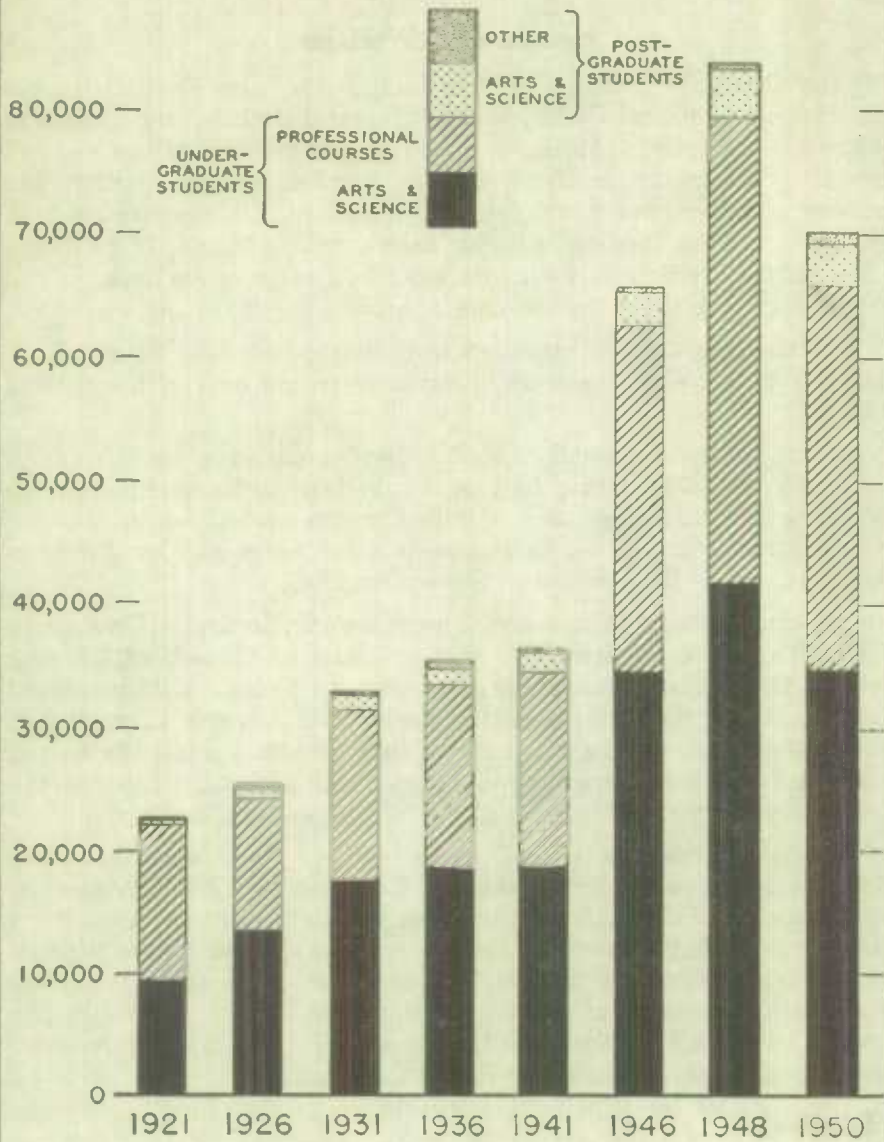
Work was begun on a catalogue of post-graduate scholarships and fellowships available to Canadian students in institutions both at home and abroad.

The report **Survey of Libraries, 1946-48**, was prepared and printed.

Each Provincial Department of Education and a number of universities were visited and technical problems in reporting as well as topics that might be the subject of a general conference on uniform school statistics were discussed.

The Division was represented at the annual meeting of the Canadian Education Association at Fredericton, N.B., where it was possible to discuss problems with representative teachers, trustees and administrators from all provinces.

ENROLMENT IN UNIVERSITIES AND COLLEGES OF CANADA 1921-1950



Early in the year the Director of the Education Division was given the additional responsibility of Director of the Information Services Division. He also carried out a number of assignments outside the Division, including participation in a panel on Indian research established by the Deputy Minister of Mines and Resources, prior to the reorganization of that Department, and in the work of the Royal Commission on National Development in the Arts, Letters and Sciences.

Health and Welfare

The Division's program of introducing the Sixth Revision of the International Statistical Classification of Diseases, Injuries and Causes of Death was continued. Measures aimed at encouraging its use and improving accuracy in certifying deaths included: the preparation and printing of informative pamphlets for physicians, the preparation of a new edition of the **Physician's Pocket Reference**, the holding of a training course in the Division for senior coding officials across the country, and an approach to prepaid hospital-care agencies.

Deaths for 1949 were classified according to both the Fifth and Sixth Revisions to allow of extension of mortality trends beyond the date of change.

It was not found possible to include Newfoundland in the Vital Statistics Registration Area during the year, due to delay in the enactment of the necessary provincial legislation, but the Division worked toward this end by preparing draft legislation and registration forms and by a visit to Newfoundland by the Director in September, 1949.

Important events during the year were: the adoption by the Conference of Commissioners on Uniformity of Legislation in Canada of the new Uniform Vital Statistics Act, in the authorship of which the Division played a dominant part; the establishment of the Medical Advisory Committee to the Dominion Statistician as the national focal point in matters of vital and health statistics, both domestic and international; and participation in the planning of the first nation-wide survey of sickness in Canada.

The varied interests of the Division required the Director and other members to take part in activities of the Canadian Public Health Association, American Public Health Association, Vital Statistics Council for Canada, Dominion Council of Health, and the United States National Committee on Vital and Health Statistics, and to organize Dominion-Provincial Conferences on Judicial Statistics and Hospital Statistics. The Director acted as a member of a Subcommittee of the Expert Committee on Health Statistics of the World Health Organization.

Public Health

Co-operation with the Department of National Health and Welfare continued in the collection and analysis of statistics of sickness in the Civil Service. The Section also collaborated with that Department in planning

a Sickness Survey in Canada. The responsibility for selecting the sample of households to be enumerated was undertaken by the Dominion Bureau of Statistics. A co-operative arrangement was made with the Senior Research Statistician and the Special Surveys Division regarding the selecting of the sample. The Section, in co-operation with members of the Department of National Health and Welfare, prepared the manual **Instructions for Enumerators**, and the forms to be used for recording sickness, and also participated in a pilot study in the Ottawa area.

Calculations were made for the provincial distribution of the Health Grants for the fiscal year 1950-51 and the necessary certificates were prepared for the Department of National Health and Welfare.

The publications **Employees Pension and Retirement Plans; Life Tables for Canada, 1947; Projection of Population Statistics;** and the 1948 edition of the **Health Reference Book** were published.

The Chief of the Section attended the first meeting of the Medical Advisory Committee to the Dominion Statistician and the meetings of the Dominion Council of Health. He also visited the East York-Leaside Health Unit in November and January as consultant to the Medical Officer of Health on the statistical aspects of the Family Sickness Survey, which is being carried on in the Unit.

Collaboration with other Departments took place in reference to the following projects: calculation of Health Grants to be extended to Newfoundland on the basis of various alternatives; preparation of reports for a subcommittee on accidents of the Interdepartmental Advisory Committee on Labour Statistics; the effects of immigration on future populations.

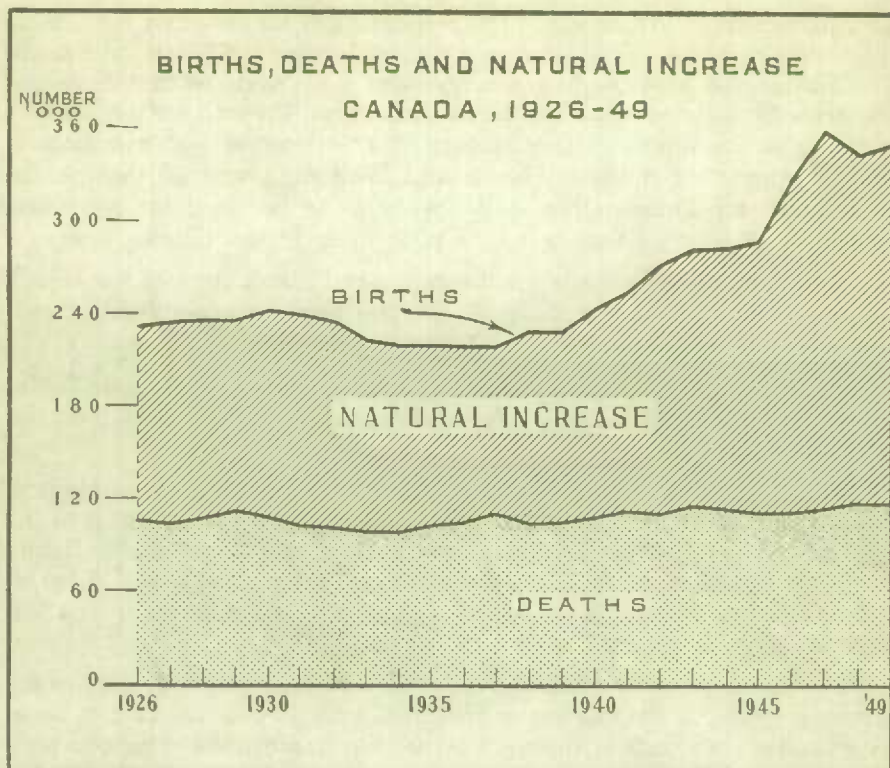
Vital Statistics

This Section continued to work with the Provincial Governments (including Newfoundland) and the Department of National Health and Welfare in the preparation of current indexes of births, marriages and deaths. The tabulation of indexes of all deaths occurring in Canada since 1925, for the use of the Provincial Divisions of Vital Statistics and for death clearance purposes in the administration of Family Allowances, was completed during the fiscal year.

The annual report, **Vital Statistics, 1946**, was issued during the year and the report for 1947 was put in the hands of the printer. The preliminary reports, **Vital Statistics of Canada, 1948** (provisional figures) and **Vital Statistics of Canada, 1947** (final figures), were released as well as the regular quarterly and monthly reports, and a special release on **Divorces in Canada, 1949**.

Plans were completed for the tabulation of results of a decennial Survey of Heights and Weights of Toronto School Children, on behalf of the Division of Pediatrics, University of Toronto.

An analytical study was in progress at the end of the fiscal year of the 1949 death records to ascertain the extent of changes due to classification



under the 1938 and 1948 Revisions of the International Lists of Causes of Death.

The Chief, as Secretary of the Vital Statistics Section of the Canadian Public Health Association, attended two meetings of the Section Council in April, 1949, and March, 1950, respectively, as well as the Annual Meeting in May, 1949, and the Annual Meeting of the Vital Statistics Council for Canada in June, 1949. The Chief also attended the Public Health Conference on Records and Statistics and the annual meeting of the American Association of Registration Executives at Washington, D.C., May, 1949, and of the American Public Health Association at New York, N.Y., October, 1949, while serving as a member of a Committee on Marriage and Divorce Statistics of the Association's Statistics Section.

A special two-week course in the principles of classification of mortality and morbidity data was held in January for vital and health statistics personnel. Representatives from Provincial and Municipal Departments of Health and the Armed Services attended.

Judicial

The **Report of Statistics of Criminal and Other Offences, 1941**—not published during the War—was printed. **Police Statistics, 1948**, was published and the report **Juvenile Delinquents in Canada, 1948**, was

released; both reports were included in the 1948 report **Statistics of Criminal and Other Offences**, also published during the fiscal year.

A confidential verbatim report of the Dominion-Provincial Conference on Criminal Statistics was edited and mailed in October, 1949, to the members of the Conference, and the Provincial Attorneys General and Ministers of Departments of Public Health and Welfare. A summary report of the Conference was prepared and given wider distribution in January, 1950.

A Dominion-Provincial Conference on Criminal Statistics was held on May 19 and 20, 1949. The Conference was attended by 10 representatives of the Provincial Attorneys General and Departments of Public Welfare, 11 Federal Government representatives (5 of whom were from the Dominion Bureau of Statistics) as well as eight representatives and observers from national organizations. Action was taken in respect to the better reporting and collecting of criminal statistics and the improvement of police statistics. As a result of the Conference a Continuing Committee, representative of the whole of Canada, was convened by the Dominion Statistician on Mar. 30 and 31 to give consideration to all suggestions for improving or changing the collection system.

The Chief attended meetings of the Canadian Welfare Council, the Canadian Association of Social Workers, the Canadian Penal Congress, the Canadian Social Research Council on Criminology and the Big Brother Movement.

Institutions

The Section collaborated with the Departments of Health of all provinces by submitting for processing and tabulation in a national report the statistical returns from public hospitals. This co-operation contributed materially to improved accuracy and comparability.

An Interim Committee on Hospital Financial Statistics and a Continuing Committee on Hospital Statistics, both of which were set up on a Dominion-Provincial Conference recommendation, met at Ottawa during the year. The Committees agreed on the content of revised reporting schedules and their accompanying definitions and instructions.

With the introduction of the **International Statistical Classification of Diseases, Injuries and Causes of Death**, statistics of tuberculosis and mental illness were made to conform to the classification as from January, 1950. A memorandum was prepared for circulation to all interested persons and agencies, illustrating the extent of the change. Plans were made for a special census of mental institutions on June 1, 1950.

The verbatim report of the Dominion-Provincial Conference on Hospital Statistics was printed and distributed, and the annual list **Hospitals Operating in Canada, 1948**, was released. The annual report **Hospitals in Canada, 1947**, was ready for printing at Mar. 31, 1950.

The 1947 annual report on **Mental Institutions** was being printed and the 1948 report was nearing completion at the end of March, 1950.

The 1947 annual report on **Tuberculosis Institutions** was completed and printed, and the 1948 report was nearing completion. Due to wartime printing restrictions, the 1941 statistical tables for the Quinquennial Census of Charitable and Benevolent Institutions and of Corrective and Reformative Institutions had not been published. These figures were included as an appendix to the 1946 reports on these institutions which were nearing completion at the end of the fiscal year.

Statistical tables of admissions and discharges of Canadian penitentiaries for the year 1948-49 were supplied to the Department of Justice for inclusion in the **Annual Report of the Commissioner of Penitentiaries**.

Industry and Merchandising

On May 1, 1949, the Fisheries and Animal Products Section of the Division was divided, and in January, 1950, a new Section known as the Commodity Section was created. The Commodity Section was charged, in general, with the co-ordination of commodity statistics and specifically with (1) the estimating of principal statistics and commodity detail from the short forms completed by small firms in the annual industrial census, (2) the development of annual inventory statistics, and (3) the development of a survey of monthly shipments and inventories, together with related surveys on unfilled orders.

Of importance, too, was the change to the new Standard Industrial Classification of industries in such manner as to allow regroupings of data to fit the groups and sub-groups established by the United Nations Classification. This change entailed a new system of numerical coding. Re-numbering was practically completed by the end of the year.

The Director reviewed the mineral industry at the annual meeting of the Canadian Institute of Mining and Metallurgy at Montreal in April.

Census of Industry forms for 1949 were collected by the Regional Officer at St. John's, Newfoundland.

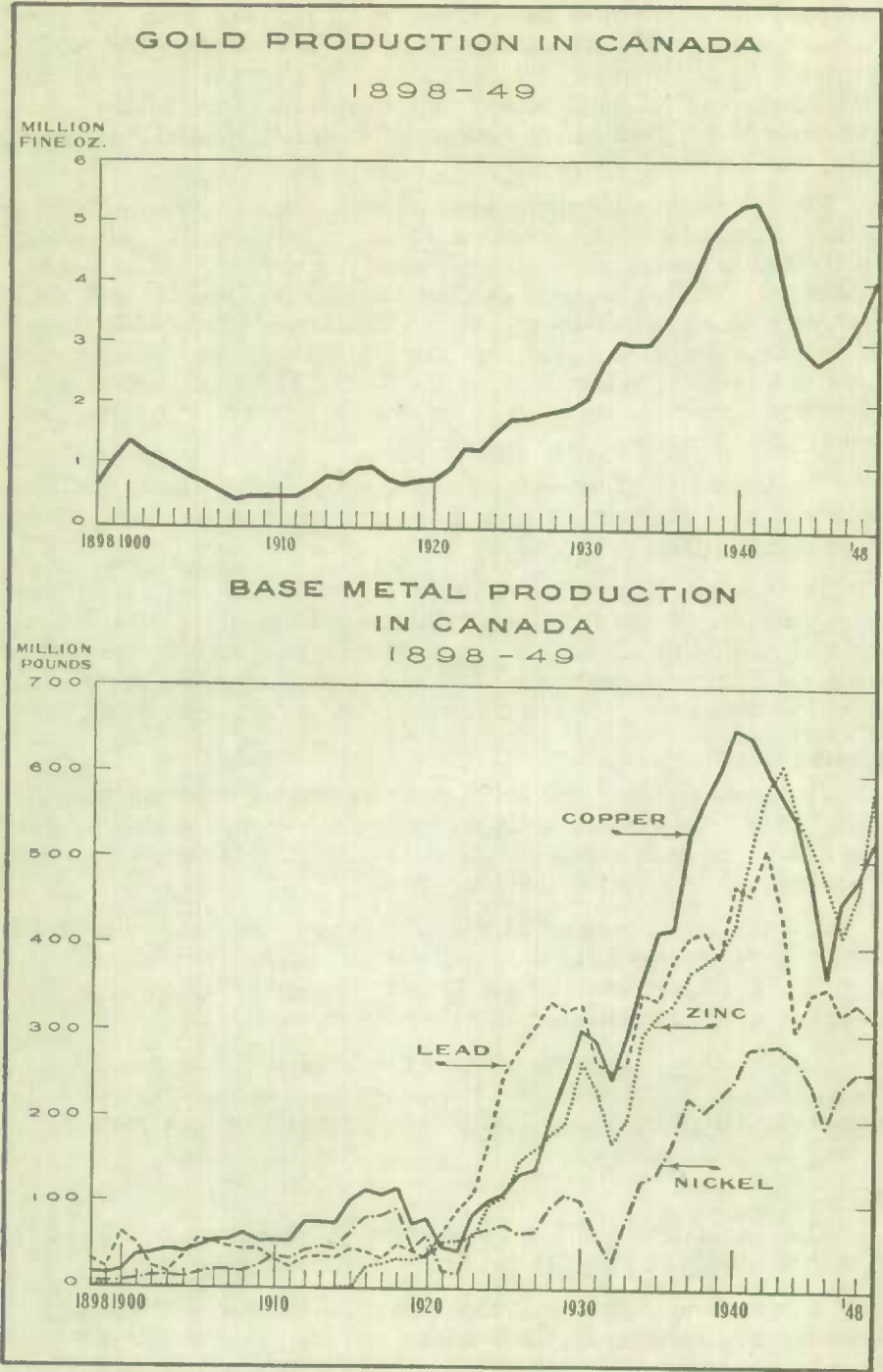
General Manufactures

Final figures of statistics of manufactures for 1947 and preliminary figures for 1948 were issued during the year. In addition 48 annual rotaprint reports and quarterly reports on **Production of Processed Foods, Stocks of Canned Fruits and Vegetables, and Stocks and Consumption of Manufactured Tobacco** were published, together with monthly reports on **Consumption, Production and Inventories of Rubber, and Shipments and Inventories of Prepared Stock and Poultry Feeds**. Releases were also made on the packs of the more important canned fruits and vegetables at the end of each pack.

Considerable time was spent in the preparation of special statements for industry and for Government Departments.

Mining, Metallurgical and Chemical

At the end of the year the compilations for these industries were further advanced than at the corresponding date for many years. The



1948 totals were completed for two groups—Chemicals and Allied Products, and Non-ferrous Metal Products; for Iron and Steel and Their Products totals were completed for 15 of the 18 industries, and for the manufactures of Non-metallic Minerals the totals were prepared for 6 of the 11 industries. Compilations for the mining industries in 1948 were completed and a **Preliminary Estimate of Canada's Mineral Production, 1949**, was prepared for release.

The following publications were issued during the year: 41 annual industry reports for 1948; 32 annual industry reports for 1947; 26 special annual reports on commodities or groups of commodities; and 24 monthly reports. In addition, a report on **Coal Statistics for Canada, 1947-1948**, was prepared and sent to the printer. A **Directory of Chemical Industries in Canada** was also prepared, and about 1,050 requests for information were dealt with. Preparations for the 1949 Census of Industry were completed; schedules were drawn up and despatched for printing, and mailing lists prepared.

The Chief of the Section represented the Bureau at the annual convention of the Canadian Chemical Association and the Canadian Institute of Mining and Metallurgy.

The Section sponsored a meeting at the Bureau in October with representatives of the Petroleum Industry to discuss the adequacy of statistics in that field. New work arising from this meeting involved a weekly summary on inventories of petroleum products and a preliminary monthly statement on domestic consumption of petroleum fuels.

Forestry

The usual rotaprint and mimeograph reports and memoranda were issued during the year covering the wood-using and paper-using industries. With the entry of Newfoundland into Confederation a large number of sawmills were added to the lists.

A considerable number of special inquiries was handled and this Section supplied specially compiled annual statistics to the Food and Agriculture Organization of the United Nations (FAO), and special quarterly statistics to the Economic Commission for Europe.

Among other outside assignments the Chief of the Section acted in the capacity of technical adviser to the Canadian delegation at the FAO Preparatory Conference on World Pulp Problems at Montreal, April, 1949.

Fisheries

The reorganization of this Section (see p. 38) proceeded according to plan and was completed by the end of January, 1950.

In addition to routine work, the Section collaborated with the Federal Department of Fisheries on the following projects: revision of layouts and contents of annual and monthly reports; preparation of forms and procedures for a fisheries census in 1951; establishment of a statistical

reporting system for Newfoundland fisheries; preparation for the trial of the 'sales slip' system in part of British Columbia.

Annual reports for 1947 and 1948 were prepared in substantially revised forms. The monthly reports were under continual revision and were improved by the addition of charts and some Newfoundland data. Twelve issues (March, 1949—February, 1950) of the **Monthly Review of Canadian Fisheries Statistics** were published during the year.

The Chief of the Section was engaged in work other than that of the Section as follows: price-control investigations in Newfoundland, April-May, 1949, at the request of the Provincial Government; Census of Industry Committee—application of 'cut-off' in use of general schedules, commodity statistics and other matters; examination of and proposals for the relation of general schedules to accounting records; the building up of a reference for inquiries on commercial, industrial and social affairs of Newfoundland.

Animal Products

The regular annual reports were published as well as the monthly reports on leather footwear and hides and skins. Beginning with January, 1950, the publication of monthly production and stocks of margarine in Canada was transferred from the Agriculture Division to this Section.

Close co-operation was maintained between the offices of the Agriculture Division and this Section in order to eliminate duplication of inquiry and variation in published figures.

At the request of the Officer in Charge of Oils and Fats, Import Division, Department of Trade and Commerce, plans were laid for the resumption of the collection of monthly statistics of production of oils and fats formerly done by the Wartime Prices and Trade Board.

Construction

The fifteenth annual survey **The Construction Industry in Canada, 1948**, was published.

Building permits were reported by 507 municipalities during the calendar year 1949. Arrangements were made during the year with the railway companies and the Bell Telephone Company to furnish statistics on construction. Arrangements were also made with the officials of the New Brunswick Government to furnish monthly labour statistics to the Public Finance Division in sufficient detail and in such manner that they might be used by the Construction Section.

Capital Expenditures

The forecast, **Private and Public Investment in Canada, Outlook 1950**, was completed in January. This survey was extended to cover the Province of Newfoundland. The revised forecast, **Private and Public Investment in Canada, Mid-Year Survey, 1949**, conducted on a sample basis, and the **Actual Capital Expenditures Survey, 1948**, were also completed.

Merchandising and Services

The regular program of the Section was reviewed and attention concentrated on preparations for the 1951 Census of Distribution. An outline of the census program was prepared.

Surveys of hotels and advertising agencies were reinstituted. Monthly reports were introduced on chain-store sales and stocks covering six trades. Refinements were made in retail-trade estimates. Consumer credit studies were placed on a quarterly instead of a semi-annual basis.

The monthly series **Current Trends in Food Distribution** was discontinued but its more useful features were incorporated into the regular bulletins **Retail Trade** and **Wholesale Trade**.

Among the new techniques studied in connection with the forthcoming Canadian Census of Distribution were: (1) that of making the mailing index a product of the enumeration, and (2) mechanical aids to editing.

Information Services

The Information Services Division was brought under the direction of the Director of the Education Division during the fiscal year.

Canadian Statistical Review

The **Canadian Statistical Review** and the **Revue Statistique du Canada** continued to be published monthly, with weekly supplements.

To illustrate some of the essential characteristics of Canada's economic progress, at the beginning of 1950 a supplement to the February issue of the **Canadian Statistical Review** was issued under the title of **Canada at the Half-Way Mark of the Twentieth Century**.

Press and Publicity

The volume of news releases through the medium of the **Daily Bulletin** and the **Weekly Bulletin** was maintained but daily newspaper use of Bureau information indicated shifts in the space and attention given different subjects. Business newspaper use of data from Bureau reports continued to expand during the period, indicating an increased knowledge by their editors of the information applicable to their particular fields that is available from the Bureau.

Selected charts from Bureau reports on the cost-of-living index, housing and other subjects of general interest were supplied throughout the year to the Canadian Press for distribution to its member newspapers, in accordance with a schedule arranged towards the end of the fiscal year 1948-49. The chart on the cost-of-living index was widely reproduced.

The Section participated with representatives of the Foreign Trade Service and the Foreign Exchange Control Board in providing an information service of broad coverage at the second Canadian International Trade Fair from May 30 to June 10, 1949. Buyers and sellers made extensive use of this service.

The first issue of **Facts About Canada** was distributed.

Publications Distribution

Letters requesting publications numbered 27,970, including 11,199 with remittances totalling \$29,082.29. Of this amount, \$24,036.39 was deposited to the credit of the Department of Trade and Commerce and \$2,054.82 to the credit of the Department of Public Printing and Stationery. The balance represents adjustments.

During the fiscal year the Bureau published 2,543 issues of Dominion Bureau of Statistics reports, 239 Memoranda and 9 Reference Papers. Mailing required approximately 891,287 addressograph impressions. To promote the sale of publications approximately 60,000 circulars were mailed.

Library

During the year the Library moved to new quarters and its supervision was transferred from Administration to the Information Services Division. The function of the Library is basically that of furnishing statistical records or background, especially to the various Divisions and Sections of the Bureau but in considerable degree also to other agencies, in particular other government offices.

Periodicals, pamphlets and books were circulated during the fiscal year to the number of 79,363. There were 288 Library users within the Bureau and 104 outside. To meet the needs of personnel within the Bureau, 381 loans were made from other libraries and, in compensation, the Bureau Library was able to make 997 loans to other libraries.

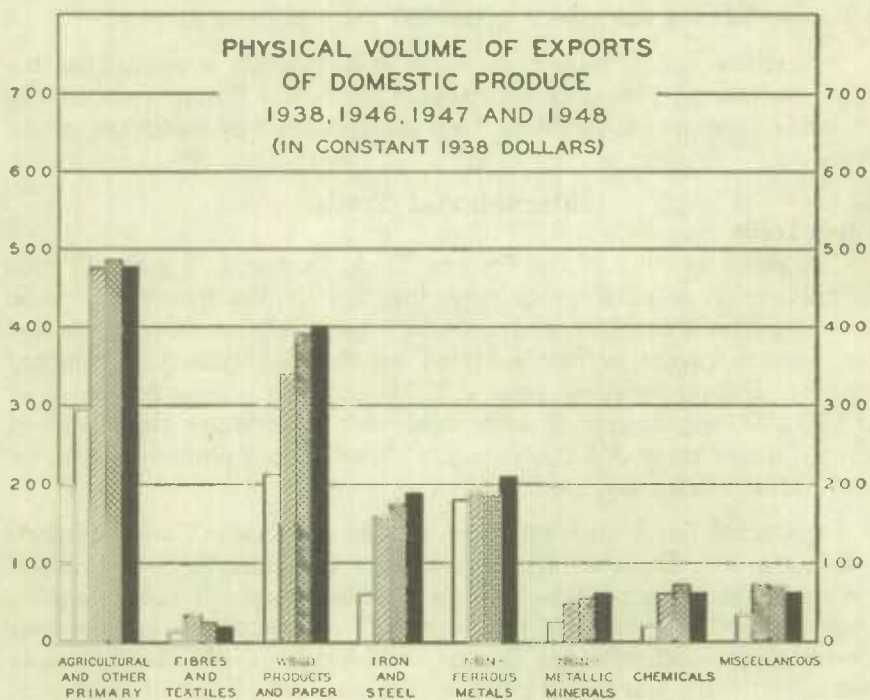
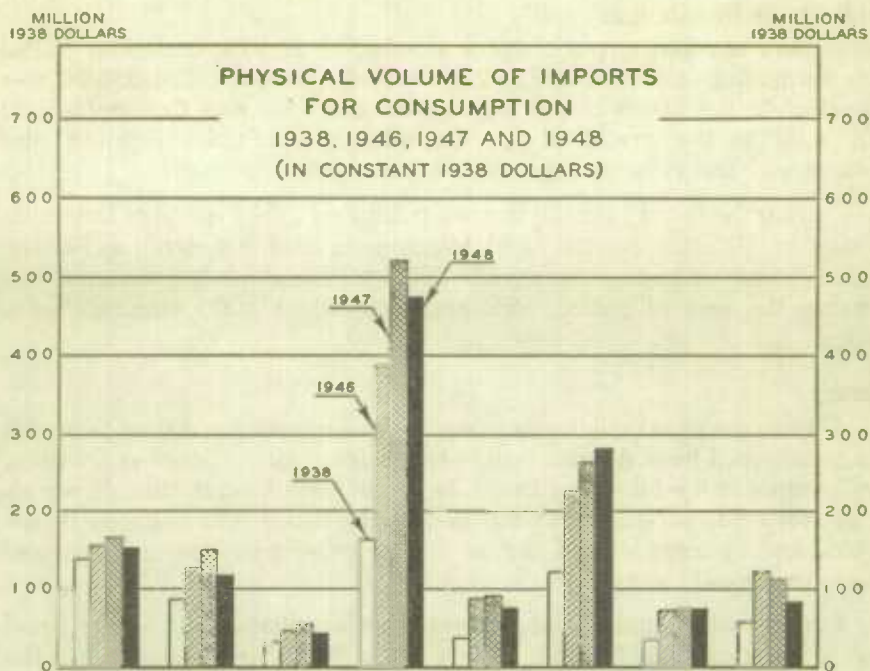
In addition to continued publication of its monthly accession list, the staff of the Library prepared a catalogue of current Bureau publications with index, designed to facilitate their use and filing by librarians generally.

International Trade

Foreign Trade

The main function of the Foreign Trade Section is the compilation and publication of all statistics regarding the foreign trade of Canada. The information is obtained from customs import entries and invoices and from customs export entries supplied by the Department of National Revenue. During the fiscal year, 2,500,000 import entries and invoices and 1,100,000 export entries were received. Imports are classified and recorded under some 2,700 commodity classifications and exports under about 900 separate categories.

Each month this Section prepared and issued **Trade of Canada Reports** for **Imports** and **Exports**. Each quarter of the calendar year reports were issued showing trade with each separate country, by commodities, during the elapsed period of the year, with a comparison for a similar period of the preceding year. The annual report of the **Trade of Canada** (printed from type) was issued in three volumes. Vol. I contains historical and analytical tables of Canadian trade as well as many summary tables



relating to current import and export transactions; Vol. II shows exports of each commodity, by countries, for the latest three calendar years; and Vol. III of the report shows imports, by commodities, from each country during the latest three calendar years as well as the customs duties collected. Summary bulletins were issued each month well in advance of the printed reports.

On request, this Section prepared many special statements relating to current trade. Nearly all foreign Embassies and Legations were supplied with monthly tabulations, by commodities, showing Canadian imports from and exports to the various countries represented. All Canadian Trade Commissioners abroad received monthly listings of quantities and values of each commodity constituting the trade between Canada and the countries within their territories. A special monthly report in the form of a commodity analysis of exports to countries under the ECA program was prepared for the Bank of Canada, the Department of Finance and the Economic Research and Development Branch of the Department of Trade and Commerce. By special arrangement, the Provinces of British Columbia, Quebec and Saskatchewan were supplied with monthly tabulations showing trade by commodities through customs ports in those Provinces. In the case of British Columbia, the information was supplied on punched cards.

In addition to these machine tabulations, a monthly service on a fee basis was supplied to business firms, trade organizations, manufacturers and others interested. During the past fiscal year 6,840 statements of this type were prepared.

A large number of inquiries requesting trade information were dealt with.

At the request of the Sterling Dollar Trade Board, this Section undertook the preparation of a special import report for use of the members of the Board and its committees.

During the year, reports were completed on the trade of Newfoundland. Machine tabulations had been prepared in Newfoundland covering the first three-quarters of the year and these were used as the basis for the relative quarterly reports. For the last quarter, complete compilation of the report was made from customs documents supplied by Newfoundland. The foreign trade of Newfoundland was included with that of the rest of Canada from Apr. 1, 1949.

International Payments

The activities of the International Payments Section were principally directed towards the following ends: (1) meeting the growing needs of the Government and international agencies for information on the Canadian Balance of International Payments; (2) the preparation of regular and special publications and the development and improvement of the data included in these.

The need for frequent reviews of the balance of payments and for forecasts by the Government continued. This necessitated the periodic

preparation of detailed records and forecasts and the analysis of data in collaboration with other Government officials. In addition to the former requirements for annual global data on the Canadian Balance of Payments the International Monetary Fund requested and was supplied with specially prepared statements showing the geographical distribution of Canada's international accounts and the global balance of payments for periods shorter than one year.

Publications included a number of special reports as well as the regular monthly and annual bulletins. Important among such special reports were **The Canadian Balance of International Payments 1926 to 1948**, **United States Direct Investments in Canada**, **Review of Foreign Trade 1948** and **Review of Foreign Trade First Half 1949**. The two last-named reports contained extensive analyses and comment on recent foreign trade. Articles on current international trade were also prepared for **Foreign Trade** and for other current releases.

At the beginning of July an important administrative change was introduced which reduced the work of handling customs permits issued to United States vehicles entering Canada. This was the return, to the Customs Division, Department of National Revenue, of the responsibility for matching duplicate copies and filing permits, a procedure which had been in effect since 1941.

A new study of inland freight earnings by Canadian railways carrying exports to Canadian ocean ports was conducted to supplement and check the completeness of export declarations.

The Chief and the Assistant Chief represented the Bureau at the Dominion-Provincial Tourist Conference at Ottawa in November.

Labour and Prices

In addition to routine work the Labour and Prices Division was assigned the following duties. Beginning with the results of the Labour Force Sample Survey of June, 1949, the preparation of the "Summary" section of the labour-force releases devolved upon the Division. The objective in the presentation of labour-force sample results is to reveal the changing size and composition of the Labour Force and to indicate the complex nature of the relationship between individuals and jobs in the economy of the country. A change in the nomenclature used in tables of Labour Force Survey results was instituted to avoid confusion in the use of such terms as "employed" and "unemployed".

Estimates of the Canadian Labour Force and its chief components from 1939 to 1949 (annually, as at June 1) were prepared and were ready for publication at the year-end. In response to a number of requests for such data, work was begun on similar estimates back to June, 1931.

Monthly estimates of labour income were published regularly and preliminary totals for 1949 were completed.

Employment

The demand for information on employment, earnings and hours of work showed a further marked increase, and required the preparation of a substantially greater volume of special statements than in any earlier year. The number of firms furnishing monthly reports rose by over 6 p.c. as compared with the preceding fiscal year.

The coding of industrial establishments according to the Standard Industrial Classification was completed: the work of assembling 1939 statistics of payrolls was also finished. Preliminary tabulations of data for the nine major industrial groups, according to the new classification, were made towards the end of the fiscal year.

Regular collection of monthly payroll data was established for Newfoundland.

Unemployment Insurance

Monthly statistical reports on the **Operation of the Unemployment Insurance Act** were issued regularly; after April, 1949, they included data for Newfoundland.

The **Preliminary Report on Benefit Years Established and Terminated Under the Unemployment Insurance Act, 1948**, was issued in April, 1949. A special report based on **Benefit Statistics for the Years 1945-48** was prepared for the meetings of the Unemployment Insurance Advisory Committee in July.

A new series of semi-annual reports, presenting **Hiring and Separation Rates, by Months, for Selected Industries**, was inaugurated in July, 1949. The second such report was completed for printing during the year.

Tables of the insured population, by occupation, industry, age, sex and province, were compiled from records of renewals of insurance books in 1949 and were published in the annual statistical report on benefit years.

In co-operation with the Unemployment Insurance Commission, a sample survey of employer policies was conducted during September. The objective of this survey was to provide data on employment policies of firms that would be of value to the Unemployment Insurance Advisory Committee.

An Interdepartmental Advisory Committee on Labour Statistics, representing the various interested departments and agencies, was in operation during the year. The Director of the Labour and Prices Division was a member and the Chief of the Unemployment Insurance Section was secretary of this committee. Through the work of the committee liaison between the departments most concerned with labour statistics was extended and improved.

Effective April 1, 1949, the Placement Statistics Unit was transferred from the Department of Labour to this Division. This Unit compiles statistics derived from the operations of the National Employment Service.

Prices

The work of this Section was unusually heavy because of major revisions in progress in both the cost-of-living and wholesale-prices fields. These were initiated with the object of improving price-index records and achieving organizational economy.

Specification pricing procedure for many items in the cost-of-living index was established. Progress was also made with several special-purpose wholesale price-index-number series to supplement the systematic classification of wholesale price-index numbers on the base 1935-39 = 100. A new experimental series of weekly wholesale price indexes was established and made available to a selected list of research personnel.

The fourth annual survey of comparative international retail prices provided material for the adjustment of allowances to Canadian personnel serving abroad. Indexes were calculated from this material and sent to the Interdepartmental Committee on Allowances.

Copy for **Prices and Price Indexes, 1948**, was forwarded to the printer.

The Section co-operated with the National Income Unit in the production of index numbers appearing in a Reference Paper entitled **Export and Import**.

Mechanical Tabulation

During the year the Mechanical Tabulation Division in addition to work performed for the Dominion Bureau of Statistics, undertook projects for other branches of the Department of Trade and Commerce, the Departments of Mines and Resources, National Health and Welfare, Insurance, Fisheries and for the Canadian Commercial Corporation.

The Labour Placement Tabulating Unit was transferred during the year from the Department of Labour to this Division; a Calculating Unit was organized to perform large-scale compilation work by means of computer and adding machine where punch-card tabulating methods were not applicable; a Census Unit was set up to test newly developed tabulating procedures for the 1951 Census of Canada. Tabulating equipment used in previous censuses was replaced by modern electronic equipment.

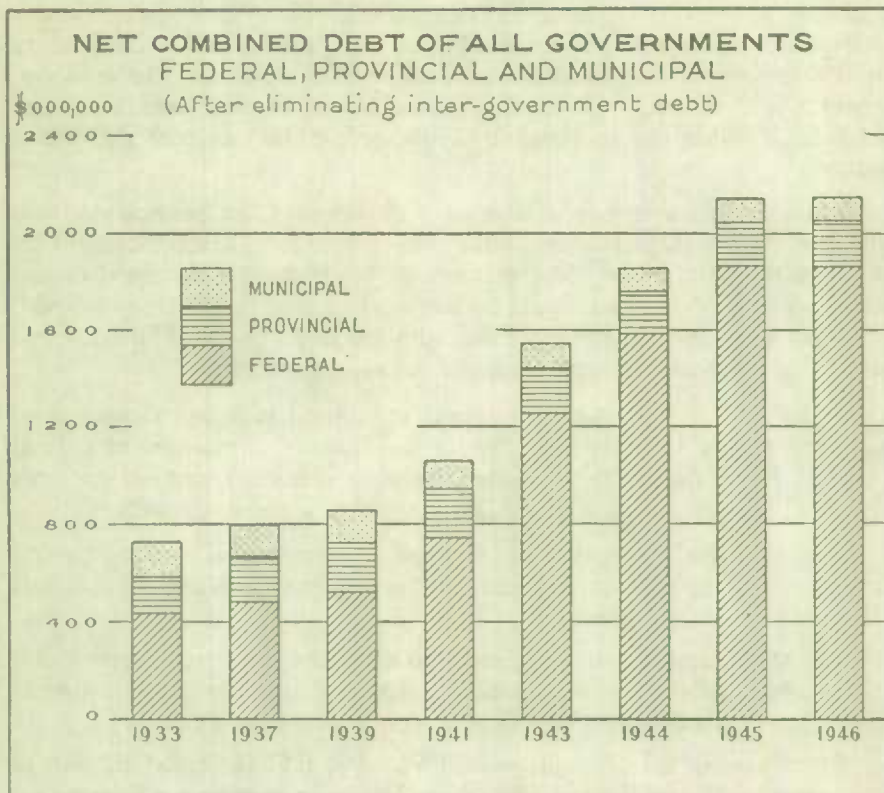
Key-punching equipment was reduced by 20 units, with a decrease in annual rental of \$3,066; sorting equipment by three, with a decrease in annual rental of \$1,800.

Public Finance

Pending the establishment of suitable classifications for analysing federal finance statistics, work continued for 1949-50 on the basis prepared for the Dominion-Provincial Conference on Reconstruction, 1943. An analysis on a similar basis of estimates for 1950-51 was begun. A draft classification of federal revenues and expenditures, comparable with those established for provincial and municipal finance, was prepared and sub-

mitted to the Department of Finance and the Bank of Canada for consideration, and preliminary analyses on this basis, subject to appropriate adjustments for possible revisions in the draft, were completed for the past three fiscal years.

The Director attended a meeting of the Continuing Committee on Provincial Finance Statistics, which among other things gave consideration to the form and content of provincial public accounts. As a result of conferences and the work of continuing committees in this field, statistics of provincial finance were reorganized on a new and more comprehensive basis. The first report, for the provincial fiscal years ended nearest to Dec. 31, 1946, was published during the year.



The Continuing Committee on Municipal Statistics, of which the Director is a member, gave final consideration to matters relating to the revised classifications and new schedules which were to be included in a new edition of the **Manual of Instructions**. Revisions to the **Manual of Instructions** and **Municipal Accounting Terminology** were completed. The printing of a composite publication, including both instructional material and accounting terminology, as recommended by the Conferences, was well advanced. A survey of municipal assessment systems and practices was also undertaken by the Division.

Prince Edward Island, the seventh province to do so, commenced submission of reports of Provincial Government employment and payrolls, and negotiations were continued with Manitoba, Quebec and Newfoundland. In addition to forming the basis for a new series of statistics, the information obtained in this survey was organized to serve the National Income Statistics and the Divisions of Industry and Merchandising, and Labour and Prices. Co-operative arrangements were worked out in connection with employment and construction statistics with respect to some of the provincial services, and were in process for others as the year ended.

Arrangements were made with the Economic Research and Development Branch of the Department of Trade and Commerce for this Division to obtain certain data from Provincial and Municipal Governments respecting private and public investment in Canada. The Director of the Division visited the Central and Eastern Provinces to make arrangements for such returns. Data on municipalities in Quebec and municipal and school authorities in Newfoundland were obtained from provincial sources.

Routine reports on public finance and Federal Civil Service statistics were prepared and published during the year. The announcement by the Government of plans for a conference to consider federal-provincial relations placed added emphasis on the work in the public-finance field, and plans were laid for collaboration with the Department of Finance and the Bank of Canada in organizing the necessary statistics.

Officials of the Division rendered assistance to other Government Departments and to other Divisions of the Bureau on matters of mutual interest. More than 100 requests involving special compilations from Provincial Governments and other authorities were dealt with.

The statistical compilations for the Government-Owned Property Survey were completed and a report on the results of the survey submitted to the authorities concerned.

Two staff members visited Toronto to assist the Provincial Department of Municipal Affairs in an advisory capacity in organizing statistical information for municipal boards and commissions in Ontario.

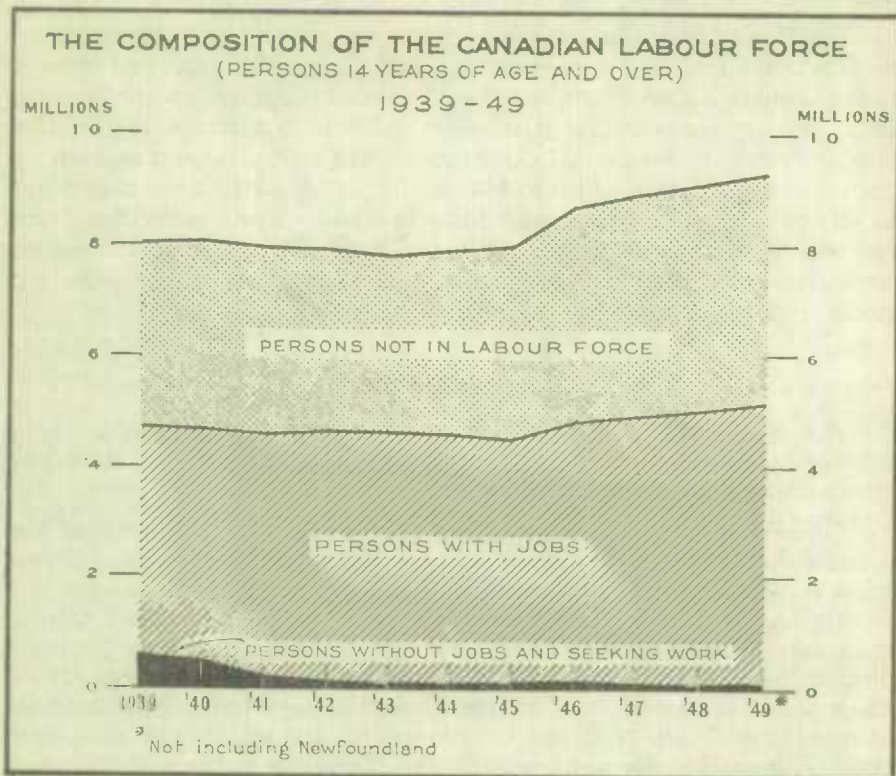
An official of the Division visited Victoria, B.C., to assist officials of the Provincial Department of Municipal Affairs in organizing their municipal reporting forms and statistics to conform with the prescribed classifications and principles resulting from the conferences on municipal statistics.

The Director of the Division visited St. John's, Newfoundland, in October, for discussions with provincial authorities concerning the interests of the Division in the fields of provincial and municipal statistics of public finance and provincial civil service statistics. Officials of the Division participated in four meetings and conferences concerned with municipal finances and public administration.

The Director of the Division was appointed a member of the Accounting Committee of the Municipal Finance Officers Association of the United States and Canada and later named as Canadian Representative of the National Committee on Governmental Accounting. A meeting of the Committee was attended at Chicago in November.

Special Surveys

The Division carried out four quarterly Labour Force Surveys. For the latter Survey, a 'mark sense' type of schedule was introduced. The use of this schedule allowed automatic machine transfer of data to punch cards, an operation formerly done manually. In conjunction with the Surveys, supplementary estimates of food purchases were conducted, on a sample basis, the results of which are to be used to modify the food component of the cost-of-living index. A supplementary survey on radio ownership and household electrification was carried out at the same time as the October, 1949, Labour Force Survey. The survey of residential rents, which provides basic data for the rental component of the cost-of-living index, was continued as an adjunct to the Labour Force Surveys.



Organization and supervision of the field work in connection with these enumerative surveys was the major task of the Regional Offices. In addition, considerable effort was put into the collection of reports for 1948

and other periods from non-respondent business and industrial establishments, the heaviest part of this work being done from June to September. Earlier in the year lists of establishments for use in the mail survey of retail sales were checked by Regional Office staff assisted by temporary enumerators.

In collaboration with the Census Division a Trial Census (see pp. 17 to 19) was carried out to test the possibilities of decentralized operations. Operations in the test areas were directed from the Regional Offices of this Division by staff sent out from the Census Division at Ottawa; many of the administrative duties were performed by the regular regional staff. Census schedules and enumerators' claims were processed by the regional staff with the assistance of temporary clerical staff.

Newfoundland was included in the Labour Force Survey for the first time in October, 1949. A Regional Office was organized at St. John's in the summer and considerable field work in preparation for the Survey was done. Coverage for monthly employment and payrolls data and annual business and industrial reports was extended to Newfoundland in the latter part of the year and Regional Office personnel made initial interviews of the firms concerned.

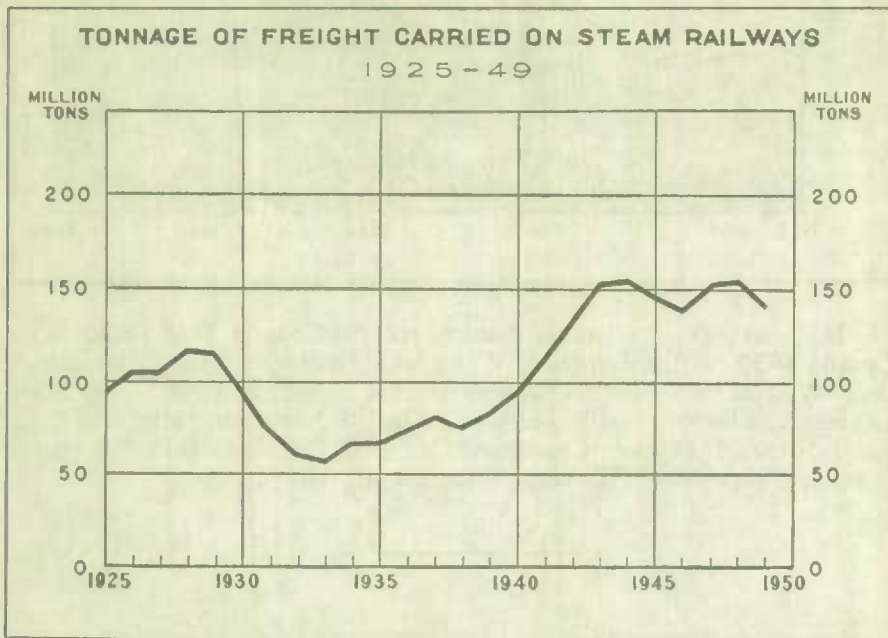
The Head Office Staff was engaged in the editing and processing of the schedules from the surveys conducted during the year and from a survey of family expenditures which took place in October and November, 1948. First releases on the latter were made in November, 1949. The Monthly Survey of Residential Construction was continued and residential rent indices were carried up to March, 1950. A mail survey regarding the source of funds used by individuals to finance new housing construction was conducted on behalf of the Central Mortgage and Housing Corporation. A mail survey to determine consumer preference for apples and apple products was also undertaken.

Transportation

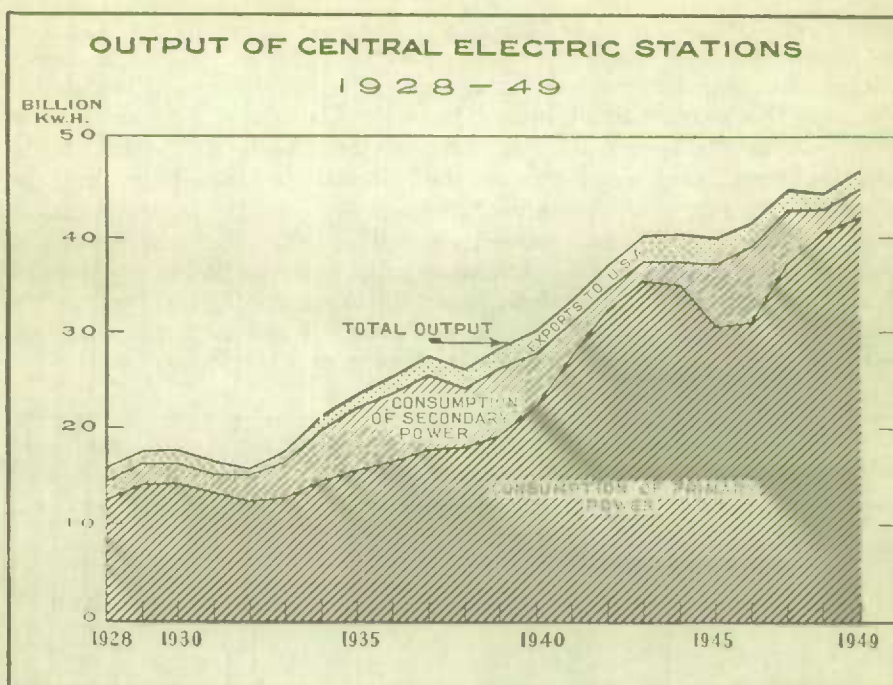
The initial issue of the report, **Water Transportation 1946-48**, was sent to the printer. A total of 35 different weekly, monthly and annual routine reports was published during the year.

There was a considerable volume of special work arising out of the nation-wide hearings of the Royal Commission on Transportation. Practically every submission to the Commission by the provinces, railways, the various Boards of Trade and Chambers of Commerce, employee unions, motor-carrier associations, trade groups, etc., was based on statistics compiled in this Division. Similarly, the applications of the railways for increased mail rates and freight rates, as well as the Mountain Differential Case and the Crow's Nest Pass Case, required the working up of special data. A special study was made for the Canadian National Railways of the volume of freight carried across the International Boundary by motor-truck. Assistance was given the Canadian Pacific Railway on a study of the comparative costs of moving wheat from the central prairies to Liverpool, via Eastern and Pacific ports, over the past 25 years. Analyses

were made for the Canadian Maritime Commission of commodities carried in foreign trade by registry of vessel and by trade routes. A special survey of Canadian shipping companies was also completed for the Commission covering the movement of freight between Canadian ports on the St. Lawrence-Great Lakes Waterway. A summary of foreign vessels trading into the Great Lakes was furnished the National Harbours Board and the Maritime Commission. A study of productivity of railway employees, as measured by freight and passenger traffic, 1926-48, was prepared. Material on particular phases of transportation was supplied to the Defence Research Board and Naval Intelligence. Reciprocal reporting agreements were explored with the Prairie Provinces and joint returns were designed for consideration with Saskatchewan and Manitoba.



The Acting Director visited Montreal, Quebec, Newfoundland and the Statistical Office of the United Nations Secretariat at Lake Success, N.Y., to discuss transportation and public utilities statistics. As a result of discussions with officials of the Newfoundland Government, arrangements were made for the forwarding of considerable provincial data required for the motor-vehicle and highway reports. The Assistant Director attended a meeting at Toronto with officials of the Canadian Warehousemen's Association and mutually desirable revisions were made in the annual questionnaire to the industry. He also consulted officials of the Canadian Automotive Transportation Association. He served on an Inter-departmental Committee on Industrial Accidents and attended several meetings during the year. Discussions were also held with Canadian Pacific Railway officials on employee classifications and accident statistics.



Material was supplied for sections of the **Canada Year Book, 1950**, **Canada 1950**, to the Dominion Water and Power Bureau, International Civil Aviation Organization, United Nations, Statistical Year Books, International Distributors and Producers of Electric Power, Imperial Oil Company, General Motors, Canadian Car and Foundry, Bell Telephone Company, and many other organizations and individuals.

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