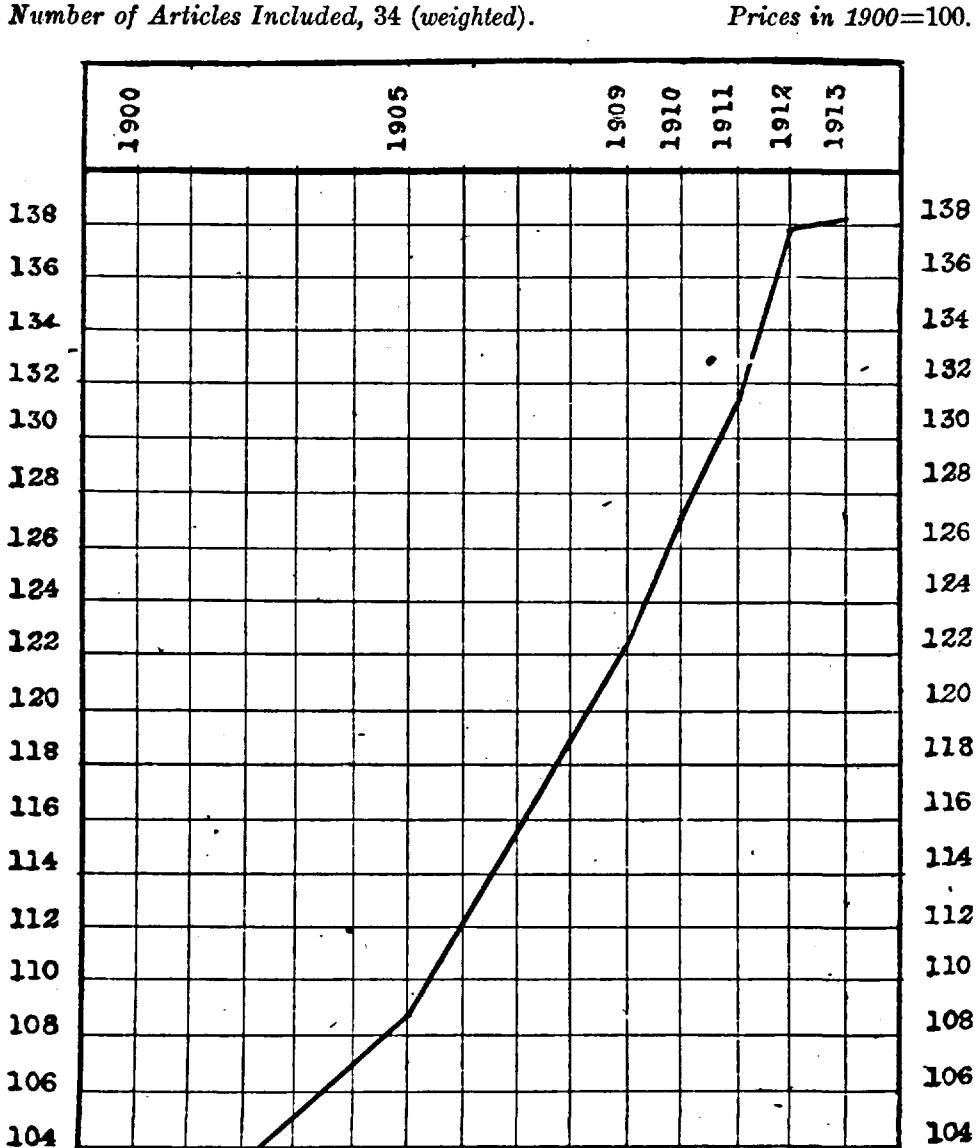
PART III. SUMMARY.

THE COURSE OF RETAIL PRICES, CANADA, 1900-1913.

Number of Articles Included, 34 *(weighted).* *Prices in 1900*=100.



PART III.—SUMMARY.

THE RISE IN THE COST OF LIVING IN CANADA AND ITS ECONOMIC CAUSES.

During the past fifteen years there has been a rise in the cost of living in Canada that may be set down approximately as 50 per cent. The prices at wholesale of 272 representative articles, selected over the entire field of production and consumption, have risen 48 per cent since 1900. The retail prices of over 30 articles which enter chiefly into domestic consumption have advanced, say, 40 per cent. Rents are up 60 to 70 per cent. The main purpose of the present investigation has been to explain from an economic standpoint the conditions which have produced a change so revolutionary in its effect upon the individual and the community.

In presenting a summary of the inquiry, opportunity has been taken to rearrange the conclusions somewhat, by way of correlating them anew to the problem of the memorandum as a whole They are given, of course, in briefest form; for the statistical demonstration of the various statements the reader is referred to the memorandum proper.

Initial Steps and Findings.

The method of the investigation, as explained in the introduction, was in the first instance to collect as complete data as possible with regard to the rise throughout the whole field of prices (prices of commodities, "services," rents, wages, prices of securities, and interest) covering all countries for which official or other reliable data were available,* the object being by the examination of phenomena in the mass to detect broad tendencies and the influences which affect considerable sections of the field. This method may be distinguished from an intensive study of the conditions surrounding individual articles, necessarily limited in number, in which the action of general and ultimate causes is apt to be obscured.

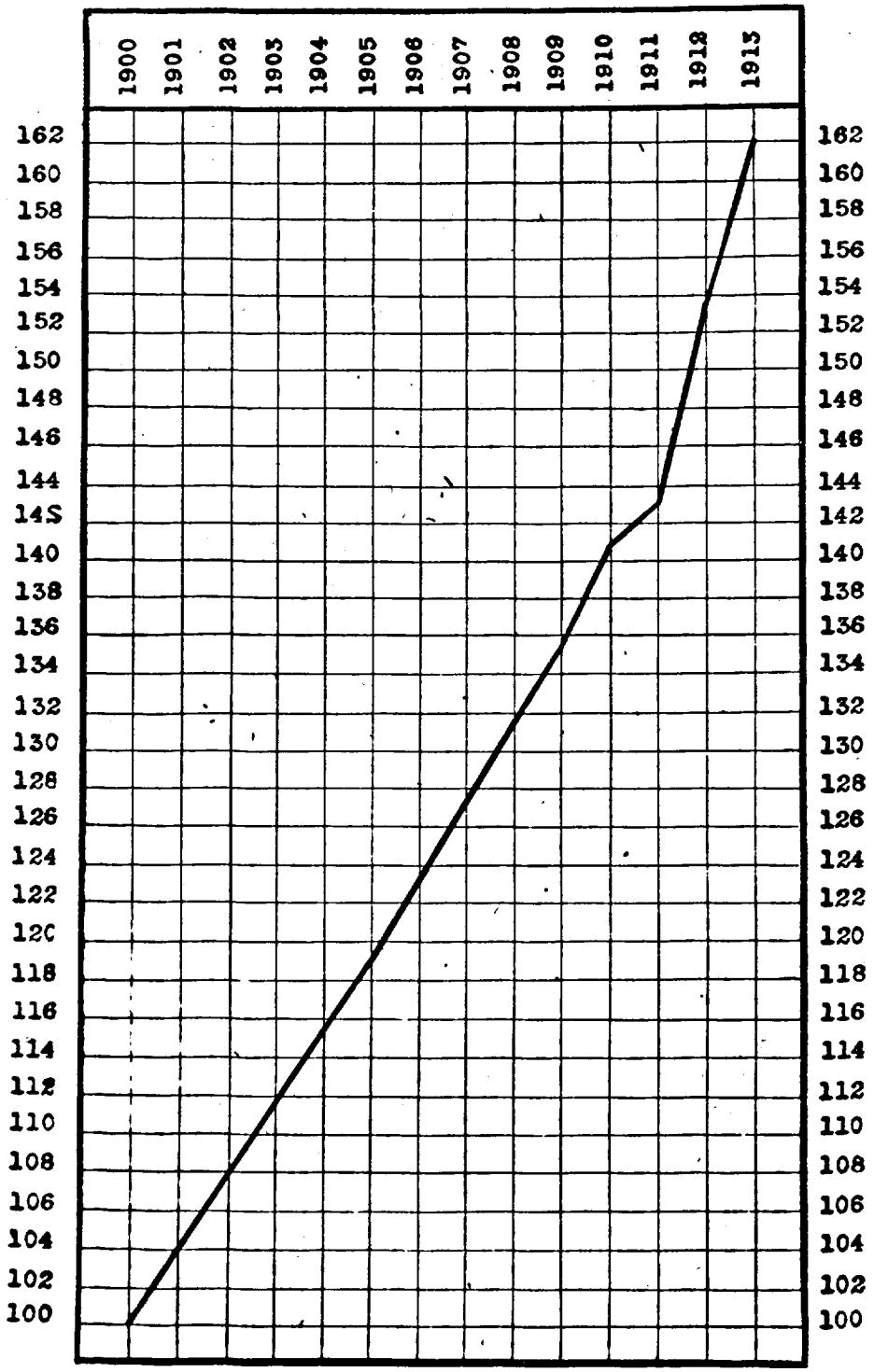
Examining the situation thus in its general setting, the rise in prices appears at once as a world-wide phenomenon. In every country for which statistics have been collected prices in the twentieth century have been characterized by buoyancy. Averaging the returns for the nine leading countries of Europe, together with Japan, Australia, New Zealand, the United States and Canada—14 in all—the rise in wholesale prices has been about 24 per cent and in retail about 31 per cent. But simultaneously two facts emerge on the most cursory view which strongly indicate the advisability of other than general treatment. These facts are, (1), that the rise has differed considerably in extent in different countries, and (2), that different commodities and groups of commodities have responded to the stimulus in varying degrees. It is obviously the first duty to extend and analyse these two statements.

Analysis of the World-Rise in Prices.

(1) Investigation of the available statistics reveals that the leading countries may be divided very roughly into three groups according to the extent to which their prices have risen. In a first group—in which prices have advanced least—may be placed the United Kingdom, France, Italy, Belgium, Holland and Norway; here the rise has been, say, 15 to 20 per cent. In a second group stand

*Namely, the United Kingdom, France, Germany, Austria-Hungary, Italy, Belgium, Holland, Norway, Russia, Japan, India, Australia, New Zealand, South Africa, Argentina, the United States and Canada.

THE COURSE OF HOUSE RENTS, CANADA, 1900—1913.
(Rents 1900 = 100).



Germany, Austria, Russia, India, Australia and New Zealand, having a rise that may be placed at 25 to 35 per cent. In a third group, where the rise has been most pronounced, approaching 50 per cent, fall Japan, Hungary, the United States and Canada. For house rents the available data are much less complete, but the tendency conforms, though with a difference, to the above. In England, they have been steady; in France and Norway, they have risen 5 and 8 per cent respectively; in Australia they are up 40 per cent and in New Zealand somewhat less; in the United States they have been very buoyant; while in Canada, South Africa and Argentina the rise is probably 60 or 70 per cent. It should be added that notwithstanding the differences above indicated, the general direction of the price movement in its ups and downs has been much the same (though not invariably so) in all countries. In other words, the impulse would appear to have been general, but to have depended for its intensity upon local conditions.

(2) It is not so easy to generalize with regard to commodities, which are many in number and subject to varying influences. Meats, grains and dairy produce, with the associated group hides and leathers, are up the most; fish and lumber perhaps next; metals, coal, and drugs among the least,—the first mentioned showing little rise at all. But it would be confusing at this point to go into details. A broad division of commodities is into foods and materials. Speaking generally, the rise has been considerably more pronounced in foods, especially in recent years. The "world" index number arrived at in the investigation for foods in 1913 was 125.8 (representing prices in 1900 as 100) and for materials 117·8; the "spread" between the two in 1912 was even greater, the food index being 134.0 compared with an index of 114.7 for materials. It may be added that raw products have similarly shown a tendency to rise faster than manufactured articles (30 per cent compared with 18 per cent in 1913; 35 per cent compared with 17 per cent in 1912.)

But it is in the combination of these points of view—the analysis by countries and the analysis by commodities—that the most interesting fact is discovered. It would appear that in the countries where prices have advanced most rapidly—Germany, Austria-Hungary, Japan, the United States and Canada,—foods have risen considerably more than materials, but that in the countries where prices have been less buoyant—the United Kingdom, France, Italy, Belgium, Holland,—the two groups have advanced at about equal pace. Materials have been much the same in trend the world over, rising 10.4 per cent in Europe and 10.5 per cent in North America; foods, however, have varied widely with locality, rising at least twice as much in America as in Europe. It is in foods, therefore, that we shall presumably find the explanation of the vagaries in the price averages of the different countries.

Outline of General Economic Conditions—Economic Trends and Prices.

Now this is very significant, for it yields a working hypothesis as to the nature and origin of the influences that have had the greatest effect on prices since 1896 and particularly during the past ten years. The period, speaking broadly, and with the purpose only of the most general characterization, has been one of great prosperity: "good times" have been everywhere the rule. The immediately preceding period, on the contrary, was one of exceedingly "bad times",—a period when, the world over, a bitter agitation was in progress against low prices (1896 saw the "cross of gold" campaign in the United States.) The price rise, in fact, in its earlier stages was two-thirds reaction from the lowest level in over 100 years—lower even than during the great depression of the eighteen-forties. (Incidentally it may be added that at their highest, recent prices fall below those of

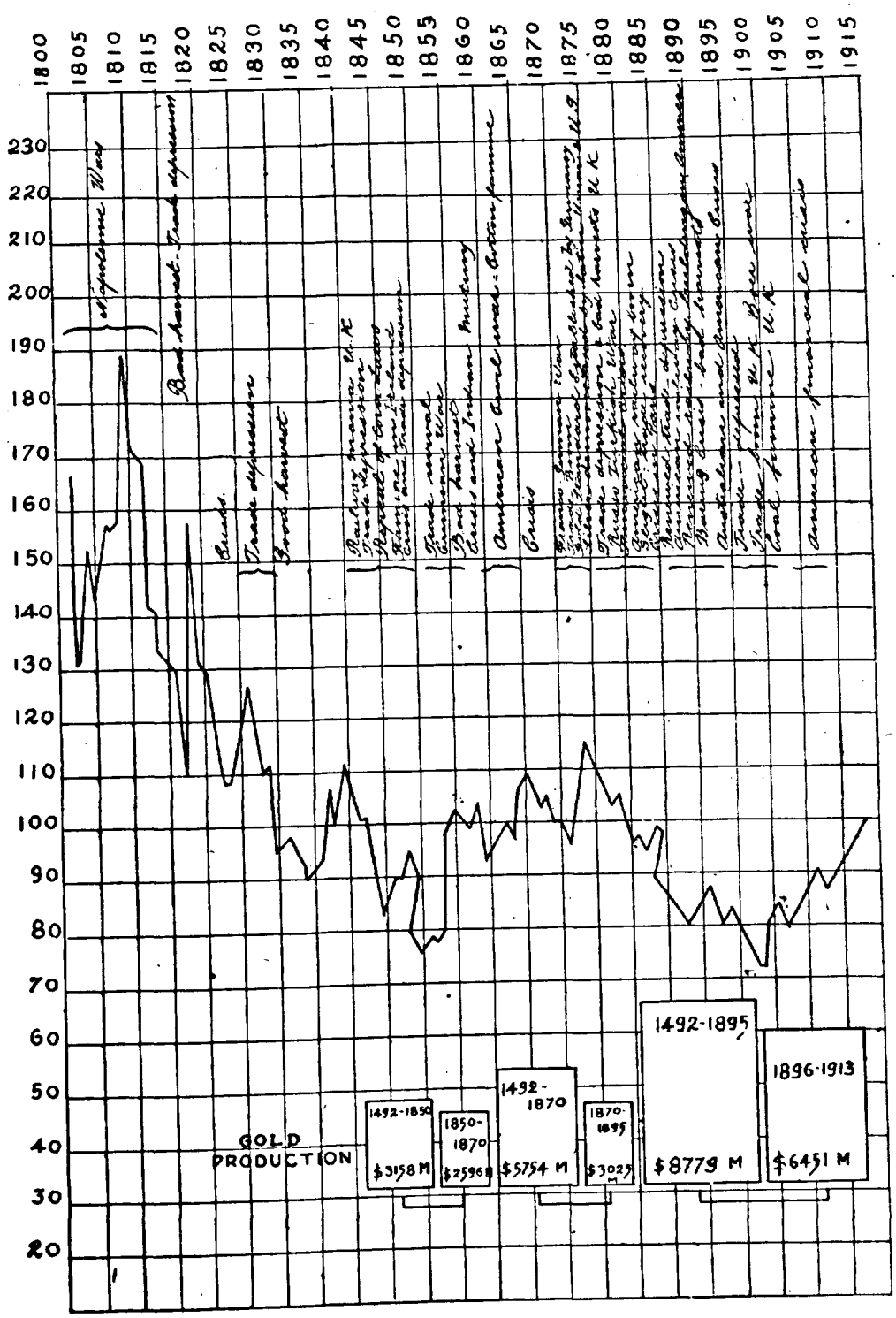
1870-1872, and still further below those of 1812-1815).* For a quarter of a century prior to 1896, supply had steadily gained on demand, until "overproduction" brought on stagnation. Credit was exceedingly contracted. The situation worked its cure first and partially through a great increase in consumption. But this soon gave way to a more positive stimulus. A period of marked expansion set in, based as usual upon credit extensions. (To the exceptional financial conditions involved, reference will be made later on). With agriculture once more on a paying basis, and with population rapidly increasing, there began early in the present century a great forward movement to extend the areas devoted to the production of foods and raw materials. Capital in large amounts began to flow from Great Britain, the home of investment funds, in the direction of the "new" countries, notably Canada, Argentina and Brazil. France sent large sums to Russia, Austria and Turkey. Germany made considerable investments abroad, notably in Austria and America. All the capital producing countries, including now the United States, spent large sums within their own boundaries mainly on industrial development. But it is with the export of capital by Great Britain during the past few years that we are here primarily concerned. Great Britain as above stated is not only the home *par excellence* of investment capital in general, but on account of her more adventurous financial policy is peculiarly the source of loans for the "new" countries and is accordingly the major factor in the expansion as affecting Canada. Sir George Paish, Joint Editor of the London *Statist*, has estimated that since 1907 alone approximately $5,500 millions have been sent abroad from the British Isles, for investment primarily in undertakings having for their object the bringing into the international trade scheme of new productive areas.†

It has been pointed out in some detail in the Introduction that prices reflect the general economic trend and that the phenomenon known as "prosperity" or "expansion" is almost invariably accompanied by a rise in prices. This is primarily because "expansion" involves in the first instance a turning aside from the usual activities of production to the providing of additional "plant" or "equipment." Equipment in the making does not "produce" at all in the economic sense and not to full capacity often for long periods thereafter, being always planned to a degree against the future. Hence in the meantime a stimulating effect on general prices, seeing that the demand for materials and labour thus created has for the time being no offset in the form of additional supply. That effect is of course greatly aggravated when the new activity takes the form of opening up remote areas to settlement, with an extensive programme of railway construction, town building, road-making and general industrialization. Such operations are not only of the largest of their kind and thus the longest in becoming fully productive, but they are carried out in comparatively undeveloped communities, where the disturbance they create economically is at its maximum. Hundreds of millions may be expended on such enterprises in a highly industrialized country like England with little influence on prices, where a less expenditure in a small agricultural community would be followed by a considerable rise. It is important to note, therefore, that according to the observations of Sir George Paish, no less than four of the

*The course of prices has been traced with a considerable degree of accuracy since the discovery of America. After a great rise in the Sixteenth and Seventeenth Centuries, due to disorganization of the monetary system caused by the new silver from America, they remained steady for a century and a half, beginning to rise again about the time of the American Revolution. By 1812-1815, they had reached perhaps the highest point ever recorded. Afterwards they fell steadily and at times rapidly until 1848. The next quarter century saw a remarkable rise, though not to the point of 1815. This was followed by twenty-five years of decline which brought the general level by 1896-as above remarked to the lowest point in over a century. When relief from the present high prices is demanded it is often forgotten that a return to the conditions with which the present is naturally contrasted would be for many reasons undesirable. Low prices, of course, mean cheap living, but they are very apt also to mean stagnation of trade and unemployment. The point is fully discussed in the Introduction (p. 2, and Note p. 9) and also in the "Historical Sketch of Prices" included in Part II (page 775 and in particular pp. 788-9 and 796 and Note F, p. 46.)

†In 1914, Great Britain was estimated to have $20 billions invested abroad in every part of the world, about half being in North and South America. French foreign investments were estimated at $9 billions, nearly all on the Continent of Europe. German investments abroad were placed at $5 ½ billions, largely in Europe, but also in America and Asia. These are, of course, the three great lending countries of the world.

THE COURSE OF PRICES IN ENGLAND DURING THE NINETEENTH CENTURY AND AFTER.



five and a half billions of capital above mentioned as having been exported from the British Isles since 1907 have been devoted to enterprises of just this character, namely, the construction of railway lines and municipal improvements in new countries, the countries to which Great Britain is looking more and more for her supplies of foods and raw materials. Altogether 140,000 miles have been added to the railways of the world since 1900—an increase of 47 per cent—in new countries alone. The tonnage of vessels in the world has increased almost as rapidly.*

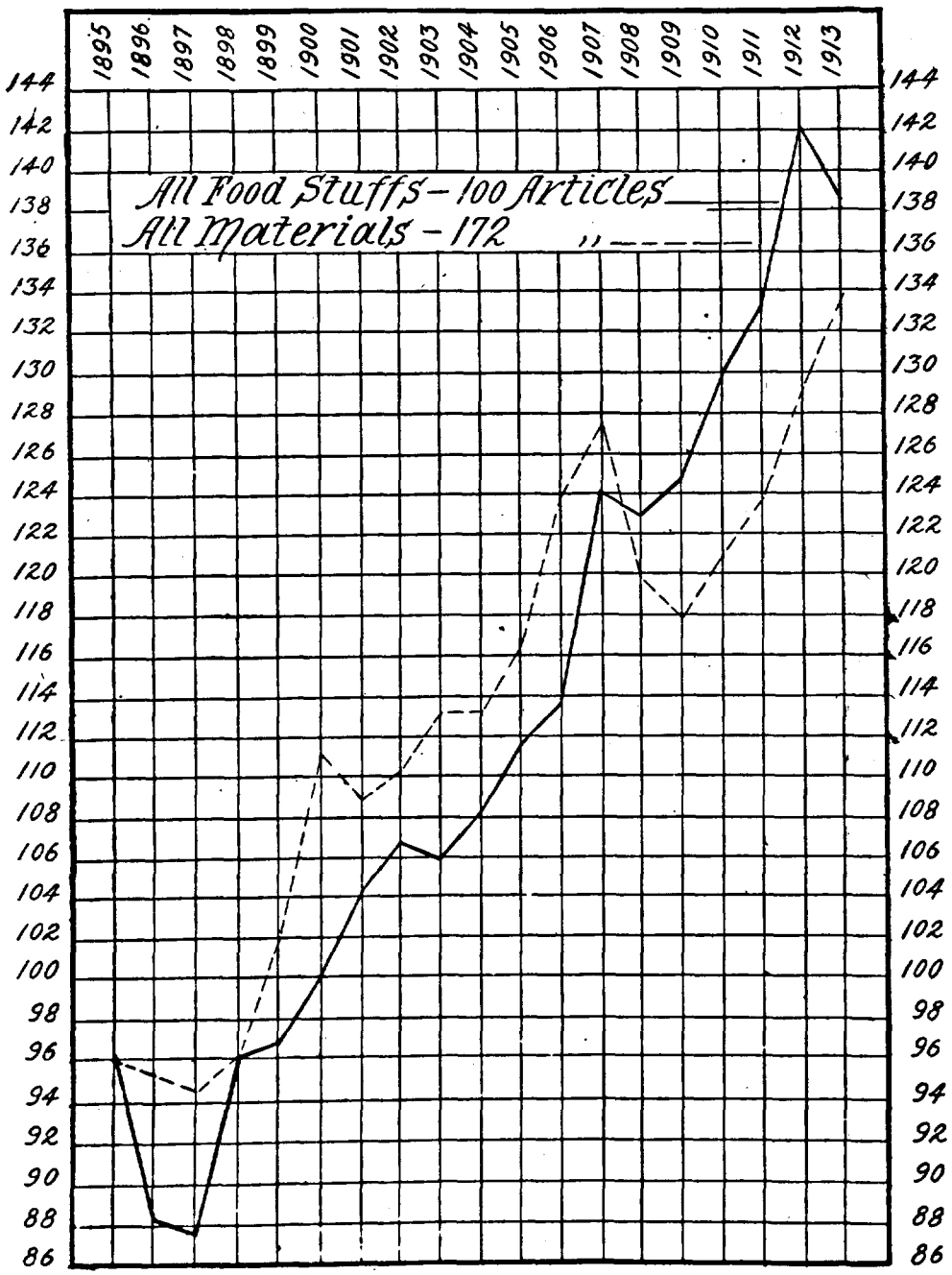
Applying the above to the international price situation previously defined, it will be remarked that it is precisely where expansion has been in progress that the rise in prices has been accentuated, and especially where the expansion has been of the kind just mentioned. England, France, Belgium and Holland, have witnessed no revolutionary changes economically during the past decade and have maintained comparative stability of prices. These countries have, of course, added materially to their industrial resources, but the additions have been to systems already large and complex. Countries like Japan and Germany on the other hand, have gone forward industrially to a much greater relative degree, and the same is true of India, New Zealand and Australia, where prices have been considerably more buoyant than in the countries first named. Austria-Hungary is an example of a European country largely agricultural under process of rapid industrialization by imported capital; her prices have been very buoyant. In the United States the process of industrialization has, likewise, been exceedingly rapid since the beginning of the century. When therefore it is stated that of the great export of capital from Great Britain above described, a full quarter has been poured into Canada alone, making her second only to the United States as the field of British investments abroad, (the United States, Argentina, Brazil and India, being the countries next in order affected) and there devoted to a scheme of railway, municipal and industrial development on a scale without parallel in her previous experience, and without parallel relatively in any other country, it will not be matter for surprise if in Canada is seen in maximum intensity the phenomenon always associated in an outstanding way with such a process, namely, a great rise in prices. This, to repeat, is for the simple reason that upon the regions contiguous to areas under rapid development in this manner naturally falls the chief share in providing labour and materials for creating the new railways, towns, elevators, agricultural implements, etc., etc., which a process of the kind makes necessary.

It is at this point that the variation in the trend of food prices as between the old and new countries obtains the significance above remarked upon as connecting the price rise with the expansion. (Note in this connection the diagrams on the three next following pages.) A movement of the kind described produces at first a keen demand for materials and tends to send their prices up. At the same time, however, it exercises so powerful a disturbing influence upon settled occupations—chief among which is the occupation of food production—that the consequent diminution in supply causes in the end a rise in the price of foods greater than the rise in materials. Materials are obtained as a rule over wider areas than foods; they lend themselves more readily to transportation, and their prices tend to move together as between country and country to an extent that is not true of foods, many of which are necessarily drawn from

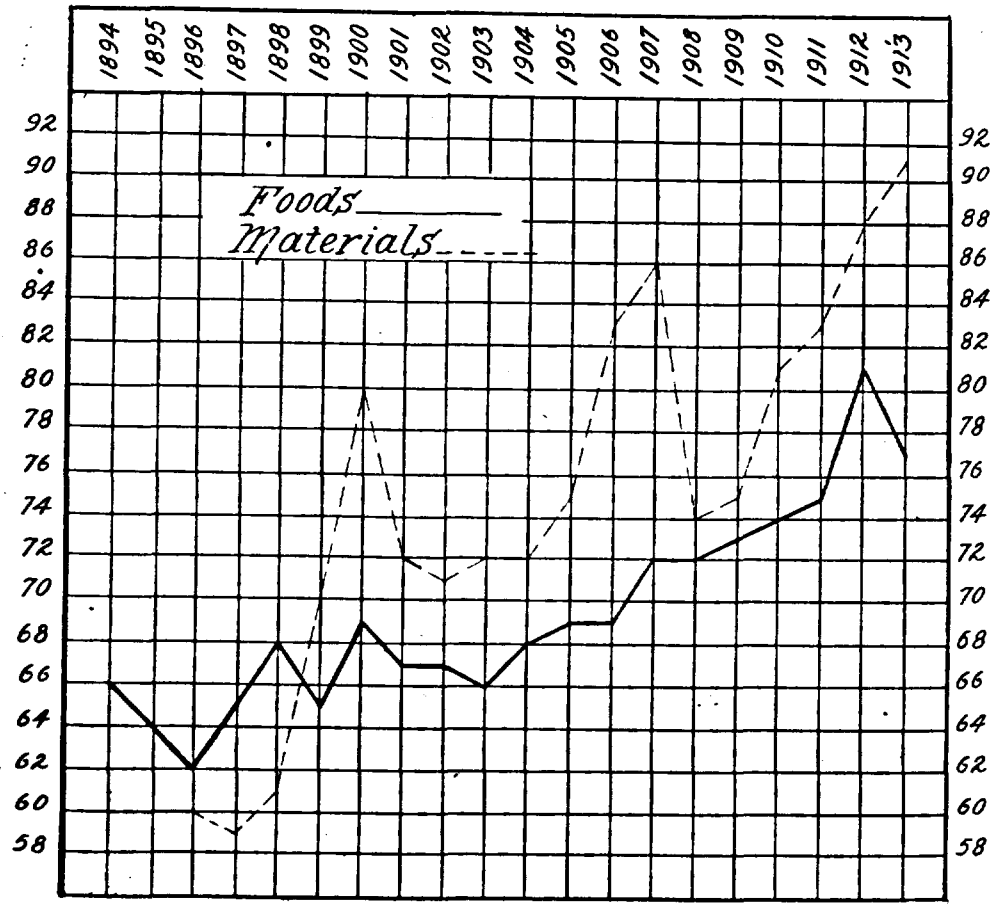
*The figures of new railway mileage since 1900 by countries, are: United States, 71,666; Canada, 18,343; India, 11,664; Argentina, 13,588; Australia, 7,469; Russia, 17,377.

It is interesting to recall the experience of the early 70's which witnessed extraordinary activity in railway-building. The period, as already stated, was one of extraordinarily high prices, culminating in the panic of 1873. In the United States the length of the entire railway system had been doubled in the seven years preceding 1873; in Russia practically an entire system of 12,000 miles was created between 1868 and 1873; in Austria about 4,000 had been built; while Brazil, Chili, the River Plate Republics and Peru carried out extensive programmes. The last mentioned country alone had spent $120,000,000 on railways. "Peru", says Sir Robert Giffen, writing during the ensuing depression (Essays in Finance, 1st Series) "has indulged a fancy for railroad-making, at frightful cost, with the immediate consequence of causing a factitious prosperity while the construction of the railways was in progress, to be changed for the present adversity, when the railways made at such great cost are found unproductive."

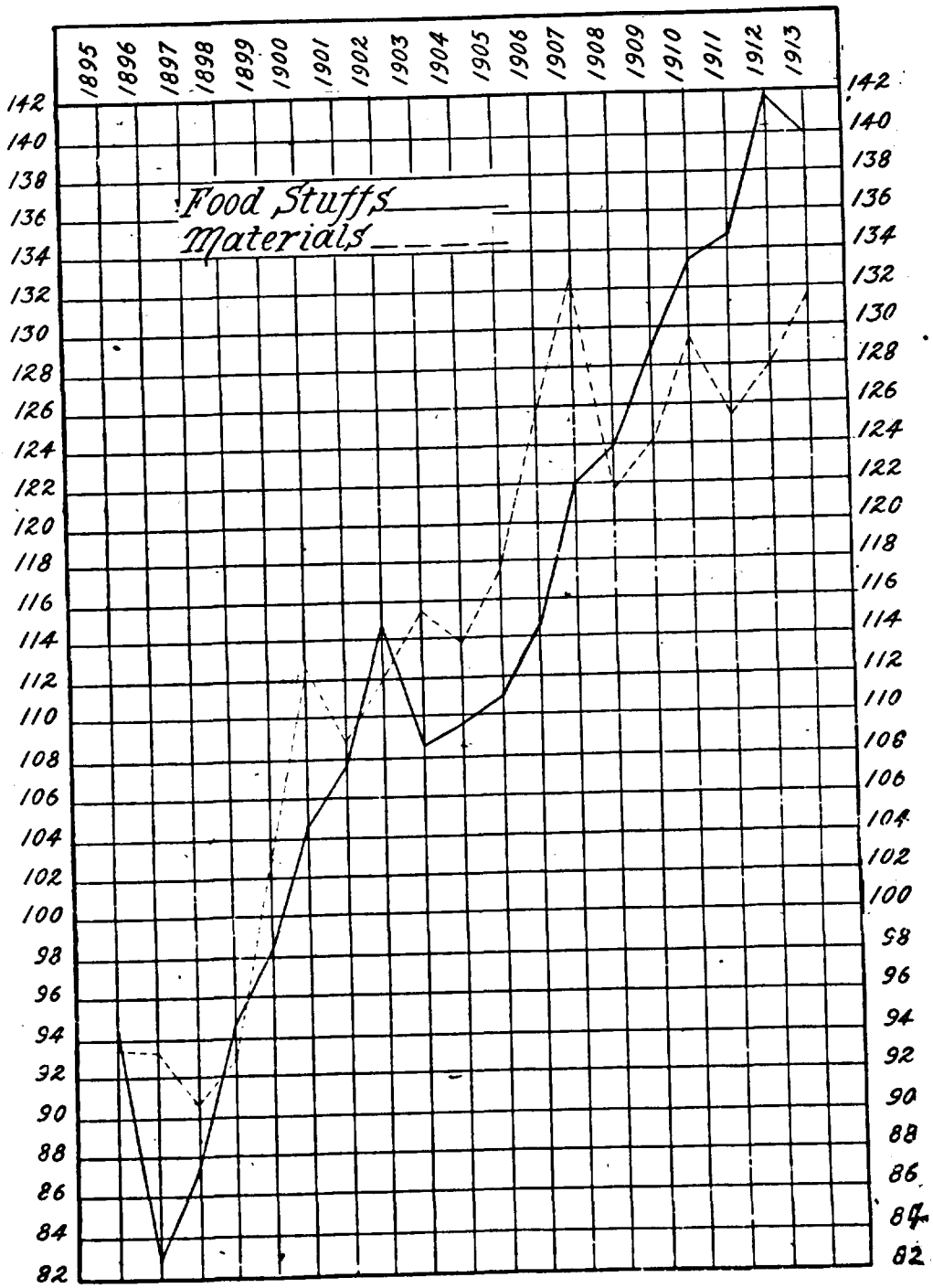
PRICES OF FOODS AND MATERIALS IN CANADA, 1895-1913.



PRICES OF FOODS AND MATERIALS IN GREAT BRITAIN, 1894–1913.



PRICES OF FOODS AND MATERIALS IN THE UNITED STATES, 1895–1913.



nearby sources. Foods can be much less quickly reproduced—cereals, fruits, vegetables, not before the next harvest, meats not for an even longer period—and when the area within which supplies are obtained is enlarged, new distribution costs of a serious nature are incurred and prices rise accordingly. It has already been pointed out that the rise in the most buoyant countries is essentially a food rise, and that the most bouyant countries are those in which expansion has been most marked. The relationship is complex and will be illustrated in detail further on, when distribution is more fully discussed. Here, it is sufficient to point out that the figures of world production of the past few years assembled in the inquiry bear out the general analysis. Coal and iron, the fundamentals of industrialism, have increased in their production 75 per cent since 1900: the pig-iron test of "prosperity" is unmistakable. Materials in general have shown the same tendency. Copper production has doubled; manganese production has increased 70 per cent, and spelter perhaps more; minerals as a whole are up 60 per cent. Among textiles, cotton, flax fibre, and jute have increased very rapidly, though wool and hemp have been stationary. But in foods the showing is very different. Cereal production (wheat, oats, corn, rye, barley and rice) it is true, has increased, say, 35 per cent, or half the increase of coal and iron, as a result of the new areas which have come under crops—a result it may be added which has checked the price rise in wheat, oats, barley and the like. Sugar has increased somewhat less (30 per cent). Potatoes are very variable; the 1911 crop was below that of 1900, the 1912 crop was 23 per cent above. The supply of meats, the second great division of human foods, has actually declined relatively to the numbers of the human family since 1900. Wine, hops and tobacco have fallen off.

Business Cycles.

Interacting with the above is the tendency of trade and industry to run in more or less well defined cycles of prosperity and depression. The causes of this striking fact—"the most important perhaps in the whole of modern industrial life"*—cannot be discussed here; its existence, however, must be admitted and with it the explanation of a similar wave-like movement in the course of prices.† The period contains one very pronounced "crisis", that of 1907, and two lesser ones, in 1900 and 1903-1904 respectively. How prices were influenced may be seen from a glance at the various charts in Part I. It will be noticed, for example, in the chart of wholesale prices in Canada, 1890-1913, (printed as frontispiece), that Canadian prices reacted considerably to the crisis of 1907, slightly to that of 1900 which was European in origin, and little, if at all, to that of 1903-1904—the so-called "rich man's panic" of the United States. The general recession in 1913 is no less apparent though no crisis has supervened.

The Increase in Gold Production.

The above brief analysis of the general situation leaves one factor in abeyance —gold. It is an old and orthodox view that the general level of prices is the result of a balance between the total amount of money and the total amount of

*W. J. Ashley, *The Rise in Prices and the Cost of Living.*

†"Beveridge ascribes crises to industrial competition; May to the disproportion between the increase in wages and in productivity; Hobson to over-saving; Aftalion to the diminishing marginal utility of an increasing supply of commodities; Bouniatian to over-capitalization; Spietholl to over-production of industrial equipment, and under-production of complementary goods; Hull to high cost of construction; Lescure to declining prospects of profits; Veblen to a discrepancy between anticipated profits and current capitalization; Sombart to the unlike rhythm of production in the inorganic and organic realms; Carver to the dissimilar price fluctuations of producers' and consumers' goods; Fisher to the slowness with which interest rates are adjusted to changes in the price level. One seeking to understand the recurrent ebb and flow of economic activity characteristic of the present day finds these numerous explanations both suggestive and perplexing. All are plausible, but which is valid? None necessarily excludes all others, but which is the most important each may account for certain phenomena, does any one account for all the phenomena? Or can these rival explanations be combined in such a fashion as to make a consistent theory which is wholly adequate."—Mitchell, *Business Cycles*, page 19. Mitchell's own theory has been called the "synthetic" theory because it combines various points in the older theories. An account of the various crises of the Nineteenth Century is given in a note to the *Historical Sketch of Prices* in Part II.

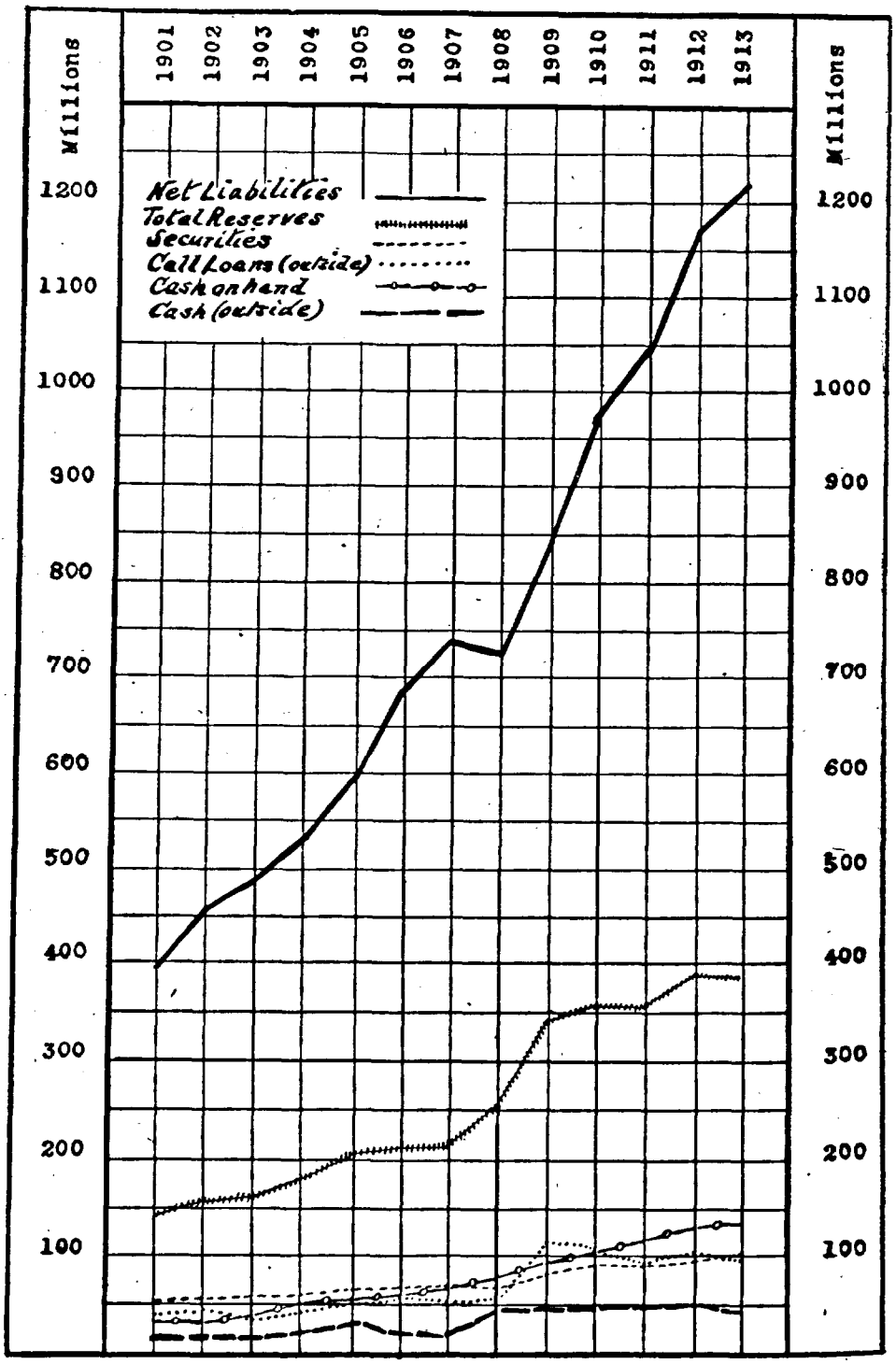
commodities—or rather between the amount of the medium of exchange (taking into account its rapidily of circulation) and the number and magnitude of the transactions it is called upon to effect,—and that a great increase in the gold supply, through its influence on credits, sets in motion an industrial and trade boom precisely of the kind above described. Since the year 1890 the annual production of gold—the standard "money metal" of practically the entire civilized world—has gone up from about 113 millions to about 460 millions, or nearly four times, (the result of the discovery of the cyanide process and its application chiefly in South Africa) with the result that the total accumulated stocks of gold available for monetary purposes have considerably more than doubled. This, as has been well said, "almost bludgeons the understanding" into the belief that we have here the underlying cause of the rise in world prices—especially in view of the similar experience after the Australian and Californian discoveries and on other occasions.

Passing over the fact that the volume of transactions has also enormously increased, which would mitigate if not offset the gold increase: there is keen debate as to the nature of the connection under modern conditions between the gold supply and prices. Gold no longer operates on prices as it once did through the currency alone*; by the modern organization of credit, 95 per cent of wholesale trade is effected without recourse to the currency at all, but by means of credit instruments. Any disturbance, due to monetary conditions, of the equilibrium between the aggregate volume of transactions and the aggregate amount of the medium of exchange is therefore overwhelmingly likely to come into play through the amount of cheques, drafts, bank notes, and similar documents which have so largely displaced currency. The question accordingly hinges on whether the volume of these documents is governed by the gold supply. It is held on the one hand that the relation is definite—that credit is proportioned to gold reserves. When an increase in the gold supply occurs, prices rise because the new gold flows into reserves thereby creating an expansion of credits and initiating a speculative and trade boom. To this, however, it is objected that credit is not "created" in any such way;—that the primary "creative" force of credit is business sentiment and its power to induce the business community to bring forward their assets as pledge for accommodation. Gold, of course, is indispensable for the "manufacture" of credit; no banker could make a loan even to the most unexceptional customer against the most unexceptional security overwhelmingly in excess of his reserve. But the gold is mere machinery; when it is wanted in such a case it will be sought; when it is not wanted its presence in reserves will not in itself expand credit,—except to the extent that favourable conditions are always stimulating by reaction. Thus credit is based on goods, not gold, and the modern process of buying and selling by means of credit documents becomes, fundamentally, a process of bartering goods for goods, not goods for gold. In any event, the tie between reserves and credit is rendered so elastic by the operation of business sentiment that no definite ratio can be predicated. It is, of course, admitted that an increase in gold production by adding to the world's wealth may easily become the basis of a boom, just as a heavy wheat or cotton crop produces the same result, but this is to regard gold *quasi* wealth and not *quasi* medium of exchange.

With regard to conditions during the past twenty years, undoubtedly the predominant factor, as already remarked in passing, has been the enormous expansion of credit. The "money increase" of the world has been in the form of credit instruments. Can this be directly ascribed to the increased production of the monetary standard? It may be noted that the new gold in so far as it has been applied to monetary uses has gone preponderatingly into bank and treasury reserves; according to the records of the United States Mint the proportion between the additions to reserves and the additions to circulation has been as 6 or 7 to 1. Thus, of the six billions of gold produced between 1890 and 1910, about a billion

*In the Sixteenth Century the great rise in prices can be directly associated with the American discoveries.

CANADIAN BANK RESERVES AND LIABILITIES, 1901-1913.



and a half were consumed in the industrial arts, another six hundred millions were absorbed in the hoards of the Orient, while of the remainder not more than half a billion can be traced to the currency, leaving well over three billions as the amount applied to bank and treasury purposes. But, as already explained, this is not to say that the new gold was the primary force creating the accompanying credit expansion. In fact the outstanding feature of the financial history of the past quarter century has been the marked extension of banking and financial organization (including international organization) by way of increasing enormously the facilities for the manufacture of credit by the pledging of securities, and of diminishing the dependence of credit upon gold. Modern business has more and more taken the form of joint stock enterprises whereby the aggregate assets available as security for bank credit have been very greatly increased, and in this perhaps as well as in the gold supply lies the root of the great growth of credits.* It is significant that England, which as above remarked has financed the greater share of the expansion in the newer sections of the world since 1900, has added but little to her gold reserves,—less in fact than countries like the Balkan States and Turkey which have recently absorbed considerable quantities of gold in the more or less mechanical process of reorganizing their banking and monetary systems.

Turning more particularly to the Canadian situation since 1900, an exceedingly rapid increase in the monetary supply has taken place. The amount of currency in circulation (notes, silver and bronze) has been shown by the investigation to have increased by 2½ times between 1900 and 1913. The Canadian gold reserve increased by nearly six times in the same period, the most rapid rate of increase in any country in the world, while even the absolute increase falls short only of great countries like the United States, France, Russia and Italy. Similarly, the loans and discounts of Canadian financial institutions went up more in proportion than those of any other country. From a rough calculation based on the latter and on the records of bank clearings, it would appear that the volume of payments effected by credit instruments increased by five times. The rapidity of circulation both of the currency and of instruments of credit undoubtedly increased considerably. Altogether the efficiency of the medium of exchange in Canada would appear to have increased by probably six times since the year 1900, an increase which is certainly very great—probably without parallel elsewhere. The question is, may this be held to account for the pronounced rise in Canadian prices?

The problem is abstruse and technical to a degree and for that reason has been given an entire section of four chapters in the memorandum, where the reader may find the data for judgment. It seems clear that, even if it be granted that the Canadian price-rise is immediately or technically a reflection of the large addition to the monetary supply, the gold increase cannot be regarded as the basic cause. The circumstance which chiefly argues against that conclusion is that Canada has no gold market and that gold for monetary purposes—that is, for reserves, the only monetary use to which gold is put in Canada—flows hither only in response to definite business demand. The mechanism of the Canadian monetary system described in Part II, renders it plain that there is no native reserve of gold in Canada, and hence no opportunity for a boom to be *initiated* by gold. The enlarged Canadian reserve (which until 1914 was in *coined* gold, Dominion notes being redeemable "in specie") is not the fundamental cause of the recent expansion in credits and of the railway and industrial boom in Canada—rather the opposite is the case. The fundamental cause is the heavy borrowings of Canadian enterprises abroad for the development purposes in question. In other words the new credit had its origin elsewhere and it was its introduction into Canada that necessitated the expansion of reserves, currency and other financial apparatus, just as it led to a growth in the number of

*The proportion of specie used in the movement of accounts at the Bank of France, one of the most conservative of banking institutions, was 3.22 per cent in 1900, and 1.95 in 1910.

Canadian branch banks from 708 to 3,140 in the thirteen years 1900–1913. It was noted above that in the United Kingdom, whence came practically the whole supply of credit which financed the Canadian expansion, there has been little or no addition to gold reserves since 1900. It may be added here that in the countries to which British capital on so large a scale has flowed (Canada, Australia, South America) a marked increase in the gold supply has taken place. In other words, the gold accretion seems to take place where loans are expended and financed (England financed her enormous loans to Canada largely through the United States) not where they originate.

But the primary purpose of this memorandum is to seek an explanation why prices have risen higher in Canada than in other countries like England and France. As above stated, the increased Canadian gold supply would not appear to have entered into that difference as a *primary* factor, seeing that it has been brought here largely because we have sought and obtained a plentiful supply of long-time credit abroad—the latter a product largely of reorganized financial apparatus. That the increased gold production, however, facilitated this movement, and that its effect has been to assist materially in the enlargement of world credits and in one way and another to stimulate the world-buoyancy, may be accepted.

The Situation in Canada.

With this by way of general statement, let us turn to a more detailed examination of how in the case of Canada the situation has worked itself out.

At bottom, the phenomenon we have to examine is the drawing of Canada at an exceedingly rapid pace into the world-trade scheme as a source of supply for raw materials, particularly cereals. This is the economic impulse underlying what is popularly called the Discovery of the Last Best West. Around this hinges the general scheme of economic progress in Canada during the last twelve years, and in its various manifestations are to be sought perhaps three-fourths of the explanation of the course that has been followed by prices.

The superficial phenomena are familiar enough. A spirited immigration policy drew thousands of people to the country, primarily to occupy the new lands. An immense railway and town-building programme was begun, also for the service of the West. The work of locating settlers, providing lumber for their houses, agricultural machinery for their fields, elevators for their crops, drew the entire economic life of Canada out of its accustomed orbit to a greater or less degree. The East in particular turned to industrialism, the people flocking from the farms to the centres of secondary production and distribution, whither also a considerable portion even of the immigrant tide was diverted. In earlier times, before western wheat growing had assumed the lead in Canadian agriculture, the smaller Canadian towns and cities were supplied from the adjacent country. Once, however, the above change took place,—and while it was taking place—they were compelled to go further afield for their supplies. New freights and the various other expenses incidental to distribution over a wide area accordingly began to appear as charges in the food bill, at the same time that Canada began to be drawn upon more and more by world markets as a source of supply. Concurrently the familiar features of an intense speculative boom, especially in land, added their demoralizing influence. That several other countries, like the United States, Argentina, Brazil, and Australia, witnessed developments similar in kind if not in degree, would account for some intensification of effects locally. It will be well to set out the facts of the situation in the usual order of economic analysis, beginning with the agencies of production, (1), capital, and (2), labour,—their growth and distribution since 1900; passing on to (3), production; and thence, (4), to the distribution problem as affected by the preceding; concluding with, (5), a review of the consumption

or living standards of the people. Each of these analyses will throw its own light on the situation and we may thus locate from several points of view the development that explains the action of prices.

(1) The Growth and Distribution of Capital, 1900-1914.

In a new country like Canada additions to capital come chiefly from abroad. It has been already noted that since 1907 Canada has received approximately one-quarter of the entire capital-export of the British Isles. The usual method of estimating the extent of such a movement is by the statistics of external trade. The new capital did not enter in the form of gold, and as exchange rates have been uniformly in favour of Canada it must have come in the form of goods.*

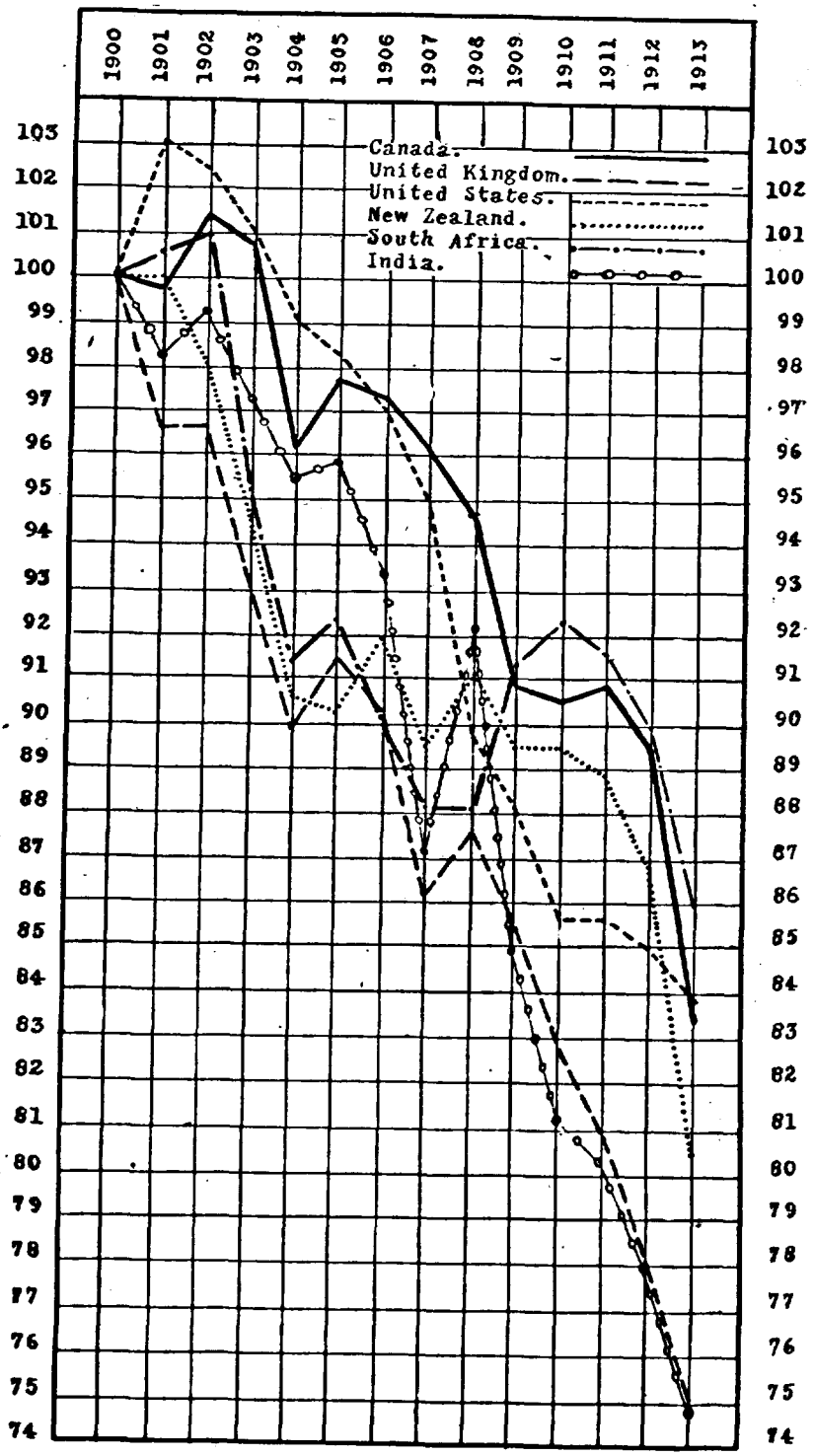
The gross export and import totals, however, cannot be used in a calculation of this kind, both including several items which in no way reflect borrowings. For example, export trade covers interest and dividend payments abroad, remittances of gratuities by alien residents, expenditures of Canadian travellers abroad, payments to foreign shipping companies, etc., while imports cover items like capital brought in by immigrants, expenditures of tourists, remittances from foreign countries, etc. The striking of the trade balance eliminating these and similar items in order to arrive at borrowings is accordingly a somewhat elaborate calculation, especially in view of the paucity of Canadian statistics on certain points. It has, however, been carried out with care in the investigation and the result is offered as a close approximation. That result shows that Canada has borrowed from foreign countries since 1900 something between $2,700 and $2,800 millions.

While this method is undoubtedly the most comprehensive for estimating the sum total of our borrowings abroad, specific records of capital movements are also valuable, both as confirming the amount and as illustrating sources. Four such records of Canadian borrowings are available. Mr. F. W. Field, Editor of the *Monetary Times*, has estimated the various public loans of the country abroad from 1905 to 1913 as $1,462 millions from Great Britain, $636 millions from the United States, and $178 millions from other countries. Mr. E. R. Wood, President of the Dominion Securities Corporation, in a comprehensive record of Canadian bond issues from year to year since 1907, shows that of a total of $1,508 millions borrowed on bonds, $1,142 millions were obtained in England and $116 millions in the United States. Sir Frederick Williams-Taylor, General Manager of the Bank of Montreal, has estimated that British loans to Canada increased between 1902 and 1914 by $1,700 millions. The estimate of Sir George Paish, already quoted, shows British loans to Canada of $1,500 millions between 1907 and 1913. These records in conjunction account for about $2,300 millions of Canadian public borrowings abroad since the opening years of the century. The balance between this and the total shown by the trade figures is made up by private loans, express money orders, and minor items.

Foreign borrowings, of course, do not represent the entire accretion to Canadian working capital. Domestic savings doubtless amounted to several

*Trade statistics must, of course, be interpreted in the light of common knowledge as to the nature of the capital movement they represent. In the case of Great Britain the excess of imports over exports represents payments of interest and dividends on sums invested abroad. As above stated, however, an excess of imports over exports in new countries like Argentina, Australia and Canada must be regarded as due to borrowings from the older countries. The normal condition of debtor nations is to have an excess of exports, representing interest payments on loans. During the process of borrowing, however, —while the capital sum is passing from the one country to the other—this is reversed. It does not follow, of course, that the excess imports must be *from the country from* which the capital is derived. This is a matter of international trade arrangements in general. Canada's recent borrowings from Great Britain, for example, as Dr. Bonar has pointed out, have entered the country in the form of goods bought in the United States. The latter country owes large sums to the United Kingdom annually in interest payments, and has been paying them of late by remittances of goods, on Great Britain's account, to Canada.

PRICES OF LEADING GOVERNMENT BONDS, ILLUSTRATING CONDITIONS IN THE MONEY MARKET, 1900 – 1913.
(Prices in 1900 = 100).



hundred millions, though it may be remarked that in many cases these savings represent the result of the capital import movement and are merely that capital in another form.* There have been, however, considerable additions to capital that are fundamentally domestic in origin. About $250 millions of bonds have been subscribed for in Canada, according to Mr. Wood's record, since 1908 alone. It would seem safe to say that Canada's working capital, what with foreign borrowings and domestic savings, has grown by $3,000 millions since 1900.

But the distribution even more than the extent of the new capital is important here. The records of loans just mentioned throw a valuable preliminary light on this point. All agree in showing that railway demands have been far and away the chief factor, those of government and municipalities standing second, industrial enterprises third, land and lumber companies next, and mining companies next. Of $1,700 millions borrowed in England which the records cover, $700 millions went into railways, $500 millions into government and municipal loans, and $300 millions into industrial and mining concerns. The $600 or $700 millions raised in the United States has gone largely into industrial enterprises. Little of the new capital, it will be seen, has been directly devoted to food-production.

The final word on the capital trend, however, is that of the census and similar statistical agencies. It will be interesting to review the various industries in order, noting the additions made to capital equipment in each since 1900. In an estimate of this kind it is incumbent to place the calculation on a "real" basis, that is, to discount changes that may be due merely to prices and values. The term "capital" is, of course, interpreted broadly as including everything of the essential nature of "equipment."

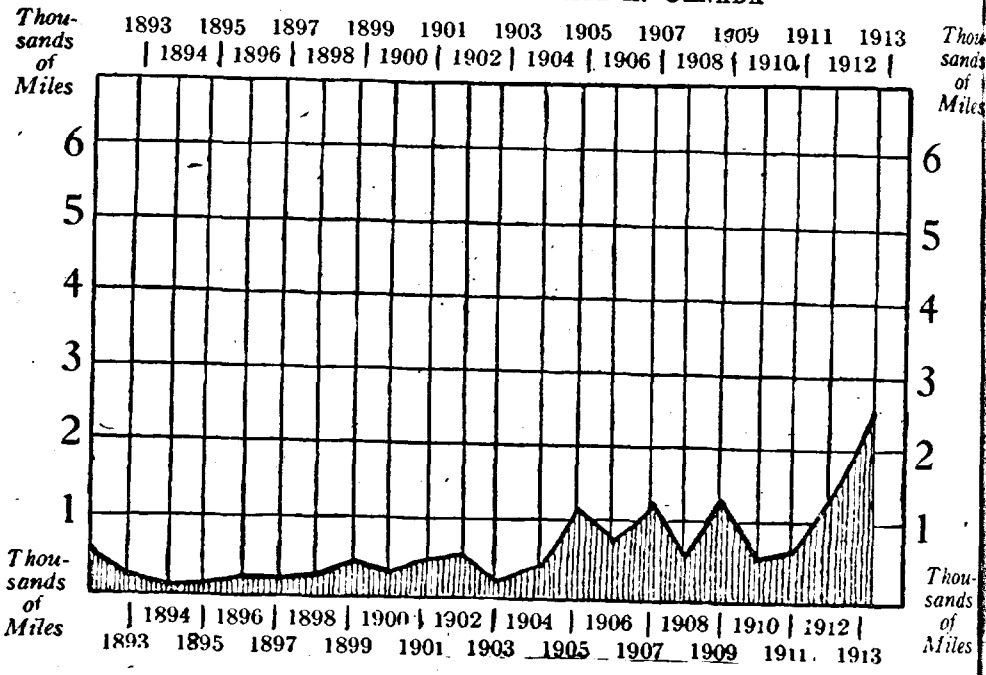
Agriculture.—The value of Canadian agricultural capital increased according to the Census 136.4 per cent between 1900 and 1910. Omitting land values the gain is only 118.6 per cent. On a quantitative basis, however, these estimates are markedly reduced. The acreage of improved lands has increased only 60.8 per cent, and the total number of live stock on farms only 55.7 per cent. Equipment like implements and elevator capacity has increased faster, namely 125 per cent and 450 per cent respectively, though farm buildings show only a 40 per cent increase. The "real" increase in agricultural capital may be set down at 63 per cent. The Western Provinces, of course, have been the scene of practically the entire advance. In Saskatchewan, Alberta and Manitoba, increases in improved acreage have been 957, 816 and 69 per cent respectively, Quebec standing next with only 9 per cent, Prince Edward Island with 5.9 per cent, and the other provinces stationary.

Fishing.—The number of boats decreased by 11 per cent and the tonnage of vessels by 6 per cent. The value of capital equipment increased 120 per cent, but it would be necessary to discount this considerably on a "real" basis, notwithstanding the improvement of the average boat and vessel.

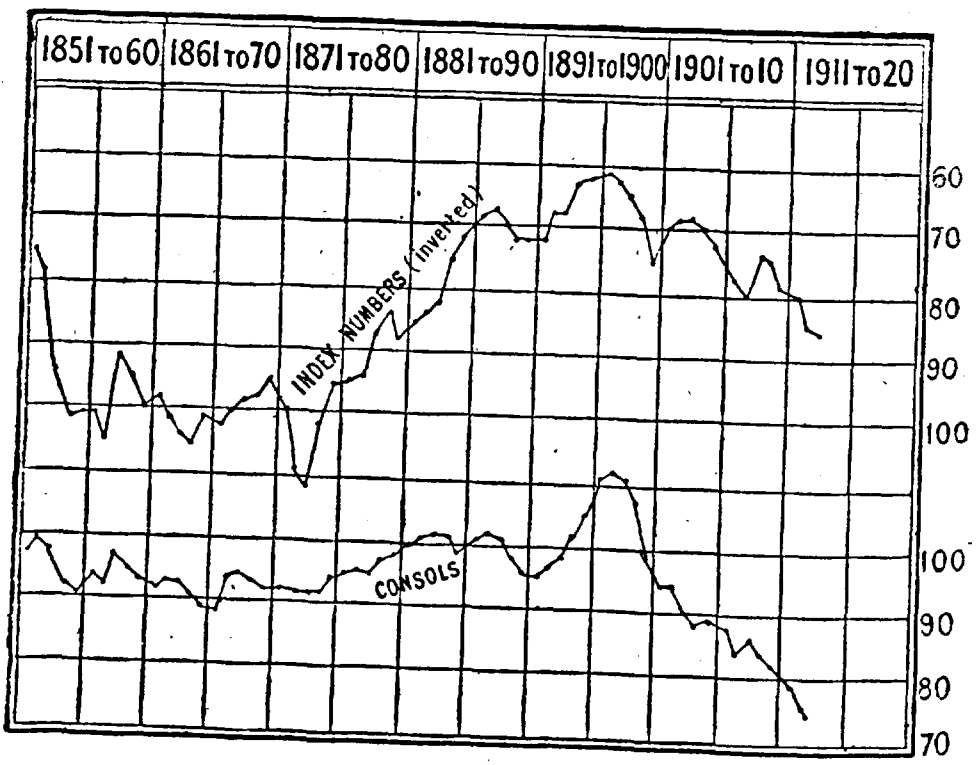
Mining.—The number of plants increased 61.8 per cent and the effective equipment of the industry by about 100 per cent.

*For example, the great rise in the national revenue derived from customs duties is, when the additional imports represent borrowings, merely a diversion of a part of those borrowings to the national treasury. When such revenue is expended on capital account it is therefore not an addition to, but only a part of, the capital coming in from abroad. Large profits have been made in recent years by financial institutions and others in handling Canada's foreign loans and the activities contingent thereon. The point to be remembered of such profits is that they are not based on increased productivity within the country and are therefore to a degree artificial, disappearing when the capital flow which created them ceases. The savings of a brakeman engaged in Canada because of the increased haulage of materials caused by the construction of the G. T. Pacific are merely a part of the loan floated in London by that corporation for the construction of its road. If, however, the additional brakeman was required because of increased traffic created by a growth in Canadian production, his savings are part of an addition to national capital created by the country itself.

THE NEW RAILWAY MILEAGE IN CANADA



THE RELATIONS OF PRICES OF COMMODITIES AND PRICES OF BONDS.



Manufacturing.—Passing to industries of "secondary" production, the gains at once begin to mount. The working capital of manufacturing establishments increased 107.5 per cent, and the value of lands, buildings and plants 212.7 per cent, the latter representing a gain of at least 150 per cent on a "real" basis. It is noteworthy that the chief advances in capitalization have been in industries engaged in the manufacture of building materials, iron and steel, various metal products, and transportation equipment; these have been increased by 200 per cent and upward. On the other hand textile industries have only increased 79.5 per cent and food producing industries by only 132.7 per cent, the latter dwindling from 12.8 per cent of the entire manufacturing capitalization of 1900 to 10.6 per cent in 1910. Ontario and Quebec have received 70 per cent of the new manufacturing capital.

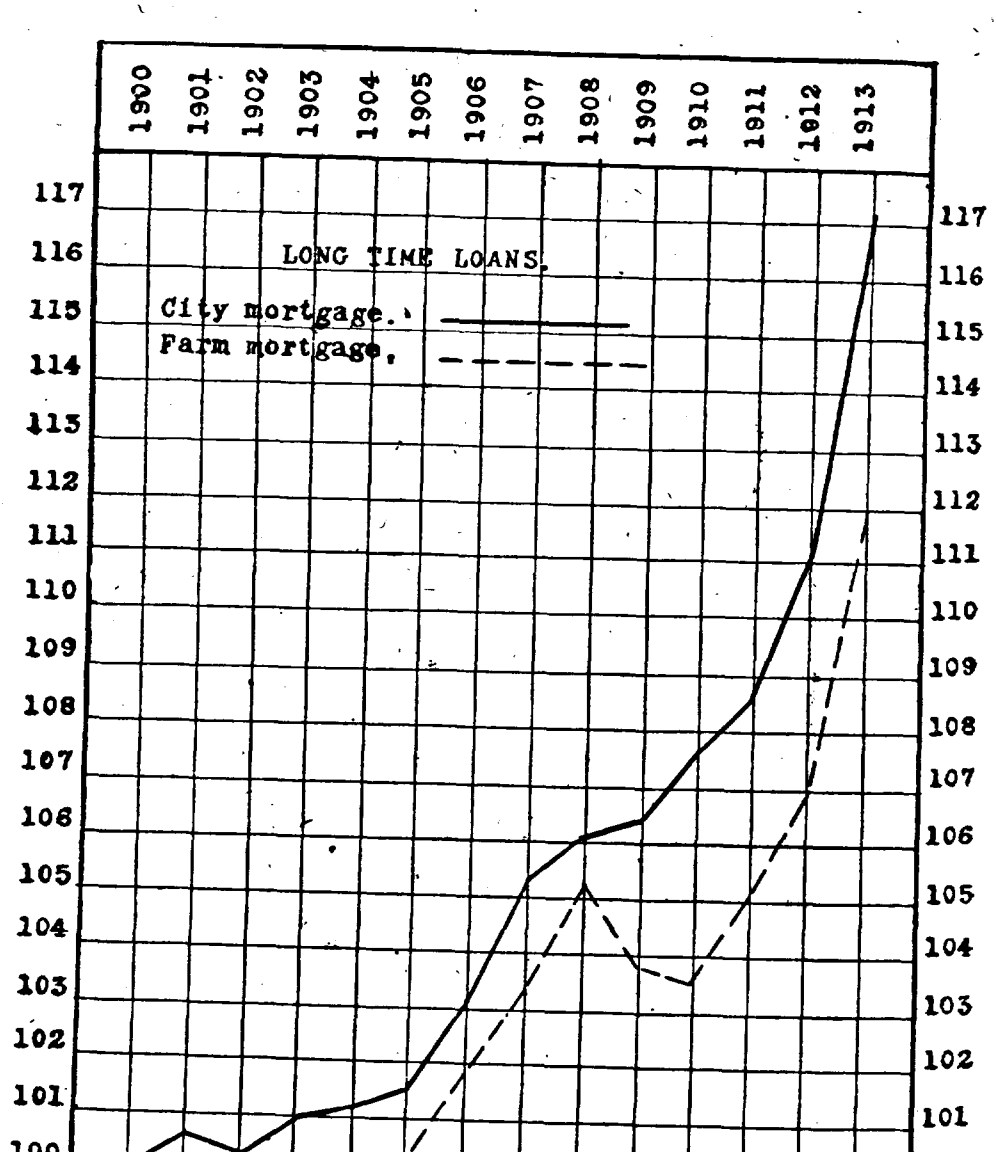
Railways.—The railway record is, of course, still higher. Capital liabilities show a gain of $750 millions or 95 per cent, but the total new expenditures amount to close upon a billion and a quarter. In no other direction have expenditures been on an equal scale. The additional mileage has been the most noteworthy item. The increase was over 11,000 miles, with at least 7,500 miles additional in process of completion. Meanwhile the number of locomotives has increased 121 per cent, the number of freight cars 171.5 per cent, the number of cabooses 173 per cent, and the number of passenger and baggage cars about 80 per cent—and these figures do not reflect the large increase that has taken place in the capacity of the individual locomotive and car.

Municipal Expansion.—The houses, streets, sidewalks, water and sewerage systems, etc., of towns and cities are, of course, a part of the nation's capital equipment. It is difficult to measure the growth that has taken place. As we have seen, municipal borrowings in the past five years alone have amounted to $330 millions. Real property assessments, which may be regarded as the security for such borrowings and as representing the values which the municipalities attach to themselves as "going concerns," have increased for 140 localities by five times since 1900,—namely, from $377 millions to $1,895 millions. This to a considerable degree represents increased price of property sites for manufacturing, trading, and residential purposes. Moreover, the average municipal tax rate has increased 21 per cent—this, in view of the usual stability of such rates, being a very strong indication of the increased scale of municipal expenditures on capital improvements and the general feeling of optimism begotten by civic growth.

The Department of Labour record of building permits from 1905 to 1913 shows an expenditure of nearly a billion on new buildings. This, of course, includes industrial plants already mentioned (say $250 millions) as well as the rise in values; on the other hand, it covers less than 100 localities, and shows that the amount of building in progress was over three times as great in 1913 as in 1904. The census shows that the number of dwellings in Canada increased 37.6 per cent between 1900 and 1910.

In such figures as the above may be seen a cause as well as an effect of the real estate boom which has absorbed so much capital and energy in Canada since the opening of the century. Having its beginning in the agricultural extensions of the West, it reached its chief intensity in the cities where the resulting industrialization was most immediate and rapid. The Eastern as well as the Western cities came under the influence. In the cities themselves the chief increase in values took place in the central business sections and in the outlying suburban sections, the former representing increased effectiveness for business purposes, and the latter a similar increase for residential purposes. The investigation into rents throws light on this aspect. Rents of stores in first class business sections of the larger cities have trebled since 1900 and those of stores in

THE RATE OF INTEREST IN CANADA, 1900-1913.



second class business sections have gone up only slightly less. Down town office rents have doubled, whilst house rents are up about 60 or 70 per cent. Even with these increases it is a common complaint that the return on valuations is less than in 1900.*

It is interesting to note in the record of capital-exports from the British Isles, that of the totals loaned to the different countries about the same proportion, namely, one-third, went into railways throughout the list, and that the same similarity of apportionment obtains in the case of Government loans. In the case of municipal borrowings, however, the proportion diverted in Canada is very much higher than in any other country.

Government Expenditures.—Government expenditures on capital account (post offices, canals, public works in general) are to a certain extent covered in the above. Their exact amount is difficult to ascertain, but they run into the hundreds of millions.

Summary.—Summarizing the above, it would appear that during the decade 1900-1910, (the period for which the estimates can be reassembled on the same basis) the capital equipment of the primary industries of agriculture, fishing and mining increased by $465 millions, whereas on construction and "secondary" industries (railways, canals, manufactures, municipalities, public works) an expenditure of at least $1,800 millions was made. In other words the proportion between the two has been as 4 to 1. If the four years 1911 to 1913 were added, with their intensification of the tendency, the proportion would probably be 5 or 6 to 1.

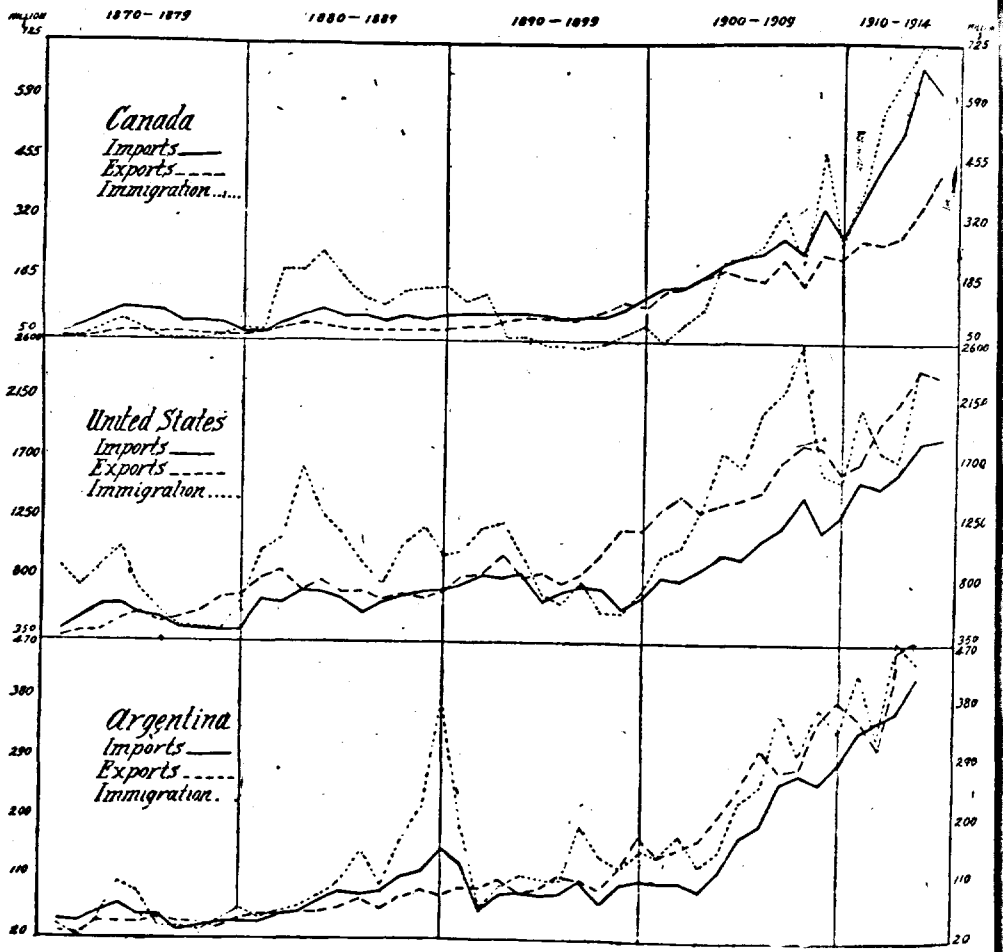
It has been already said that no other country has absorbed outside capital so rapidly as Canada since 1900. This is borne out by an examination of the trade balances of various countries. On a per capita basis the Canadian excess of imports over exports has become the highest in the world, namely, $42. In 1902 it was only 10 cents, being the lowest of any country having an unfavourable balance at all. The change from the one condition to the other is a measure of the impulse to secure capital abroad for exploiting our natural resources. For a parallel we must turn to the experiences of the United States in the 1880's and of Argentina in the early 1890's, (see diagram over the page) but even these well known instances do not exhibit the same relative intensity of capitalization. In other words, there has been no such instance in modern history of the "speeding up" of industrial expansion.

The keenness of the world-demand for capital is well illustrated by the yields of government bonds. The average yield at current prices of the leading bonds of fifteen nations rose from 3.89 per cent to 4.23 between 1900 and 1913. The Canadian rate on farm mortgages went up by one-eighth and that on city mortgages by one-fifth, chiefly since 1905. In other words, the "price of money" in Canada has gone up 12-20 per cent since 1900 in the case of long-time loans. Call loans were up 15 per cent in 1913, and general banking accommodation, say, 10 per cent.§

*The investigation into rents covered all localities of 10,000 population or over. Returns were obtained from three real estate agents in each locality of typical stores and offices in the business section and of a six roomed workingman's dwelling with sanitary conveniences. An independent inquiry by correspondents of the *Labour Gazette* into workingmen's rents was also made. Housing conditions in each city are covered in some detail, and notes added on the trend of rents in Great Britain, the United States, France, Germany, Belgium, Australia, New Zealand, South Africa and Argentina.

§The investigation into interest rates covered loans on city mortgages in every locality of 10,000 or over and loans on farm mortgages by 45 companies doing business in every section of Canada. The Government bonds included are Consols, French Rentes, German 3 per cent, Austrian 4 per cent, Hungarian 4 per cent, United States 4 per cent (1925), Russian 4 per cent, Japan 4 per cent, Chinese 4½ per cent, Indian 3 per cent, South African 3 per cent, New Zealand 3 per cent, Argentine 5 per cent, Brazilian 4 per cent, and Canadian 3 per cent.

(FOREIGN TRADE AND IMMIGRATION, CANADA, THE UNITED STATES AND ARGENTINA, 1870-1914).



Note on Immigration line:

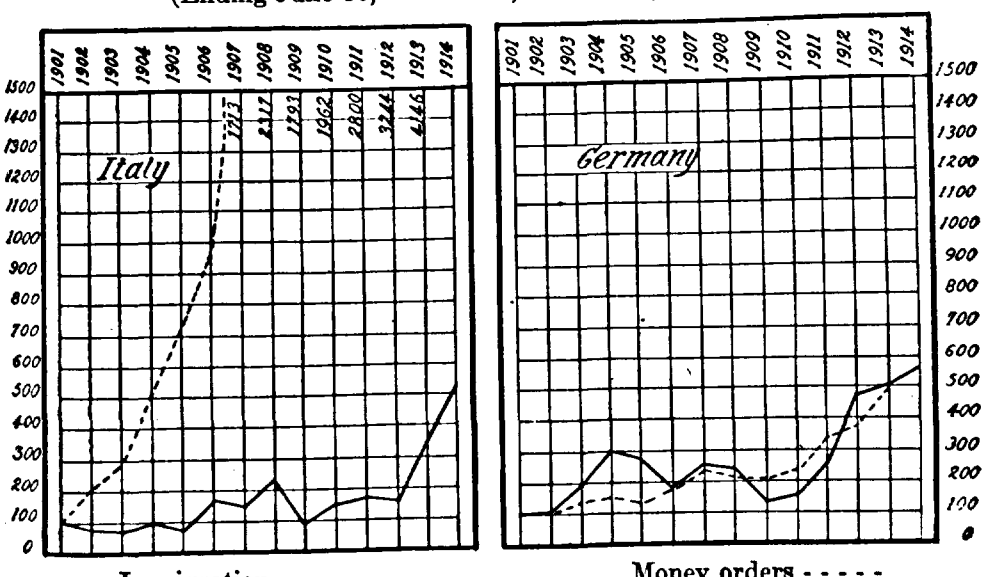
Canada: Spread is from 25,000 to 400,000. 1900 is for 6 months only.
United States: Spread is from 100,000 to 1,300,000.
Argentina: Spread is from 20,000 to 320,000.

(2) Labour Force, its Growth and Distribution, 1900-1914.

The second active agent of production, namely, labour, has taken the same direction as the first, and the figures add some interesting light. The most notable fact is perhaps that the permanent labour force of Canada (that is, the population) increased 35 per cent between 1900 and 1910, (45 per cent to 1913). No other country in the world has shown so rapid a growth. Of 18 leading countries for which figures are given, New Zealand comes nearest with a gain of 30 per cent (1900-1910); the United States increased 21 per cent, Russia about the same or perhaps a little more, Australia 18 per cent, Germany 15 per cent, Japan 13 per cent, Argentina 10 per cent, and the United Kingdom 9 per cent. This, however, is not the whole of the Canadian situation. The census figure above cited includes less than 900,000 increase in "foreign born." But in the same decade, 1900-1910, the number of immigrant arrivals was over 1,700,000. Some of these may have passed on at once to the United States or elsewhere, but the great majority probably remained some time in Canada. One indication of this is the exceedingly rapid growth in the volume of money orders sent from Canada to countries like Austria-Hungary, Italy, Norway and Sweden, whence a correspondingly heavy immigration was derived. Money orders sent abroad are largely made up of two items,—payments in small trade transactions, and remittances to relatives or dependants. Our lesser transactions with Great Britain and the United States are in the aggregate considerable; but money orders sent to the countries above mentioned doubtless represent in large part remittances from recent immigrant arrivals to friends at home, made out of wages, and presupposing a term of residence in the country. The conclusion is safe that Canada in addition to the accretion of permanent labour force recorded by the census, received considerable bodies of "floating"

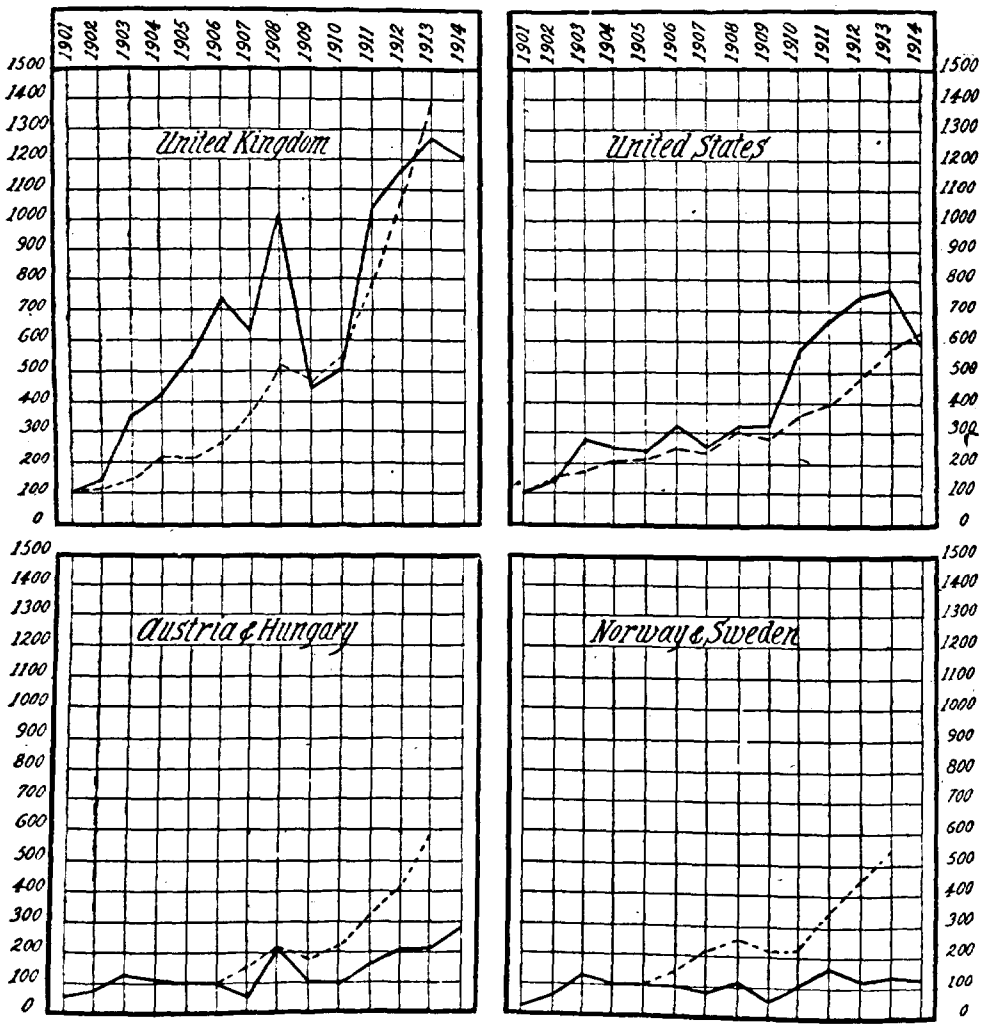
CHART SHOWING IMMIGRATION INTO CANADA AND MONEY ORDERS FROM CANADA ACCORDING TO COUNTRIES FOR FISCAL YEARS.

(Ending June 30, 1900–1906; March 31, 1907–1914).



Immigration——— Money orders - - - - -

CHARTS SHOWING IMMIGRATION INTO CANADA AND MONEY ORDERS FROM CANADA ACCORDING TO COUNTRIES FOR FISCAL YEARS.



Immigration———

Money orders - - - - -

labour, and that the final figure of expansion for the 14 year period may be set down at well over 50 per cent.

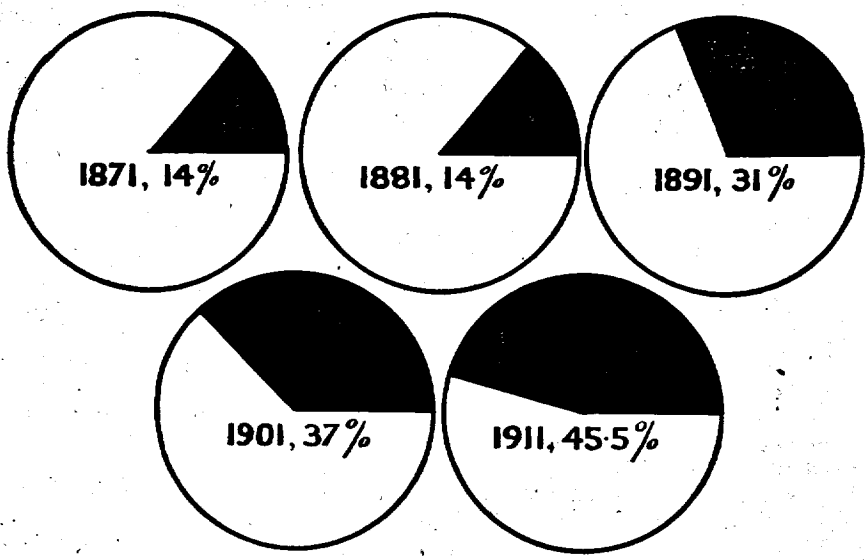
From a cost of living standpoint, the obvious meaning is a corresponding increase in the demand on the food supply. This, of course, would be met if food production had received a similar impetus. An examination of occupational tendencies, however, since 1900, shows that in so far as labour is concerned the flow has not been in the direction suggested, but rather the opposite. The hundreds of thousands of "temporary" labourers may be almost wholly accredited to the large railway and construction operations. More important is the trend in the ranks of the "permanent" labour force. The food producing industries have, of course, absorbed large numbers; their relative importance, however, as employers of labour, has been declining. In 1901 those engaged in agriculture constituted 39.8 per cent of the total working population; in 1911, they had diminished to 34.3 per cent. In fishing there was a decline from 1.5 to 1.3 per cent of the whole, and within the industry itself there was a movement away from the primary occupation of catching the fish to the secondary occupations of packing and canning. In mining, on the other hand, there was a rise from 2.1 to 2.4 per cent. But it is in transportation lines that the tendency is seen at its highest, the percentage having risen from 4.8 to 9.0. Forestry and lumbering have risen from 2.2 to 4.5 per cent. The trade and merchandising classes have likewise increased in relative importance. In the manufacturing industry, significantly enough, employees on mechanical products and textiles have risen from 6.2 to 7.2 per cent of the whole, but the sections devoted to the manufacture of food and clothing have fallen from 7.4 to 6.9 per cent. For the building trades statistics are not available, but they doubtless absorbed an increased proportion of the working population. Domestic service has declined from 9.3 to 7.9 per cent, a reflection perhaps of the attraction of female labour into industrial occupations. The United States has had the same experience; those in agricultural pursuits have diminished from 35.7 per cent of the whole in 1900 to 32.9 per cent in 1910, while trade and transportation occupations increased from 16.4 to 19.9 per cent and manufacturing from 24.4 to 28.3 per cent.

Figures quite as significant, though less specific, are those of urban and rural increase. The outstanding fact is, of course, that in Canada, an agricultural country, the former has greatly surpassed the latter. Urban growth in fact has considerably more than doubled rural, the city population rising from 38 per cent to 45 per cent of the whole during 1900-1910. This is indeed an extraordinary development in an era primarily devoted to opening a great new territory for agriculture, when it might be thought the building up of towns would follow rather than take the lead. Yet in Saskatchewan and Alberta alone of the provinces has the rural increase been greater than the urban, and even in that centre of agricultural expansion the relative importance of the rural population has dwindled. In the East, of course, where the larger cities are situated and the attraction into industrialism is at its maximum, the rural decline is much more pronounced. The urban growth in point of fact has been pre-eminently a growth of the larger centres. In 1900 Canada had 21 cities of over 10,000 inhabitants aggregating 996,806 in population; in 1910 there were 44 places of 10,000 or more whose total population was over two millions. Twelve per cent of the population in 1900 was contained in cities of over 50,000, whereas in 1910 the percentage had increased to 18. In brief, a full half of the entire urban increase in Canada may be accredited to the ten largest cities. Though the same cityward tendency is seen in other countries, Canada again stands out pre-eminent. Whereas during the last ten years the rise in urban percentage in England and in Norway was one point, in France 2, in Denmark 4, in New Zealand 5, and in Germany and in the United States 6, in Canada the rise as already noted has been 8 points. The explanation is partly psychological in the better

schools, amusements and general satisfactions of the gregarious instinct, but is largely economic, as the analysis under the heading of capital has shown,—a reflection of the great impetus given to construction, manufacturing and distributing activities by the promise of the new West.

The population and immigration figures yield one further analysis which is important in the present connection. They show, of course, that the rate of growth has been greatest in the West. The population of Saskatchewan and Alberta increased over 400 per cent in the decade 1900-1910, British Columbia 119 per cent, and Manitoba 78 per cent. No other province approached these gains, though all except Prince Edward Island have grown. Even considered absolutely the gain west of the Great Lakes has been more than half again as large as in the East. But it is in the source of the western increase that the interest here lies. It is ordinarily attributed to immigration. Yet though the West has received a larger number of immigrants than the East the excess is not striking, namely, 55 per cent of all arrivals to the East's 45 per cent. Ontario and Quebec received practically the same number of immigrants as the Prairie Provinces, and it is to the increase of British Columbia over the Maritime Provinces that the western preponderance is due. Eastern industrialism in other words has absorbed immigration in almost equal measure with Western agriculture. The further element in the situation is the extent to which the West has drawn upon the East itself. From the census it would appear that fully 350,000 Canadians have moved from the East to the West, constituting nearly a quarter of the population gain of the West since 1900. The point to be noted is the disturbance to settled industry, and especially to agriculture, involved in a movement of these proportions within the country. Not only are occupations wholly abandoned in such a process, but even where no change appears on the surface a modification amounting to a change often results. The farmer moving from an Ontario to a Western farm remains a farmer, but he

(THE GROWTH OF URBAN POPULATION, CANADA, 1871-1911.)



represents nevertheless a drift from mixed farming to grain production, and a movement accordingly into a sphere in which a highly organized world-demand rather than the feeding of the local population is the dominant factor.

(3) Production, 1900-1914.

The results of the capital and labour movement just described are seen in the statistics of production—using the term broadly to include economic activities in general. It will be interesting to measure progress as above by industries, using as in the capital section quantities rather than values where possible, so as to discount changes which merely reflect the rise in prices:

Agriculture.—The rise in agricultural production between 1900 and 1910 works out at 36.8 per cent. Except for a gain in Eastern dairy production due to improved methods, the rise has been almost wholly in the new areas of the West. The great rise in cereal production is Western. Cereal production in the East, which was 208 million bushels in 1901, was 201 million bushels in 1911, and Eastern root crops which yielded 126 million bushels in the former year, yielded only 121 million bushels in the latter. Eastern fodder crops, however, have more than doubled. Live stock figures are practically stationary in the East, comparing 1913 with 1900; in the West there was a considerable gain in the opening year of the century, but since 1910 conditions have been stationary in cattle with gains in swine and sheep.*

Fishing.—The value of the annual fishing catch has risen from $21 millions in 1900 to $33 millions in 1913, or about 55 per cent, but as prices are up fully 50 per cent, the increase on a quantity basis has been but small. The chief expansion has been in British Columbia, which in 1900 contributed 22 per cent of the total value but in 1913 contributed 43 per cent.

Hunting and trapping.—A gain of 35 per cent is estimated.

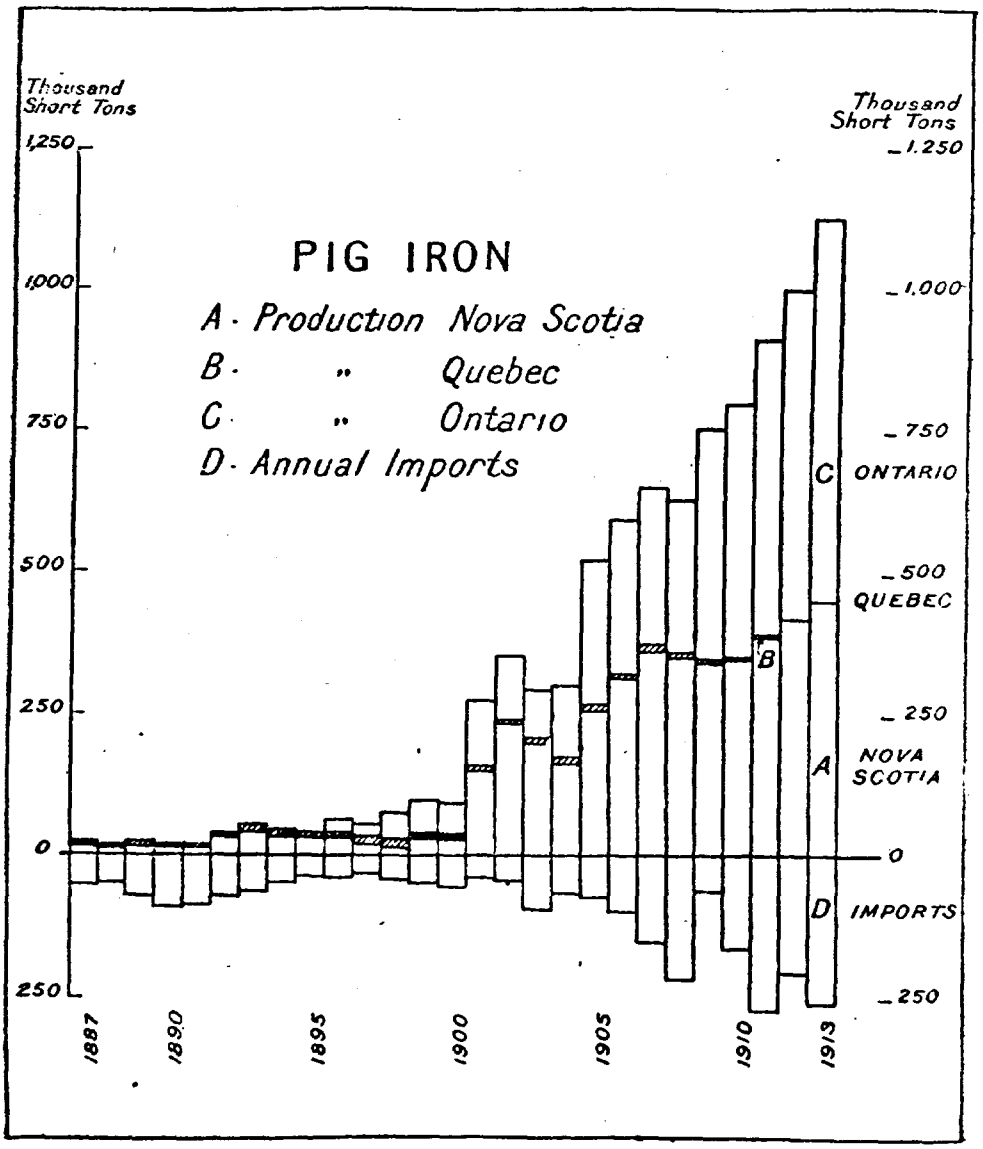
Lumbering.—Forestry products (log products as distinguished from manufactured lumber) show a gain of 54 per cent.

Mining.—Mineral production shows a gain of 64 per cent; here allowance is made for a drop in prices. Especially significant is the enormous gain in the production of pig iron, the barometer of "prosperity." About 20 per cent of the gain is accounted for by the discoveries at Cobalt.

Manufacturing.—It is difficult (on account of the number of manufactured articles) to eliminate the influence of changing prices, but it may be noticed that of 15 groups into which the census figures are divided, the group showing the second smallest rate of increase is food products, while the third smallest is shown in textiles (leather being the most stationary). Building materials, metal products, and vehicles and vessels for transportation purposes show gains of 200 per cent and up. Taking the various articles in which production in 1900 amounted to more than one million dollars and dividing them into (1) foods and household articles, and (2) miscellaneous materials, the increase in the production of the latter was 126.5 per cent as compared with 87.9 per cent in the former.

Transportation.—Railway and canal traffic may be regarded as the "product" of the capital and labour investments above recorded. It may be pointed out that the number of passengers carried by railways has increased 115 per cent, freight tonnage hauled 197.6 per cent, and gross earnings 262.9 per cent. Electric railways have increased their passenger traffic four times, their freight

*In general terms, animal husbandry grew rapidly in production until 1905-6, after which period exports fell off. The census annual estimates were begun in 1908; they shew a steady decrease from year to year in cattle and sheep.


Thousand Short Tons
1,250
1,000
750
500
250
0
250
PIG IRON
A · Production Nova Scotia
B · " Quebec
C · " Ontario
D · Annual Imports
Thousand Short Tons
1,250
1,000
750
500
250
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250
C
ONTARIO
QUEBEC
B
A
NOVA SCOTIA
D
IMPORTS
1887
1890
1895
1900
1905
1910
1913

tonnage six times, and their gross earnings four times. Similarly, canal, coasting, and lake traffic show very large gains: the tonnage of freight passing through our canals has increased over 900 per cent. The items of the recent freight tonnage are significant. Wheat tonnage has greatly increased with the new Western areas. Flour has followed, but livestock has stood still. The other great gains are in the materials of expansion—bituminous coal (60 per cent), bar and sheet metals (1,384 per cent), pig iron (312 per cent), stone and sand 215 per cent), rails (581 per cent), castings and machinery (544 per cent), cement (112 per cent), oils (196 per cent), and general merchandise (89 per cent).

The above figures do not cover all the activities of the people. They show, however, that primary production, as might have been expected, has advanced at a much less rapid rate than has secondary production. Taking the total values of farm production, minerals, logs, fish, skins and furs in 1901 and 1911, respectively, and re-estimating the latter at 1901 prices, a gain of about 40 per cent is shown. Against this, as already seen, we must place a doubling of manufacturing output, a trebling of transportation activities, and a quadrupling of the scale of building operations. If to these are added certain figures reflecting the scale of general business,—such as foreign trade, sales on the stock exchange, postal and telegraph statistics, insurance risks, etc.,— and a rough average of the whole struck, the gain is shown as at the very least 200 per cent.

The cause for this, to repeat, is very largely economic, and the production figures in conjunction with those of capital furnish an interesting demonstration to this effect. If we take the total capital accorded to each industry by the census and the total value of the product similarly recorded in the census years respectively, the following facts appear: In agriculture in 1910 the value of the product was 15.7 per cent of the capital; in 1900 it was 20.4 per cent. In fishing, the value of the catch in 1910 was 37 per cent of the total capital employed, whereas in 1900 it was 96 per cent; the average return for the past five years was 58.9 per cent compared with 92.0 for the five preceding. In mining, there has been a similar decline. In manufacturing, however, the return has been about stationary; while in transportation the tendency on the whole would appear to be upward, *i.e.*, the volume of traffic has increased at a faster rate than the amount of equipment. In other words, the primary productive processes during recent years have not "paid" as well as the "secondary" occupations and those disassociated from food production. These tendencies, though accentuated in Canada, have been fairly general wherever industrialization has been the keynote of the times, as may be gathered from the section of the investigation devoted to world production whose figures have been already briefly cited.

(4) Distribution.

With the subject of distribution we enter the region where developments like those just outlined make themselves chiefly felt. When supply from an accustomed source fails to keep pace with demand the new costs are largely those incidental to employing new distribution agencies. We have already seen why a shifting of the source of supply involves a much greater disturbance to distribution and consequently a greater enhancement of price in the case of foods than in the case of materials. It remains to examine whether a change of this nature has actually taken place. Is it or is it not the case that Canada has been going further afield for her supplies—and more particularly for her food supplies? In a general way it is known that problems of food distribution have been acute in Canada, such phenomena as the decay of municipal markets, the multiplying of middlemen, the operations of alleged

combines, the tariff as affecting the channels in which trade flows, having been widely blamed for the rise in the cost of living; practically every complaint to reach the Government, in fact, has had its root in one phase or other of distribution. Can any broad light be obtained on the trend which has brought these phenomena into prominence?

The first avenue of information to suggest itself is the external trade statistics. Our trade commodities may be separated into foods and materials and the trend in each ascertained under three headings: (1) the United Kingdom, (2) the United States, and (3) all other countries combined. The export figures have been analyzed in this way since Confederation, and the imports since 1905. The United Kingdom and the United States, of course, account for the bulk of our external trade and the agencies through which it is conducted are naturally the most convenient and the cheapest. The countries of the third group are more distant and are less efficiently served. Obviously any shifting of the volume of trade from the first and second groups to the third group, means, other things being equal, an increase in distribution costs.

It is precisely a shifting of this kind that the figures reveal. Not only has there been a great rise in imports, but there has been a decided set in the direction of distant sources. Imports of agricultural and animal products from the United Kingdom and the United States have increased 103 per cent, but similar imports from other countries have increased 283 per cent. Whereas in 1905, 15 per cent of all Canadian food imports came from the United Kingdom and 66 per cent from the United States, these percentages had declined by 1913 to 9 and 63.8 respectively, while food imports from other countries rose from 18.7 per cent of the whole to 27.2 per cent. It is also significant from the prices standpoint that the process of reaching out to distant sources has been less marked in the case of materials than in foods; the rise in imports of materials from "other countries" has been from 14.2 per cent of the whole to 20.2 per cent. Another analysis of food imports (bread stuffs, fruits, vegetables, provisions, etc.) shows that whereas in 1900 their per capita value was $5.28, in 1913 this had risen to $10.04. It is noticeable also that seagoing tonnage inward in British and Canadian vessels has declined from 61.9 per cent to 50.5 per cent of the whole, while similar tonnage in foreign vessels has increased from 38.3 per cent to 49.5 per cent.

It is interesting to observe that, in the early stages of the Canadian rise, materials went up the faster, but that later foods took the lead; continued expansion in spite of its tremendous demand for materials in the end worked out its chief effect on prices through the medium of interrupted food production. The United States and Germany have had the same experience; not so, however, in the case of Great Britain, (see diagrams pp. 1037-8-9).

The above will help to explain why it is that the chief rises of the past ten years have been in the prices of Canadian home-grown food products. The reason is that in these products the failure of supply to keep up with demand has necessitated the maximum degree of change from nearby to distant sources, such change involving in the case of foods the maximum addition to distribution costs. Materials, which always tend to flow in world-wide channels, have shown no such rise, notwithstanding the unprecedented demand. Similarly exotic foods, which have always come from a distance, have experienced few additions to distribution costs; they are up 10 per cent in 1913 where Canadian foods are up 45 per cent. Bananas and oranges are marketed in Canada by much the same machinery as ten years ago; but the appearance of New Zealand butter, Chinese eggs and Irish potatoes on Ontario markets indicate a revolution in the methods by which Canadian households are supplied.

The same explanation can be invoked to account for the stability of British food prices as compared with Canadian. Great Britain, as is well known, has

for many years obtained her principal food supplies from distant sources. Food prices have accordingly been unaffected there by any such shift as has taken place here. They are accordingly, like the prices of exotic foods in Canada, only slightly up, materials contributing most to the British rise, (see again page 1038).

This, then, is the great factor at work in the section of the field now in review—the addition of distribution costs following an enlargement of the areas within which demand and supply are equalized. Up to the present we have considered the latter as due primarily to relative decrease in Canadian production. This, however, is not a complete view of the situation. It has already been pointed out that the underlying factor in the expansion was the drawing of Canada into the world-wide market scheme as a producer of cereals and other raw materials. Inasmuch as Canada has been an exporter of cereals for many years the increased demand in this respect has not created essentially new conditions, though it permits the point again to be emphasized that the main productive effort of the country in a new direction during the past few years has been on products destined for foreign consumption. In other lines, however, there is evidence that the general trend of trade to an international basis has affected Canadian conditions.* The improvement of transportation facilities with Great Britain and other parts of the Empire, for example, represent increasing drains upon Canadian supplies. The new trade agreements in recent years with such countries as France, Germany, Belgium, Holland, the West Indies and Japan are further evidence of Canada's entrance into world trade. How powerful is such an influence may be seen by the transformation it has wrought in a typically Canadian industry like apple growing. The Canadian orchard of a quarter-century ago included a large number of varieties as desired by the Canadian consumer; the modern orchard is devoted almost entirely to winter apples for the British market. In cheese similarly there is evidence that the machinery of the export trade has been developed to the neglect of local distribution. The internationalizing of trade is essentially a process of specialization. It, of course, makes Californian oranges cheaper in Canada in the same way that it makes Canadian apples cheaper in England. In brief, it tends to bring local prices everywhere to the level of world prices, less freights to the recognized world market.

Very much the same in its effect has been the opening of the West as a market for Eastern food supplies. That the West has been entirely devoted to cereal production has implied that thus far its other food products have had to be supplied by the Eastern provinces—at a time when, as we have seen, increased demands within the latter had been created by the growth of city population. During several months of 1912, a carload of butter left Montreal for the West daily. The tariff reductions in the United States have more recently opened still another channel for the egress of Canadian products, the effects of which have yet to be seen.

Thus the recent rise which Canadian prices have shown over those of the United Kingdom, France, and similar countries, and which was located primarily in food prices, appears to have been caused in large part by new distribution costs resulting from an increase in the areas from which supplies must be obtained, this in turn being due to the disturbance of local production resulting from the attraction of capital and labour on a large scale into con-

*"There is one broad feature of the past thirty years," says Mr. R. H. Hooker (Journal of Royal Statistical Society, June, 1909, p. 804), of which it is not too much to say that its bearing upon almost all questions of supply and prices is fundamental. . . . With nearly all kinds of produce, prices are nowadays determined by the supply and demand, not of a particular country, but of the whole world. Means of communication and transport have developed so enormously of late years as to produce a complete revolution in the conditions governing prices, and trade is no longer regulated by internal concerns, but by the sum total of the varying influences in all countries of the globe."

struction and industrialism—added to which is the effect of the trend towards an international trade basis which by opening up new markets to Canadian produce has still further reduced the supplies available for home consumption.

(5) Consumption and the Standard of Living.

The final criterion of economic change is in the lives of the people. Has the standard of living risen or fallen since 1900? The common impression is that it has risen, so greatly as to make it a primary factor in the advance of prices. That the true key of economic progress is the development of new activities, rather than of new wants, as Alfred Marshall states, and that, in the words of the same authority, "it is necessary to bear in mind the distinction between a rise in the standard of life, which implies an increase in general efficiency, and a rise in the standard of comfort which may suggest a mere increase of artificial wants among which the grosser wants predominate even though it does to some extent imply a rise in the standard of life," makes the subject of first importance. It suggests also its complexity and the need for breadth of treatment.

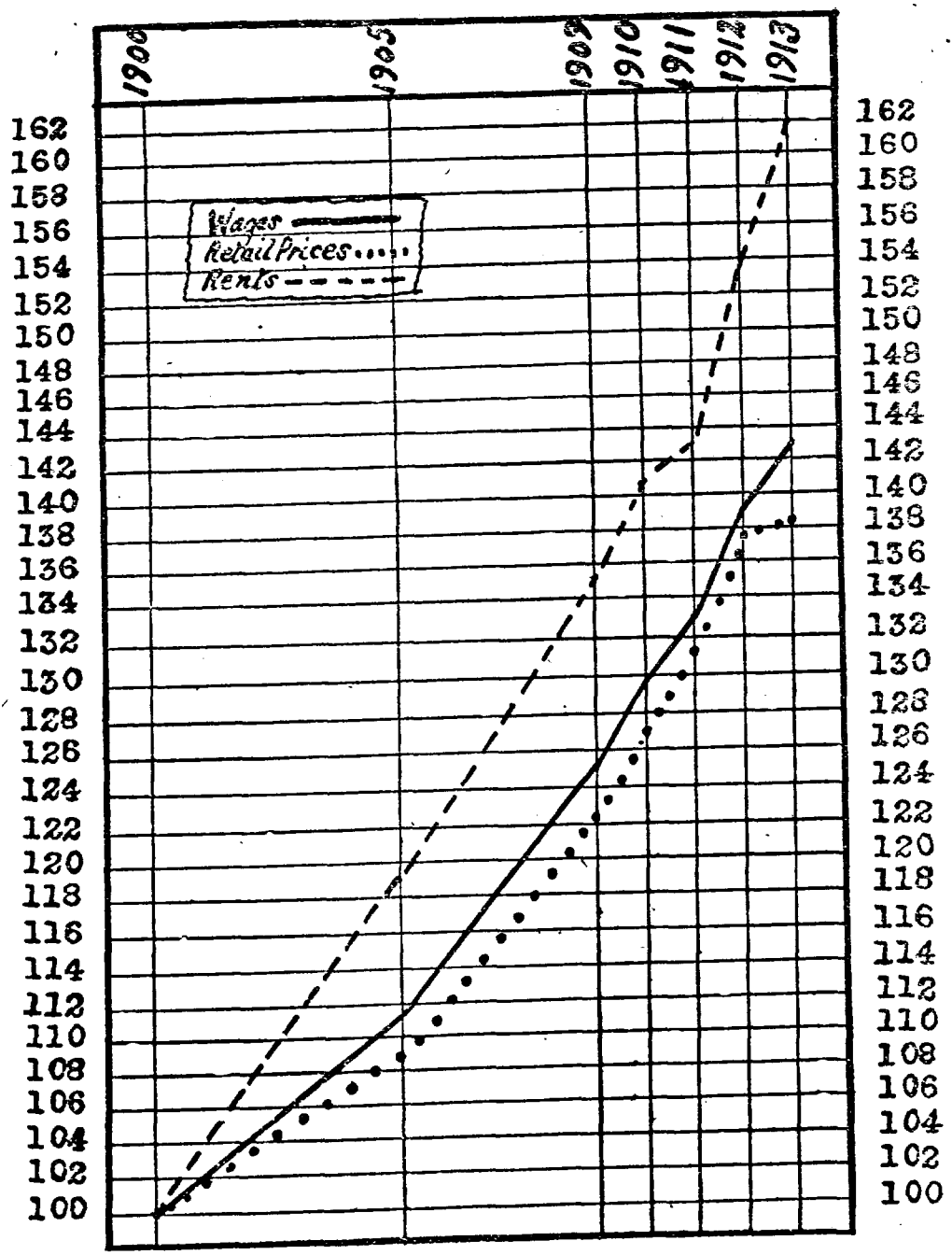
First as to necessaries: the per capita consumption of the common foods has materially increased,—wheat and flour, perhaps one-half; dairy products, 30 per cent; beef, 10 per cent; pork, 20 per cent; eggs, 26 per cent; tea, 12 per cent; coffee, 100 per cent; sugar, rice, prunes and raisins, over 40 per cent each; bananas, three times; cocoa, four times; etc. Increases of this nature might be classified as conducive to efficiency, though there is room for waste or extravagance here as elsewhere. Such features as the increased use of package goods, the preference for the choicer cuts of meat, better delivery service, ordering by telephone, changing styles in clothes, etc., are, of course, frequently cited as evidence of the latter.

The chief charge of undue expenditures, however, is usually in connection with luxuries, the consumption of which has increased even more rapidly than the above. The use of malt and spirituous liquors has increased about 60 per cent since 1900, that of tobacco, 66 per cent. The increases in the imports of silk, jewelry, perfumery, precious stones, etc., run into the hundreds per cent. The fact that in 1912 Canada spent over ten million dollars on motor cars for recreation purposes is particularly in point.

Side by side with these tendencies, however, are others of a different complexion. It has already been remarked how the increasing attraction of the foreign market has operated on articles like cheese and apples; the consumption of both these staples has declined; illustrating the influence of trade conditions as well as psychology on consumption standards. The increased consumption of oranges, in fact, often mentioned as luxurious, may in part be attributed to the rise in apple prices. A decline in per capita consumption of mutton has followed the neglect of sheep raising. But an even more contradictory feature is that expenditures on the "higher life" have increased quite as rapidly as expenditures on luxuries. On education a per capita increase has taken place in every province; in Ontario and Quebec it is more than 100 per cent. cent. Contributions to churches have markedly increased, those of the Presbyterian Church for all purposes from $11.93 per communicant in 1900 to $17.91 in 1913, and those of the Methodist Church for missions and certain other services from $2.02 in 1900 to $4.24 in 1914. Life insurance premiums are an excellent barometer of thrift—the exact opposite of "extravagance": the per capita expenditure in this connection has grown from $2.81 in 1900 to $4.87 in 1913.

Moreover, the period has not been without signs of deterioration as well as of advance in standards. From the housing statistics of the census a down-

WAGES, RETAIL PRICES AND RENTS, CANADA, 1900-1913.



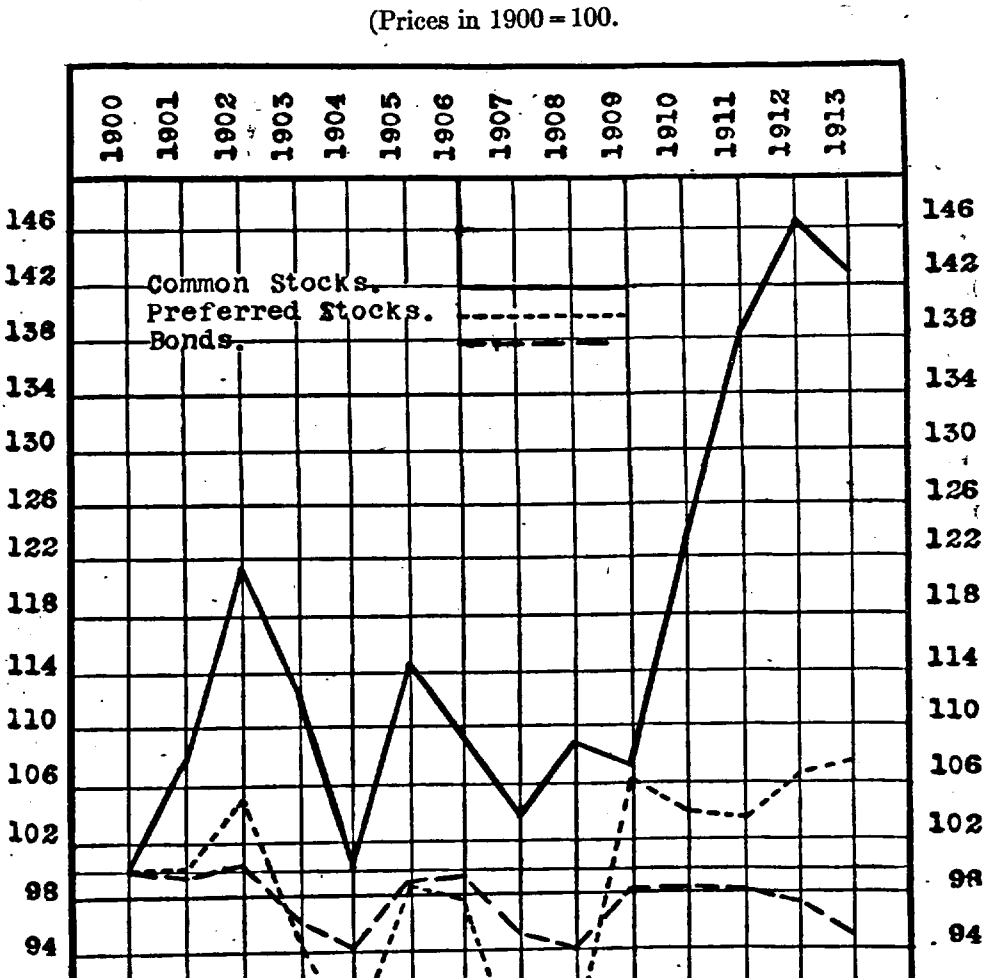
ward as well as an upward tendency may be deduced. The typical Canadian condition, that of one family to a house, fell from 94 per cent of the whole to 92 per cent during the decade 1900-1910. This is perhaps too slight a change to be emphasized, otherwise than as a straw to point the wind; entirely unfavourable, however, is the fact that the number of families living in a single room increased 74 per cent, or from 4.3 per cent of the whole in 1900 to 5.7 per cent in 1910. While the better paid classes have perhaps improved their housing standards, (the number of families living in eleven rooms or over went up by 60 per cent, or from 7 to 8.3 per cent of the whole) and while in so far as construction materials are concerned the tendency is toward a more permanent type of dwelling, the unskilled and immigrant classes in the larger cities are crowded together to a degree that is new in the history of the country. This is in some measure due to the influx of industrial workers with lower standards of living, the presence of which probably reflects the emancipation of the native Canadian worker from the more disagreeable forms of labour. But an examination of the course of "real" wages (*i.e.*, the ratio of earnings to the cost of subsistence) over a wider range (necessarily inconclusive owing to lack of statistics) leaves it open to question whether in spite of the great rise in money wages the standard for workers as a whole is appreciably higher,—this notwithstanding the abundance of employment which has prevailed and the many evidences of greater comfort in the modern family. Wages, speaking generally, have risen 43 per cent—the investigation having covered the chief industries and groups of trades in the several provinces. But there has been considerable inequality as between classes like agricultural labour and the printing trades on the one hand and less skilled industrial workers on the other. Wages of the former have risen faster than the rise in retail prices, wages of the latter not so fast. This, however, leaves out the important item of rent. An analysis of approximate incomes and expenditures shows that whereas foods cost in 1913 about the same per cent of current income as in 1900, the percentage going for rent has risen from 20.9 to 24.7—an increase only to be met by economies in other lines.* Considerations like the decreasing size of the family, the development of woman labour, and the decreasing share of labour in the gross profits of industry, must also be discounted. On the last mentioned point it may be noted that although the earnings of the average employee in manufacturing establishments increased 40 per cent, according to the census, between 1900 and 1910, proportionately to the value of the product the total wages bill declined from 23.5 per cent to 20.6 per cent.

A contrariety of experience, then, is a prominent feature of the past few years, viewed from this standpoint. In this is probably to be found the explanation of the origin of the change in living standards. It is primarily a reflection of an era of boom and of the fact that the distribution of the resulting prosperity has not been uniform. Large numbers have had their incomes increased not only absolutely but relatively, and have spent the increase in various ways as their desires dictated, while others, though their incomes may have advanced absolutely, have shared less relatively or not at all in the rise. Perhaps no better illustration is available than that afforded by the prices of stocks as opposed to those of bonds. Stocks, as is well known, represent the interests of the *entrepreneur* class, which operates largely on borrowed capital, while bonds represent the interests of the creditor class—the two main sections into which the modern community is divided. The first class profits by the high prices of "good times" through increased earnings; the second suffer because their earnings are stable whilst their expenditures are increased by high prices. The

*It was formerly a common calculation in Great Britain that rent should not constitute more than 12 per cent of total expenditures. In Canada the similar minimum used to be 18 per cent.

THE COURSE OF COMMON STOCKS, PREFERRED STOCKS AND INDUSTRIAL BONDS, CANADA, 1900–1913.

(Prices in 1900 = 100.



results of the section of the investigation devoted to the prices of Canadian securities are accordingly of fairly general application. It may be said in fact that everyone is either a stockholder or a bondholder in the sense that his interests are affected under a rise in prices in the one way or the other. Briefly, these results may be summed up as follows: An investment of $100 in a typical Canadian stock in 1900 was in 1913 worth $143.50; in other words the purchasing power of the investment, notwithstanding the rise in cost of living, was unimpaired. On the other hand an investment of $100 in a typical industrial bond in 1900 realized only $95 in 1913 and its purchasing power in view of the rise in prices was probably not more than the equivalent of $66 in 1900. This, however, is not all. The bondholder's rate of interest remained unchanged, so that in order to maintain his standard of living he would have had to consume a part of his capital. By 1913 he was probably not more than half as well off as in 1900. With the stockholder, however, there has been a rise of from five to nearly nine per cent in the rate of return, taking into account increased dividends, bonuses, "rights" on new stock issues, etc. This, it will be observed, is a greater rise than has taken place in commodity prices.§ In this margin of great profits in the operations of the financial and commercial classes—including real estate dealers, promoters, brokers, agents, and all who are in essence if not actually holders of stocks as opposed to bonds—is to be found the root of the "extravagance of the age"—in that and in the fact that the individual's standard is to a degree determined by that of the community in which he lives. The increased standard is not the primary cause of the rise in prices, though, of course, once set in motion it increases the demand for goods. The whole phenomenon is one of the most familiar features of a period of speculative boom, disappearing when the boom has passed and stock and bond prices and the fortunes of the two great classes which they represent tend to an equilibrium. The belief has been expressed in high financial quarters that there will be a considerable reduction of credits within the next two years, and that investors who are now demanding securities with large returns and great speculative opportunities, will shortly prefer securities with a lower income yield coupled with great safety—a very significant turn of opinion.

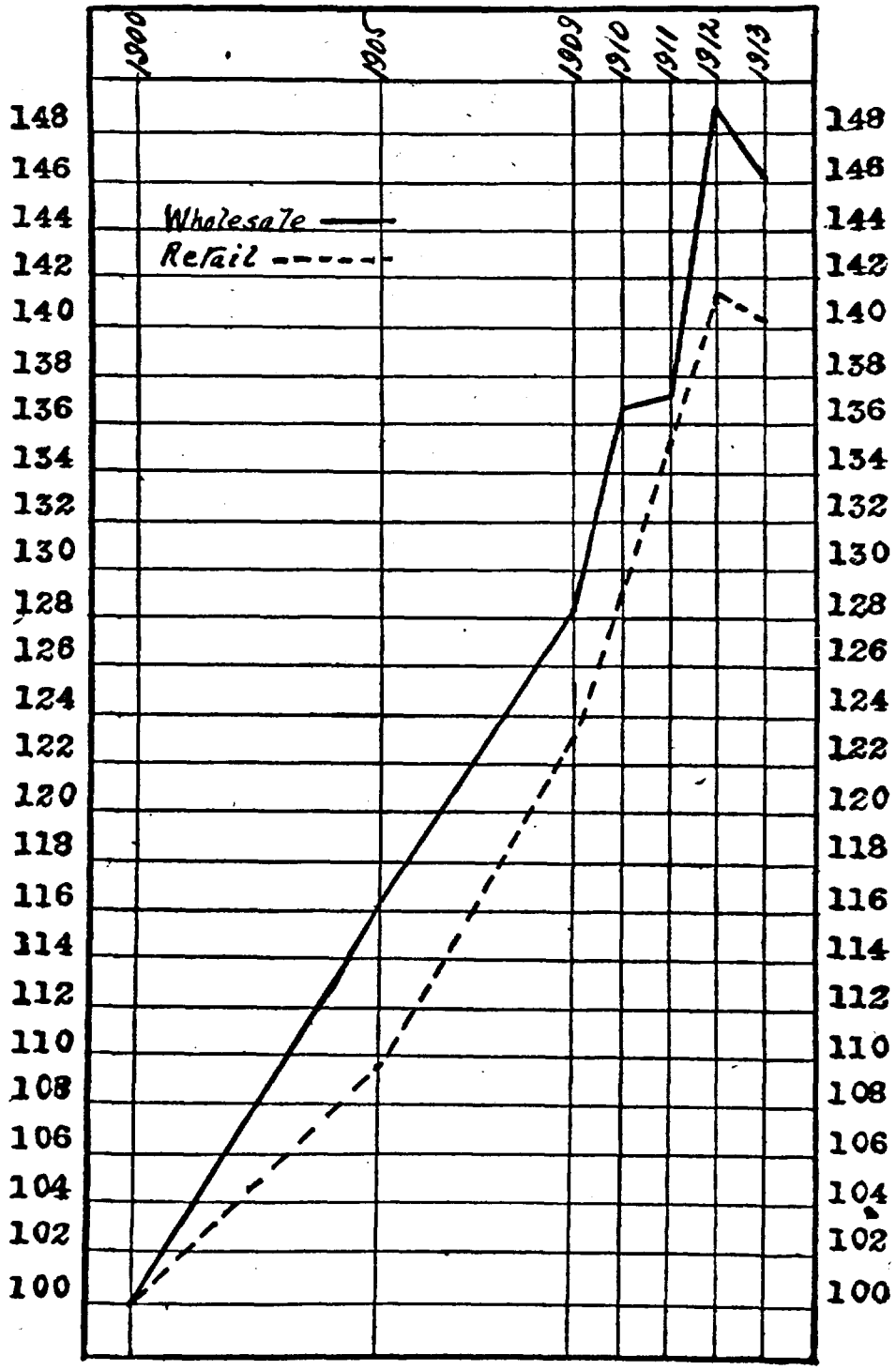
"Causes."

The foregoing, it is thought, will assist in "placing" in the general scheme most of the commonly cited "causes" of the rise in prices of particular commodities. The noticeable *expensiveness of business methods,* like the *extravagance* just referred to, is the product of "good times," when even the inefficient make profits and when even misdirected energy has its reward.‡ To blame the *middleman* for the high prices is natural enough when the multiplication of middlemen may be seen everywhere; it should be realized, however, that this multiplication also is natural when supply shifts from a local to a nation-wide and even world-wide basis, and when, as a by-product of prosperity, competition in price tends to give way to competition in service. The evidence would show that retail prices have in the main followed wholesale. *Mergers* and *big business* flourish in the same soil; publicity and regulation are the needs indi-

§As the investigation was based on listed stocks alone, whereas the closely held unlisted stocks are often the most profitable, the conclusion here arrived at is probably an understatement.

‡The use of advertising has been brought to an unparalleled development. Advertising has undoubtedly enabled many articles to be sold at an excessive profit and has created a large part of the demand for packaged goods and other expensive devices. This is a fact that cannot be estimated with precision, but it remains true that advertising is a force "which has helped to make possible the monopolization of certain articles." The truth is that efficiency in spending is as necessary as efficiency in earning, and the former is dulled in "good times."

WHOLESALE AND RETAIL PRICES OF FOODS (27 ARTICLES) AND FUEL AND LIGHTING (3 ARTICLES), CANADA, 1900—1913.



cated. Similarly, when a change is made from a domestic to a foreign source of supply the *customs duty* may become one of the direct additional charges incurred. The decline in *municipal markets* is a further indication of the change which has come over the distribution problem. The municipal market of the old type was a device to bring the consumer and the neighbouring producer together; the successful municipal market of to-day is one well situated with regard to railway and tramway terminals, and the fact is eloquent of the change that has come over methods of supply. *Cold-storage* affords an excellent instance of the complexity of the new situation. Because it may be used, when privately owned, to control supply, (though under difficulties that are commonly understated, seeing that only about 5 per cent of the supply goes into storage) it has been blamed for the rise in food prices. Yet its advantages are no less patent. It equalizes the supply of perishable products throughout the year, and it enables such products to be brought great distances. It is in the latter connection perhaps that its significance as a factor in the rise in prices lies: it is one more device rendered necessary by the process of going far afield for food products; when that process has its origin in local failure of supply it is symptomatic of higher prices. Moreover it offers additional facilities for shipping local foods to distant markets. Thus while it regulates the prices of local producers, it also provides them with an outlet. On the whole the nearby source is under ordinary circumstances the cheapest. With regard to *strikes* and *higher wages* as affecting prices, the effort to adjust wages to the rise in the cost of living is the explanation of 80 per cent of the labour unrest in Canada since 1900. Over long periods there may be a rise or fall in "real" wages, but in times of rapid change like 1900-1912, wages follow rather than lead; it is significant that some of the highest rises have been in non-unionized occupations like farm labour and domestic service. *Land speculation* is to be justly condemned, for though speculation in joint-stock securities and in commodities performs a certain service in distributing risks, no similar service is performed by the land speculator, who frequently imposes overhead charges that are a permanent handicap on industry. From the chapter on rentals, it would appear that rent of land has received an increased portion of the dividends on production since 1900. As to *wars* and *militarism*, the drain upon materials caused by the rivalry of the nations in armaments and by the four great wars of 1900-1913 has been so enormous as to rank it in importance with the world expansion above described. It is a striking fact that the expenditures of a single year on war preparations by the seven great nations are approximately the same amount as Canada's total borrowings from Great Britain since 1907—the effects of which on Canadian progress are the subject-proper of this memorandum. But the number of "causes" in a category of this kind can be enlarged almost indefinitely; a writer has enumerated over eighty. Enough has been said to warrant the conclusion that most of the phenomena mentioned are in the main incidental; they are not the tide, they are rather waves upon the tide, and explanations of the rise in prices should not treat them as fundamental. Such phenomena in the great majority of cases obey economic influences; they are closely associated the one with the other as the briefest analysis will show.

Conclusion.

The great rise in prices that has taken place in Canada is accordingly found to centre largely in the new distribution problem which has been created by the lessening of local food supply during an era of heavy expenditures on capital account. The incident is not new to Canadian history; almost an exact counterpart is to be found in the experiences of the provinces during the 1850's while the original railway and canal systems of the country were under construction.§ That the tendency recently has been the same in several other "new" countries has intensified the Canadian situation. "The rise in the cost of living," says Sir George Paish, "came from the remarkable credit the world enjoyed in the past ten years and the greatly increased consumption of the nations that were able to borrow." In the manifestation of this to a very pronounced degree in Canada is to be sought the explanation of the rapidity of the Canadian price-rise. As indicating that we have here the root of the matter one final incident may be cited, namely, that it was the stopping of the inflow of capital by the Balkan war that in reality led to the appointment of the present Board of Inquiry. The war occurred early in 1913, affecting first and chiefly Austria and Germany. Its influence spread thence to France and England and from the latter to Canada. The result was a lessening of employment which caused the prevailing high prices to be severely felt; at the same time it had already in the autumn of 1913 set in motion a very perceptible tendency on the part of prices, and particularly rents, to seek lower levels.† This tendency was world-wide but was chiefly felt, of course, in countries obtaining their capital from outside. It was steadily gathering momentum when the outbreak of the great war threw the situation into confusion.

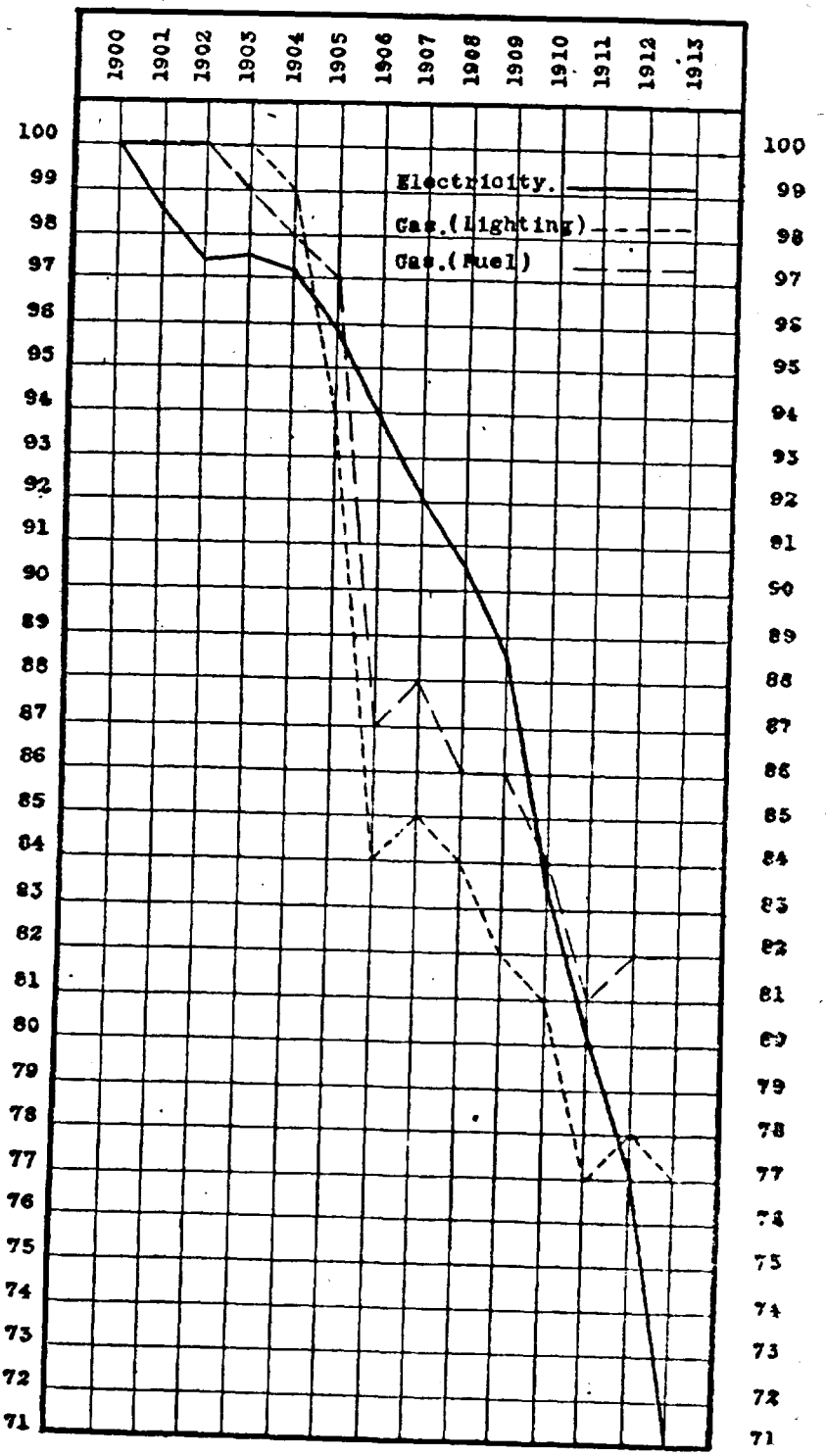
The Order-in-Council appointing the Board does not call for suggestions as to remedies, but it may be stated that the remedial lines which this inquiry indicates are the encouragement of food production and the removal of every possible economic weight in the distribution process. Many concrete suggestions have been made having reference to particular phases of the problem, such as industrial education, co-operation, the amelioration of labour conditions on the farm, the expansion of rural credit, etc., etc., and though the excellence of these does not depend on the price level, and though they will not prevent the pendulum of prices from swinging in obedience to economic attraction, their introduction as *new* influences would undoubtedly mitigate the effects of the high prices. (It may be pointed out that in spite of current tendencies the price of electric lighting has gone down almost one-half following the municipalization of plants and the operations of the Hydro Electric Commission of Ontario—a result which forced down the price of illuminating gas, but, significantly enough, had much less effect on the price of fuel gas.)‡ The reorgani-

§Altogether about $100 millions were spent on railways in Upper and Lower Canada between 1849 and 1859 and an additional $11,500,000 on canals, about the same per capita as in recent years. The new railway systems included the Grand Trunk, the Great Western and the Northern. There was a real estate boom of enormous proportions and a rapid growth of the cities at the expense of the rural districts. Immigration, foreign trade and government and municipal borrowings were on an unprecedented scale. Prices rose 80 per cent in four years. Then, as recently, the rise was chiefly in native products; butter and eggs being imported in large quantities from the United States. The first strikes in Canada occurred during the decade. The "extravagance of the age" and the exactions of middlemen were frequent themes. The check came in financial stringency. Canadian newspaper editorials of the 'fifties on the theme of the high cost of living might have been written yesterday.

†This sensitiveness of rents is a further indication that the most intense effects of the boom are seen in real estate values.

‡Because, of course, of the greater use and therefore greater competitive force of electricity for lighting than for fuel purposes. [See Part I, Section (2)].

PRICES OF ELECTRIC LIGHTING AND OF ILLUMINATING AND FUEL GAS, 1900-1913.



zation of Canadian official statistics may perhaps be mentioned in this connection, for without comprehensive and up-to-date measurements of the kind it is impossible to grasp the significance of current phenomena* That the process of development which has created the great rise has been over-rapid is frequently stated, but when it is remembered that all such developments are necessarily against the future, it will be seen that the answer depends on what is made of the future. The situation has been pronounced sound by Sir George Paish, one of the most practical of observers, and speaking from the quarter from which most of the outside capital now invested in Canada has come,—provided the country turn its energies to production, against which the great outlays of the past ten years have been made. "No debtor country," says Mr. Hartley Withers (*The Meaning of Money*),—"that is, no country which has borrowed extensively from the investors and money-lenders of other countries,—can afford the luxury of what is called an unfavourable trade balance," except, of course, during the period of actual transfer of capital. This review may, therefore, fitly conclude with the more explicit words of Sir George Paish: "It is evident that the railway machinery created to take care of the production of the country is sufficient to deal with at least twice, if not three times, the existing output, and it is obvious that the burden of interest upon the immense amount of capital supplied will be a heavy one until the productive power of the country is greatly increased. I am convinced that every possible effort will be made by all concerned—the Canadian Government, the Provincial Governments, the municipalities, the great railway companies, bankers, traders and others as well as by British investors—to increase rapidly the agricultural and mineral output of the country upon which the welfare of the Canadian people, both individually and collectively, absolutely depends, and that the effect of their concerted effort will be so great that the country will carry with safety a burden of interest which might otherwise overtax its strength. It is, however, of the greatest possible importance that the work of directly increasing the productive power of the country by placing a larger proportion of the population upon the land and in the mines should be carried out with the least possible delay."

(End of "Exhibit" on General Economic Causes of the Rise in Prices, 1900-1914.)

*Sir Robert Giffen has pointed out that countries engaged like Canada chiefly in the production of raw materials are apt to suffer in "bad times" more than manufacturing countries for the following reasons: (1) because there is a greater liability to produce raw materials in excess; (2) owing to their lack of capital they are the first to suffer in a money stringency; and (3) such countries are usually defective in economic knowledge. He added: "If improvement is to come at all, new countries must seek to compensate their natural liability to great commercial fluctuations by a more prudent rate of expansion, and by a more careful study of the lessons of political economy, the neglect of which may be less injurious to them than to an older country, but is still very injurious." (*Essays in Finance*, 1st Series, p. 140). Lack of an alert and educated public opinion in Canada may be read in the vagaries of retail prices. For example, in June, 1914, there were over 20 different prices of bread in 50 localities, ranging from 2 and a fraction cents to 6 cents a lb.

MEMORANDA ON "FISH" AND "DAIRY PRODUCTS."

NOTE.—*For statement as to the purpose of these memoranda see "Preface to Volume II." See also Introduction to "Exhibit," pp. 4-5.*

MEMORANDUM "A."

FISH.

The Canadian fisheries are perhaps the greatest in the world. On the eastern coast no less than 200,000 square miles, or over four-fifths of the fishing grounds of the North Atlantic, belong naturally to Canada, compared with 45,000 square miles belonging to the United States. In addition, there are 15,000 square miles of inshore waters controlled entirely by the Dominion. Hudson bay, with a shore 6,000 miles in length, is greater than the Mediterranean. The Pacific coast comprises over 7,000 miles well sheltered for fishing. In the interior is a series of lakes which together contain more than half the fresh water on the planet; Canada's share of the great lakes of the St. Lawrence basin alone amounts to over 72,700 square miles. Of even greater importance than the extent of the Canadian fishing grounds is the general excellence of their product. It is an axiom among authorities that food fishes improve in quality in proportion to the purity and coldness of the waters in which they are taken. Judged by this standard, the Canadian fishing grounds are without superior. The cod, the halibut, the herring, the mackerel, the whitefish, and the salmon of Canada, are the peer of any fish in the world. It is possible therefore to say that by far the most extensive and valuable fisheries of the Western Hemisphere, if not of the globe, belong to Canada.

In view of the above it is somewhat striking that the consumption of fish in the Dominion should still be comparatively light. The main reason, of course, lies in the difficulty in transporting so perishable a product over the great distances that separate the different sections of Canada. The unlimited supply, however, in conjunction with the high food value and comparatively cheapness of fish renders the problem of increasing the consumption extremely pertinent in connection with the cost of living. The English economist, Alfred Marshall, has stated that the future population of the world will be appreciably affected by the supply of fish both as to quantity and quality.

General Conditions of Canadian Fish Trade.—The feature of the past ten years in the Canadian fish trade has been its marked activity and expansion—compared with previous conditions. Improved transportation facilities and the immigration to Canada of fish-eating people may be assigned as the chief causes. A large Halifax dealer stated that his business west of New Brunswick in smoked and frozen fish had increased from $22,000 in 1907 to $375,000 in 1913. In 1909 the Canadian Fish Company of Vancouver sold one car of frozen fish to Winnipeg; in 1913 they sold sixty-five cars. In the latter year they shipped 5,000,000 pounds of frozen halibut from Vancouver to Halifax. This increased consumption, however, does not appear in the Dominion Government's statistics.

There has also been marked improvement in the technique of the fishing industry in recent years. Steam trawlers and motor-boats have increased the catch and insured its reaching shore in better condition. A prominent Halifax dealer was of the opinion that the Government should encourage motor-boat fishing by advancing money to buy motor-boats on lien when necessary. The process of curing is more efficient than formerly and there is some attempt to manufacture fertilizer from heads, fins and other offal, although this phase of the fishing industry could probably be considerably extended.

Transportation facilities have been so improved as to make possible the marketing of fish in much better condition. In summer there is a special fish train from the Maritime Provinces to Montreal, and in order to develop the market for fresh fish in the interior the Government pays one-third of the express charges on shipments of fresh fish from the Atlantic coast to points as far west as the eastern boundary of Manitoba, and from the Pacific coast as far east as that boundary. According to the dealers, this action has so reduced the cost of laying down Canadian sea fish in Montreal and Toronto that a much larger distribution has resulted. Cold storage cars by fast freight are also available for shipments from the Atlantic seaboard, and the Government renders aid in the building of small cold storage establishments for the storing of bait.

In 1907, the Canadian Government doubled the duty on fish entering Canada, making it 1 cent per pound. Fish dealers assert that this protection has been a great encouragement to the industry. Montreal wholesalers, however, have not entirely ceased to buy from Portland and Boston—stating that at some seasons it is impossible to obtain supplies from the Maritime Provinces. Mulgrave, for instance, is frozen up part of the winter. There is also the difficulty that fish from Nova Scotia is a day longer on the road than fish from Boston, a fact which affects the trade in live lobsters and other fish for quick delivery. For instance, shipments leaving Portland Monday a.m. arrive at Toronto Tuesday a.m. Shipments leaving Canso Monday a.m. arrive in Toronto Wednesday a.m. Boston wholesale prices fluctuate more than prices in the Maritime Provinces and are usually higher. About the middle of January, however, prices in the American markets frequently drop and buyers in Canada take advantage of such occasions. One firm in Montreal stated that they had bought in the American market as low as $1.25 per hundred pounds and in one instance under a dollar per hundred pounds. A wholesaler in St. John stated that early in 1914 he bought fish in Boston and paid the duty, and the laid-down price was cheaper than that of the Canadian product. He had later shipped to Detroit and other Michigan points. Fish brought from the American side are chiefly haddock and cod ranging in price from 4 cents to 5 cents per pound.

Some notes in more detail as to the more important concerns engaged in the industry and as to the methods of the trade follow, under the headings of the Atlantic, Pacific and Lake fisheries respectively:

(1) *Atlantic Fisheries.*—Fish firms on the Atlantic coast include the North Atlantic Fisheries Company. A. Wilson & Son, N. M. Smith Limited, and James Watson in Halifax; The Lockport Cold Storage Company, Swimm Bros., and H. R. L. Bill in Lockport; the Maritime Fish Corporation in Canso and Digby; and H. P. Robertson at St. John. Halifax is the principal market for the fishermen of the souwest coast. In the western part of the province they land at Lockport and Yarmouth. Hawkesburg and Digby are also important markets.

The largest firm dealing in fresh, frozen and smoked fish in the Maritime Provinces is the North Atlantic Fisheries Company, which has cold storage plants at Halifax and Hawkesbury and a branch house at Canso. They deal with the Canadian and American trade only, shipping through to the Pacific coast, haddock, finnan haddie, mackerel, smelts, eels, salt mackerel, salt herring, and boneless fish. Outside of Halifax this firm sells to wholesalers only; in Halifax they operate a retail store. Their chief competitors are A. and R. Loggie in Mulgrave and Loggieville, and A. Snow and the Nova Scotia Fish Company at Digby. The North Atlantic Fisheries Company was organized as the Halifax Cold Storage Company in 1905 and was reorganized under its present name in August, 1912. The company in some cases makes contracts with fishermen for supplies at certain prices. Contracts are also made with steam trawlers landing at Hawkesbury.

The company's capitalization is $1,000,000 common stock ($500,000 paid-up) and $1,000,000 preferred stock ($500,000 paid-up). The preferred stock pays a dividend of 7 per cent; the actual amount of capital put into the business was $500,000. The assets are increasing in value all the time. The manager estimates that last year his company made between one-eighth and one-quarter cent per pound profit in the wholesale business, out of which the dividend was paid.

N. M. Smith, Limited, of Halifax, is in the cured salt fish trade exclusively. He buys direct from the fishermen and handles mainly cod. This firm has a branch in Newfoundland. They exported cod largely to Portugal in 1913, and reported that their trade with Brazil is also increasing. They find that the demand for fresh and half cured fish in Canada has considerably decreased their Canadian business. They sell about ten carloads of fish per year west of Winnipeg.

Mr. H. P. Robertson, of St. John, is in the wholesale fish business exclusively, handling both fresh and cured fish. There is a curing establishment in the city and also the cold storage plant of the New Brunswick Cold Storage Company, now controlled by the Canadian Pacific Railway. Mr. Robertson secures his supplies from agents at different points in Nova Scotia. He also does a large business in such local fish as shad, salmon, and gaspereaux. He ships throughout Canada and the United States. Atlantic halibut is sold as far west as Ontario, but most of it is marketed in the Maritime Provinces.

Since the change in the United tariff, a new concern, the Consumers Fish Company, has begun business at Yarmouth. It is composed of a number of fish firms at Boston and Gloucester.

The fishing companies frequently enter into contracts with wholesalers to supply fish at stated prices. A Halifax company makes a contract with Winnipeg wholesalers at 5½ cents per pound f.o.b. point of shipment, or with Chicago houses at 5½, 6 or 7 cents per pound.

(2) *Pacific Fisheries.*—On the Pacific coast the largest fish firms are the new England Fish Company and the British Columbia Packers' Association. The New England Fish Company has a controlling interest in the Canadian Fishing Company. The British Columbia Packers' Association is an association of companies which, according to the president, has as its object the bettering of conditions in the salmon trade. When it was organized the association took over forty-nine canneries, twenty-five of which have since been closed down. The association's proportion to the British Columbia salmon pack is 35 per cent, but they state that they have no monopoly of the canning business. The association has three halibut steamers and deals in various kinds of fish. The next largest company is the A.B.C. Company or the Wallace Fish Company. Halibut fisheries are mainly in the hands of the New England Fish Company. In the year 1913 the halibut catch of the British Columbia Packers was 4,00,000 lb. and the catch of the New England Fish Company 16,000,000 lb. The practice of the companies on the coast is to operate their own fishing vessels and to buy part of their supply from fishermen. The Canadian Fishing Company, for instance, operates three United States, two British, and two Canadian vessels from Vancouver, and three Canadian vessels from Prince Rupert. Altogether there are three or four large fish companies on the Pacific as well as smaller ones. A Toronto wholesaler asserts that the smaller companies offer little or no competition. He finds that he can buy several cents cheaper per pound from the larger British Columbia firms than from the smaller ones. British Columbia halibut can be bought and delivered at Halifax at 6¾ to 7 cents per pound.

(3) *Lake Fisheries.*—The Dominion Fish Company is the largest fish corporation operating on the lakes. It is an American corporation with a Canadian charter, and has a large capital. It is believed to be a branch of the Booth Fish Company. They have a large measure of control of the lake fisheries through contracts with the fishermen. They also own boats of their own and call at certain fishing stations where no other boats call. The bulk of the catch of this company goes to the United States. One Toronto wholesaler stated that the Dominion Fishing Company would sell to him only if they were over-stocked.

According to the evidence, the Dominion Fish Company is not so powerful on lake Erie. The Port Stanley fishermen pool their interests under a Buffalo agent who sells all their fish on a one-half cent per pound commission. This combination is known as the Producers' Fish Company. The Toronto wholesaler, above referred to, found it impossible during the season of 1913 to buy fish at Port Stanley, except from one fisherman who had been excluded from the Association. He stated that the best Canadian lake fish were going to the United States; his firm had been asked to make an offer for what was left over after the export trade had been supplied, and they had been unable in the year 1913 to get all the fish they wanted at what they considered fair prices. He stated that owing to these methods of doing business in the lake fisheries, the Canadian wholesaler and retailers were being unfairly treated. He was of the opinion that in the matter of granting licenses it might work for the benefit of the Canadian fish trade if the proviso were attached, that fish should be offered for sale in Canada at the same prices as sold to dealers in the United States. Wholesalers might also be permitted to take out licenses on the condition that they should use the same only in the Canadian trade. At the present time licenses are granted only to bona fide fishermen living in the vicinity of the fishing grounds. It was stated that wholesalers in Toronto have no such difficulty with the sea fish trade as with the trade in lake fish.

A prominent Toronto retailer stated that his firm buys sea fish on the coast and lake fish from the wholesalers. The big fish companies outside being connected with the wholesalers in Toronto, it is impossible to buy from them direct. According to this witness it would appear that some effort is being directed to secure control of the supply of lake fish. He had been able to secure lake fish from a small dealer, but a large company bought out the dealer and in this way his source of supply was cut off. He was aware of another instance where the same company had endeavoured to buy out another small dealer and when he refused they had cut prices. His firm was unable to buy in the Port Colborne section but could secure fish in Wiarton at one-half cent less than the Toronto wholesale price.

DISTRIBUTION COSTS.

Loss by shrinkage in fresh fish taken from the water in the first twelve hours is about 10 per cent, and in the next three or four days there is a further shrinkage of 5 per cent.

The cost of handling haddock to the wholesaler is about $1.35 per 100 pounds. The cost of packing fish is about 75 cents per 300 pounds.

The following list of express rates on fish is useful in this connection. The Government rebate of one-third the express charges from the Atlantic and Pacific coasts should be kept in mind:

Atlantic Ports—

Mulgrave to Montreal	$1.50	per 100 pounds.
St. John to Montreal	1.30	"
St. Andrews to Montreal	1.30	"
St. Stephens to Montreal	1.30	"

Pacific Ports—

Vancouver to Toronto and Montreal	$3.00 per 100 pounds.

United States Ports—

Portland to Montreal	$0.80 cents per 100 pounds, plus duty.
Boston to Montreal	1.20 per 100 pounds, plus 30 cents, plus duty.
New York to Montreal	1.20 " " "
Boston to Toronto	1.75 per 100 pounds, plus duty.

PRICES.

Three tables of prices are submitted herewith. The first gives the market price paid to fishermen for fresh fish at Canso 1911-1914; the second, average prices paid and charged by dealers for fresh fish at Canso; and the third, wholesale price of fresh fish at Montreal, and of retail fish at Toronto. Nova Scotia fishermen get, say, $1.50 per one hundred weight for fresh cod. The wholesale fish dealer at Canso and Digby get 2½ cents for market cod and 3 cents for steak cod. Halifax prices are a shade higher. At Montreal, the wholesale price is, say, 4 cents for market cod and 6 cents for steak. Retail prices at Halifax range from 6 to 10 cents and at Montreal from 7 to 10 cents.

I.—Market Prices paid to Fishermen for Fresh Fish, Atlantic Products, at Canso, N.S.

	Cod, market, per cwt.				Haddock, per cwt.				Halibut, per pound.				Pollock, per cwt.				Salmon, per pound.			
	1911	1912	1913	1914	1911	1912	1913	1914	1911	1912	1913	1914	1911	1912	1913	1914	1911	1912	1913	1914
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	c.	c.	c.	c.	c.	c.	c.	c.	c.	c.	c.	c.
January	1 50	1 50	1 50	1 50	2 50	2 00	1 50	2 00	....	....	....	10	....	50	50	60	....	....	....	....
February	....	2 00	2 00	2 00	2 50	2 00	1 50	2 25	....	....	....	10	....	50	50	60	....	....	....	....
March	....	2 00	2 00	2 00	....	1 50	1 50	2 25	....	....	....	10	....	50	50	60	....	....	....	....
April	1 00	1 50	1 50	2 00	75	1 50	1 50	1 00	3-5	7	7	7	50	40	50	60	....	....	....	....
May	1 00	1 25	1 25	1 50	75	1 00	75	1 00	3-6	6	6	6	50	40	50	60	....	12	12	10
June	1 00	1 25	1 00	1 50	1 00	1 00	75	1 50	5	5	5	6	50	40	50	60	12	10	10	10
July	1 00	1 25	1 00	1 50	1 00	1 00	1 00	1 50	8	8	8	7	50	40	60	60	12	12	10	10
August	1 00	1 25	1 00	1 50	1 00	1 00	1 00	1 50	8	8	8	8	50	40	60	60	12	12	12	....
September	1 50	1 25	1 00	1 50	1 50	1 50	1 00	1 50	8	8	8	8	50	40	60	60	....	....	....	....
October	1 50	1 25	1 25	1 50	1 50	1 50	1 25	1 50	8	8	8	8	50	40	60	60	....	....	....	....
November	1 50	1 25	1 25	1 50	2 00	1 50	1 25	1 50	8	10	10	10	50	40	60	60	....	....	....	....
December	1 50	1 50	1 50	1 50	2 00	1 50	1 50	1 50	8	10	10	10	50	40	60	60	....	....	....	....
Average	1.25	1 437	1.354	1.625	1.50	1.416	1.208	1.583	6.83	7.7	7.8	8.33	50	42.5	55	60	12	11.5	11	10

II.—Average Prices of Fresh Fish at Canso, N.S.

Year.	Cod.		Haddock.		Halibut.		Pollock.		Salmon.	
	Prices paid to fishermen, per cwt.	Wholesale prices, per lb.‡	Prices paid to fishermen, per cwt.	Wholesale prices, per lb.	Prices paid to fishermen, per lb.	Wholesale prices, per lb.	Prices paid to fishermen, per cwt.	Wholesale prices, per lb.	Prices paid to fishermen, per lb.	Wholesale prices, per lb.
	c.	c.	c.	c.	c.	c.	c.	c.	c.	c.
1908	.925	.3	1.091	2.50	6.18	8	.365	.2	11.3	12.75
1909	1.050	2.75	1.125	2.75	7.85	8.50	.50	.2	10.6	13
1910	1.120	2.75	1.268	3	5.88	8.25	.50	.2	10	15
1911	1.250	2.88	1.500	3	6.83	8.83	.50	2.33	12	13.8
1912	1.437	3.05	1.416	3.05	7.7	8.92	.425	.219	11.5	*14
1913	1.354	2.70	1.208	2.70	7.8	8.9	.550	.2	11	†14
1914	1.625	2.50	1.583	2.56	8.33	9	.60	.2	10	..

*14 cents in January and February.
†14 cents from June to December.
‡"Market "sizes.

III.—Average Wholesale Prices of Fresh Fish at Montreal, Que.—Quotations from the Canadian Grocer.

	Cod.		Haddock.	Halibut.	Salmon. Gaspé.
	Steak.	Market.			
	cents.		cents.	cents.	cents.
1908	5.9	4.6	4.8	9.1	19.6
1909	5.6	4.2	4.8	9.6	21.4
1910	5.9	4.6	5.1	9.9	26.0
1911	5.5	4.0	5.0	9.1	19.1
1912	5.7	4.3	4.7	9.7	16.3
1913	6.4	4.9	5.1	10.0	17.9
1914	6.2	5.2	5.6	8.1	15.2
Retail price Toronto 1914	17.3		12.2	30.0 18.0*	45.0

*Frozen.

The great spread in fish prices, it will be seen, is contributed by the retailer, and no doubt it is the retailer who bears the chief share of the risk in what is essentially a risky business. The unsteady character of the demand for fish is noteworthy in this connection. The demand varies with the seasons and the days of the week—Wednesday and Friday being the two heavy days. Moreover, the retailer's costs have greatly increased in recent years; the expenses of delivery have advanced rapidly and a much larger proportion of the sales have to be delivered than some years ago. Dealer after dealer stated that they secured most of their business over the telephone and that only the poorest came to the store or market. Now the retailer has to clean all fish sold, whereas years ago this was

not required. One of the largest wholesalers in Canada thought that the retailer must have a profit of 100 per cent. Dominion Fisheries authorities, however, are of the opinion that the retailing of Canadian fish products is at present carried on by inefficient and extravagant machinery—that not only could the trade be considerably increased by those methods of display which are to be seen in other countries, but that much of the present loss in handling could be eliminated.

MARKETING OF FISH.

Several of the dealers who gave evidence were of the opinion that the development of municipal markets would reduce the retail price of fish by encouraging small dealers. A wholesale and retail fish dealer in St. Antoine market, Montreal, stated that despite the unattractiveness of that market the people were resorting to it in greater numbers than ever before. The prices of fish on the market were 2 cents less than in the up-town stores. "The fact that the St. Antoine market had a profit of $98,000 in 1913," said the witness, "ought to encourage municipalities to promote such markets." A prominent wholesaler in Toronto was of the opinion that municipal markets would greatly improve the fish business, because of the high rent of stores. The dealer in the St. Antoine market above referred to paid $11.75 per week for his stall. Apparently there is a growing tendency on the part of that section of the population upon whom the burden of high prices chiefly falls, to resort to the municipal market in order to take advantage of the lower prices. Unfortunately the number of markets is small and municipalities are slow to develop them. There is evidence to show that the removal of the duty on Canadian fish entering the United States has been a factor in increasing prices. American firms have their representatives in Nova Scotia and the fishermen have benefited by the increased demand. Table II shows that the average price paid to fishermen in 1914 was higher than in previous years. It is significant that the export of fish from Canada for the fiscal year 1913-14 was $20,698,849, the largest export in the history of the country. Boston prices are as a rule, as above stated, higher than those in Canada, but since the removal of the American duty Canadian prices are approaching the Boston level. In the lake fish trade, the same conditions prevail; the fishermen sell in Buffalo rather than in Toronto as they find it pays. On the other hand when prices are lower in the United States the consumer in Canada is unable to benefit unless the American price falls sufficiently to enable the Canadian dealer to import over the duty.

The witnesses examined were agreed there is no combine in control of the sea fisheries of Canada. They stated that the fishing business is of such an uncertain character that a permanent agreement as to prices is quite impossible. Nevertheless in some instances at least a large measure of control is exercised by particular concerns. Fishing companies have been combined in associations and when an association has been effected the number of constituent companies has been decreased. Some large companies have controlling interests in other firms and are thus able to determine their policies.

With regard to the lake fish trade there is evidence that it is the policy of one of the larger groups to control the supply. In the opinion of one of the witnesses "this company is not a monopoly in so far as selling is concerned, but I would consider it as such in so far as buying is concerned."

In the following note will be found a statement with regard to methods of fish marketing in Great Britain, which is submitted in view of the interesting light it throws on the general problem.

NOTE ON FISH MARKETING IN GREAT BRITAIN.

Memorandum submitted through Major H. C. Blair on the subject of Steam Trawlers and the Fishing Industry in the United Kingdom, by Mr. George S. F. Edwards of Smith's Dock Company, Limited, South Banks, near Middlesborough-on-Tees, England.

MY DEAR BLAIR,—In further reply to your letter of the 17th February, I shall now proceed to answer the questions you ask me in this letter.

1. How is the fresh fish transported to the inland towns in this country?

When the fish is landed from the trawler at the fish market it is sorted according to class and quality on the floor of the market. The entire catch is then exposed to public auction, the bidders consisting of fish merchants who have customers in different towns throughout the country or who act as buyers for the large public institutions, such as workhouses, lunatic asylums, etc.

2. Transport of fish.

Immediately the buyers have completed their purchase they proceed to pack the fish, either in wooden boxes or in kits, or barrels. Most of the fish is gutted on the spot and is packed with intervening layers of crushed ice. The railway wagons are ranged up alongside the fish market, the floor of which is level with the floor of the railway wagons. We do not use refrigerated cars, as our distances do not necessitate this, what we use are specially constructed covered-in fish trucks, the dimensions being 46 feet inside length, 7 feet 9 inches width, and 10 feet 10 inches height from ground to roof and 7 feet 3 inches height from the floor of the truck to the roof. At the principal fishing ports the railway companies run special express fish trains. Take Grimsby, for instance, which is our fishing metropolis; indeed, the fishing metropolis of the world. There are twenty-three fish trains despatched every day, seven of which are special express trains, these being drawn by specially constructed locomotives. These locomotives are of great boiler power, enabling a very high tractive effort to be maintained at high speeds. All other traffic gives way to these express fish trains except certain through passenger traffic on the main lines.

3. What is the margin of profit, showing whether the consumer has to pay a reasonable price or not? What benefits do the carriers reap, etc.?

The price of fish in this country is regulated by supply and demand. The buyer on the market, or more correctly speaking, the distributing merchant, looks to a profit of 5 per cent on his turnover, after paying all expenses of packing, railway carriage, etc., and it often happens, when there is a glut of fish, he has to take less. The fishmonger, that is the man who supplies the public, looks to securing a profit of 10 per cent on his turnover, certainly not less. This, however, depends on the locality in which his business is conducted: fishmongers in London, for instance, whose customers consist of wealthy families in the west end, derive very large profits. It is common knowledge, however, that the fishmonger's price does not vary with the price received by the owner of the steam trawler; in other words, when there is glut of fish and it is sold by auction at ruinous prices, the price of fish to the consumer is not proportionately reduced. On the other hand it is only fair to say when there is a scarcity of fish and prices rule high at the market the fishmonger's price is not raised, but the former happens more frequently than the latter.

Of late years a business has sprung up in our densely populated towns which has had a great effect on the fish trade in general; I allude to the business of the

fish frier. These people have shops where certain kinds of fish are prepared and fried ready for use in large quantities, and prove excellent and nutritious, as well as cheap food for the working and poorer classes of the population. This trade of the fish frier has developed enormously of late years, and has proved a veritable backbone to our fishing trade, as it absorbs a large quantity of the poorer classes of fish which otherwise would have been a drug on the market and at times unsaleable.

The difficulty to be contended with in a large and comparatively sparsely populated country like Canada, is that the towns are scattered over such a wide area, and in themselves do not represent a very large population, thus the cost of transit is a very serious consideration. On account of the long distances to be traversed, particularly in summer weather, it would hardly be possible to adopt the same principle of preserving the fish for transit as is adopted in this country, namely by means of crushed ice, which is quite sufficient to keep the fish in a fresh condition for the period occupied by carrying over any distance of this small country of ours; that being so I think it would be found necessary to introduce specially refrigerated fish trucks in your country.

With regard to the rates for carrying fish in this country, we will take Grimsby as the base and I give you a list of some of the rates from that port:

Cost of Carriage per hundredweight.

	Prime.	*Coarse.*	*Smoked.*
Birmingham	2s 3d	2s 3d	1s 9d
Liverpool	2s 3d	2s	1s 11d Reduction of 3d to 6d for 3-ton lots
London	2s 4d	1s 6d	1s 8d Reduction for 3-ton lots.
Manchester	2s	1s 9d	1s 8d " " " "
Sheffield	1s 7d	1s 7d	1s 7d
Plymouth	3s 6d	3s 6d	3s
Dublin	4s 9d	3s	3s
Edinburgh	4s 9d	3s	2s 6d

You ask what became of the fishermen who operated the old sailing vessels; did they get employment on the steam trawlers?

In reply to this question, I may tell you that the success of Grimsby as a fishing port is due to the fact that previous to steam trawling being introduced in the early eighties there existed a fleet of something like fifteen hundred sailing smacks working out of the Port of Grimsby, and as steam gradually displaced the sailing smack, it was found that the crews of the sailing smacks were ideal men for working the steam trawlers, and when the evolution became rapid there was no difficulty to be faced in regard to finding crews for the steam trawlers, whereas in other ports which possess many greater advantages than Grimsby, geographical and otherwise, the one great obstacle to success has been the difficulty in manning the steam trawlers, thus the development of these other ports has been both slow and tedious.

I will now proceed to give you some interesting information regarding the port of Grimsby:

There are 650 steam fishing vessels belonging to that port, and fifty new ones are expected to be put into commission during the present year.

The estimated quantity of fish landed by British vessels at Grimsby during 1913 was 179,226 tons, an increase over 1912 of 3,500 tons.

About 1,250,000 tons of coal are used annually by the fleet of steam trawlers.

200,000 tons of ice are used annually.

The average number of vessels landing their fish at Grimsby market each day is sixty-eight, while on the 6th January, 1913, no less than 124 vessels laden with fish entered the fish dock, the largest number on record for any one day.

The total quantity of fish carried by the railway company in one year was 170,000 tons, added to which there was 26,000 tons exported by the railway company's steamers plying between Grimsby and the continent, making a grand total of 196,000 tons.

The fish trade of Grimsby requires 50,000 railway trucks annually.

The largest quantity carried by rail in any one day was 1,400 tons.

Of late years a new development has sprung up in the despatch of fish in small parcels direct to the consumer. Firms who are carrying on this business issue price lists of packages of various sizes and prices, composed of various kinds of prime fish, and a large number of consumers in this country derive their supplies direct from Grimsby. In one year 450,000 of these parcels of an average weight of 12 pounds and paying an average charge of 8d. each to the railway company were carried. In addition to these, there were large numbers sent by parcels post, amounting to many thousands.

The estimated number of packages of all sizes handled in one year by the railway company alone was 4,000,000.

The existing fish docks at Grimsby have a total water area of about 35 acres, which, however, is quite inadequate to cope with the trade. An additional dock, however, is in course of construction, which will have a water area of 28 acres.

The covered-in fish markets where the fish is landed run to an area of 3,316 square feet, and there are about 500 merchants engaged in buying and despatching the fish to all parts of the country.

The capital invested in steam trawlers amounts to £3,500,000, and 6,000 men are employed directly in the fleet, whilst 50 per cent of the town's population is dependent on the fishing industry.

An enormous business is done at Grimsby in the salting and drying of cod, ling, etc., hundreds of tons being dealt with and prepared in this manner. The railway company have provided special facilities, and the area over which this class of fish is distributed is rapidly increasing.

A large business is done in the manufacture of cod liver oil, and all the offal is used for the manufacture of fish meal and fish guano, which is a very profitable business.

When you come to consider that the population of Canada scarcely exceeds that of London, and that the distance from London to our farthest away fishing port, namely Aberdeen, is inside of 500 miles, you will ready understand that in the present condition of the population in Canada the problem to be solved is a very difficult one. I mention London, in particular, but our other large towns such as Birmingham, Nottingham, Leicester, Manchester, Leeds, and all the large towns in the cotton-spinning area. and the large colliery districts of this country are very large consumers of fish, but it is only within the last twenty years that fish has been recognized in this country as a cheap and nutritious diet for the working classes. Previous to that it was looked upon more as a luxury to be enjoyed by the wealthier classes of this country.

Yours sincerely,

GEORGE S. F. EDWARDS.

March 14, 1914.

MEMORANDUM "B."

DAIRY PRODUCTS.

The outstanding feature of the dairy industry in Canada since the beginning of the century is the decrease in the number of milch cows in the eastern provinces. In 1901 the number of cows in the country as a whole was 2,408,677; in 1911, 2,594,179, and according to the estimates of the Census and Statistics Branch this number has increased to 2,740,434 in 1913. In all the provinces east of Manitoba there has been an actual decrease, while in the western provinces there has been an increase due in part to the shipments of dairy cattle from the eastern provinces to the West. The Dominion Dairy Commissioner, in a statement on Dairy Production in Canada, which is appended to this report, states that the decrease in the number of cows in Eastern Canada is not an indication of any decrase in the total production. According to his estimates, the value of dairy products in 1910 was $109,340,024 as compared with $66,470,953 in 1900, or on a basis of quantity, the production of milk in 1911 was 9,871,178,103 pounds as against 6,866,834,000 in 1901, an increase of 43.75 per cent. The fact remains, however, that despite the increase in production through improved breeding and care, dairy production has not kept pace with home consumption. Granting that dairy production has increased 43 per cent as against a 34 per cent increase in population in the decade, we have the further fact according to the commissioners' own estimate that the per capita consumption as milk has increased from 816.76 to 1065.17 pounds, or 30.41 per cent, while the total consumption increased from 4,387,123,379 to 7,674,385,623 pounds, or 74.92 per cent.

A prominent wholesaler and exported expressed the opinion before the Board that soon the home market will consume our entire output of dairy products.

The extent to which consumption is overtaking production is still more evident in the period 1901-13. The increase of production in 1913 over 1901 was 51.84 per cent, while the increase in consumption was 88.33 per cent. The following table summarizes the statistics of the production and consumption of milk for the years 1901, 1911 and 1913. For the year 1913 we have taken the average pounds of milk per cow and the per capita consumption given for 1911 by the Dairy Commissioner.

	1901	1911	1913	Per cent increase or decrease, 1901-1913
Population of Canada	5,371,315	7,204,838	7,758,000	44.43
Total production of milk (pounds)	6,866,834,000	9,871,178,103	10,426,341,370	51.84
Total consumption as milk (pounds)	4,387,123,379	7,674,385,623	8,262,270,000	88.33
Per capita consumption as milk (pounds)	816.76	1,065.17	1,605.17	30.41
Number of milch cows in Canada	2,408,677	2,594,179	2,740,434	13.77
Average pounds of milk per cow	2,850	3,805	3,805	.....
Surplus remaining for export	2,479,710,621	2,196,792,480	2,164,071,370	-12.7

Milk.—All know something about the milk trade, although not as much as formerly. The day when the city dweller bought milk from the farmer at his door has gone. One evidence of the change is the export of milk and cream to New York City from Canadian farms in the eastern townships of Quebec and along the St. Lawrence river in Ontario. Even before the removal of the United States duty on milk and cream which came into effect October 3, 1913, this trade had assumed considerable importance for the communities interested. The following table shows the export of milk and cream by quantities and values for the period 1911-14 (years ended March 31):

Years.	Gallons.	Dollars.
1911	1,881,923	$ 1,719,919
1912	894,037	793,662
1913	828,299	752,535
1914	1,631,117	1,337,325

Similarly, Canadian cities have had to go further and further afield for their milk supply, and the middleman has come in between the producer and consumer. Simultaneously there has been a great rise in price—probably over 50 per cent in ten years. The rise is still going on. The average retail price in recent years in the fifty-five cities of Canada which have a population of 10,000 or over is as follows:

1910—8 cents per quart.
1911—8.2 "
1912—8.3 "
1913—8.6 "
1914—8.8 "

The expansion lies in the first instance, in the necessity of bringing milk from a distance. A few years ago all the milk used in Montreal came from the island or just across the river. To-day special milk trains are run in from Huntingdon, and other trains have milk cars. Not only is our population increasing, but the per capita consumption seems to be going up. Especially is the demand for cream expanding. Mr. Ruddick estimates that the consumption of cream in twenty-four cities alone in 1912 was the equivalent of 6,000,000 pounds of butter or 13,000,000 pounds of cheese. Then again, the milk for the city consumer must now be from inspected herds and from model establishments. These conditions and the real estate speculator have put an end to the milkman who used to keep a small farm on the outskirts of the city and peddle his milk in cans from a wagon. In the smaller cities this practice may still prevail, and prices of milk there are 5 and 6 cents per quart. In the larger cities, production has been forced into the hands of the farmer with capital to maintain large herds of high grade cattle, to build sanitary stables, etc., and to employ help. These men cannot deliver milk in bottles throughout a large city some miles distant. For this, the dairy companies provide the necessary organization.

Some of the western cities have found it necessary to import milk from the adjacent agricultural communities of the United States. The home supply of milk for Vancouver is sufficient in summer but in the winter months there is a shortage which has been made up by importation from the State of Washington. Up to the present these imports have been increasing, but the milk production of the province has been growing gradually, and in the opinion of the dealers the import business is likely to fall off. Until recently Winnipeg also found it necessary to bring milk across the border, but the irregularities of the crops and the

high price of dairy products have induced the farmers in the surrounding country to take up dairying and at present the supply of milk in the province is quite sufficient for Winnipeg. It appears that the supply within a radius of fifty miles of the city has doubled within the past two years.

The milk business is therefore no longer under the competitive influence of the individual milkman, who, unless very efficient, was kept down to small profits —possibly a mere wage. The new race of dairy farmers and dairy companies are under direct necessity of making the business pay—they have capital to pay dividends on—and profit-cutting competition or under-bidding for business plays a small part in their calculations. At Toronto, the Milk Producers' Association agrees twice a year with the Milk Dealers' Association as to the price to be paid for milk shipped into the city; the latter association then fixes the retail price. Last winter the Toronto producer received $1.62 per 8-gallon can, while the summer price was $1.27, or roughly 5 and 4 cents per quart respectively. The retail price was 10 cents in winter and 9 cents in summer. At Montreal, the prices to producers are 5½ cents and 4 cents per quart respectively. Some Montreal dealers obtain 10 cents in winter for possibly better quality, while at Toronto also certain dealers pay more or less than the prescribed price according to scarcity or exceptional agreement. The spread between producer and consumer in both these cities is greater than even two years ago.

There was general agreement among witnesses that the cost of distribution of milk is excessive. Farmers held that owing to the high land values, the greatly increased value of milch cows, the stricter regulations as to cleanliness, the losses through the tuberculin test, etc., the cost of production has been very materially increased, and that the advance in the amount paid to the producers in recent years is by no means too high. At the time of inquiry, producers in the Vancouver district were receiving from the dealers 18 cents per gallon on an average for milk delivered at Vancouver. The freight averaged probably 2 cents per gallon. Seven years ago the producer received 12 cents per gallon in summer and 15 cents in winter.

It was agreed that the difference between the amount the producer receives and the price paid by the consumer is too great; in Vancouver, for instance, at the time of inquiry the consumer was paying 40 cents per gallon, while the producer was receiving 18 cents per gallon. This difference is made up in delivery costs. The producer sells to a dealer who may deliver himself or may sell to a retailer, in which case two profits must be made before the milk reaches the consumer. There is the additional fact that the delivery system itself is a wasteful one. The delivery wagons of perhaps a dozen competing firms deliver in the same section of the city. A Vancouver witness stated that if delivery could be made direct to the consumer and each house served in turn, the delivery cost would be reduced at least 60 per cent. According to one estimate, delivery could be made from a central clearing house in Vancouver to the consumer for 10 cents per gallon, whereas by the present extravagant system there is a difference between the price paid to the producer and that charged the consumer of 22 cents per gallon.

According to one witness it would seem that the Vancouver wholesalers are careful to eradicate competition. After the witness had built his factory and had been distributing milk for some time he was approached by the Wholesalers' Association and found that he was obliged to do business through them. His business was "knocked" until he joined the association. He was obliged to deal through brokers and give them a discount of 12 per cent and 2½ per cent before he could do business in the province. In addition, he paid a commission of 10 cents per case on all milk sold. The witness stated that he would not have built his plant had he known that it was necessary to deal through the Wholesalers' Association in this way.

WHOLESALE PRICES.—EGGS.—Storage—Price per dozen in case lots at Toronto, Ont., on the first market day of each month; quotation from the Toronto *Globe*.

Month.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.
	cts.	cts.	cts.	cts.	cts.	cts.	cts.	cts.	cts.	cts.	cts.	cts.	cts.
January	18 -19	22 -23	14 -15	19 -20	15 -16	14 -15	17 -17½	15 -16	13½-14	16 -17	15 -18	15 -16	17 -18
February	16	21	17	19 -20	16	12 -13	14 -16	14 -15	15 -16	15 -18	15 -16	14	21
March	15	17	17	19 -20	15	18 -19	3 -12	10 -12	14 -14½	15	12 -13	12½-13	18
April	13	17½-18	12 -12½	13	10½-11	12½-13	13	7	9½-10	16	14	13½-14	12
May	10 -10½	12 -14	11¼	11½-12	10½-11	10	9½-10	9½-10	10½	11 -11½	11 -11½	11	13
June	13	12	10¼-10½	11½	10	10½	9½-10	6½- 7	10 -10½	11½-12	12 -12½	10½-11	14
July	13 -13½	12 -12½	9½-10	11½-12	10½-11	10½-11	9 - 9½	6½- 7	12	12¼-12½	13 -13½	11 -11½	15
August	17	12½ 13	11½-12	11 -11½	10 -10½	10½-11	7	9½	10½-11	13 -12½	13	11 -11½	14 -14½
September	16½-17	12½-13	11	2	8 - 9	11½-12	11 -12	9 -10	11 -11½	13½-14	13	12 -12½	10 -11
October	18 -19	13 -13½	14 15	16	14½-15	10 -11	13	11 -12	13 -14	16	16	12 -13½	11 -12
November	20 -21	15	15½	151-16	14½-15	15 -16	13½	10 -12	15 -16	15 -17	15 -16	15 -16	13 -15
December	20	14 -15	18	15 - 16	14	15 -16	15 -16	12 -13	12 -15	15½	15	17	18
Average	15·979	15·312	13·593	14·729	12·583	12·791	12·000	10·437	12·541	14·489	13·979	13·145	14·895

Month.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.	1914.
	cts.	cts.	cts.	cts.	cts.	ctc.	cts.	cts.	cts.	cts.	cts.	cts.
January	18	22 -23	20	22 -23	24	20 -21	25 -26	25 -26	27 -28	28	26 -28	35 -36
February	14 -15	28	17 -18	17	24	21 -22	27 -28	25	23	36 -38	18 -20	35
March	9 -10	32	19	13 -14	24 -25	21 -22	25 -26	25	16 -17	30 -32	18 -20	32
April	10 -12	18	14½-15	13	17	15 -16½	18 -19	19 -20	18	24 -25	22 -23	20 -22
May	13	14½-15	15½-14	12½	17	16 -17	19	19 -20	18	22 -23	20 -21	21 -23
June	13½-14	15	13½-14	13½	17½-18	17	18½-19	19 -20	18 -19	22 -23	20 -21	20 -22
July	15	12 -12½	16	18 -18½	17 -17½	17½-18	20	19 -19½	18 -19	21 -22	21 -22	23 -24
August	14 -15	14	15	15½	17½-18	20	22	19 -20	18 -19	22 -23	21 -21	24 -25
September	15	18	17½	17	18½-19	20 -21	23 -24	22	19 -20	23 -24	23 -25	26 -27
October	16 -17	18½-19	18 -19	18½-19	20 -21	21 -22	25	23	20 -21	24 26	27 -28	25 -26
November	18	19 -20	20 -21	19	24 -25	22 -23	26	26 -27	25 -26	26 -28	28 -29	28 -29
December	19 -20	20	21	23	22 -23	22 -24	25 -26	26 -28	27 -28	26 -28	31 -32	29 -30
Average	14·854	19·395	17·270	16·958	20·458	19·875	23·062	22·604	21·143	25 913	23·500	26·450

EGGS STRICTLY FRESH.

Price per dozen at Montreal, on the first market day of each month, 1890-1910; quotations from *The Canadian Journal of Commerce.*

Month.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.
	cts.	cts.	cts.	cts.	cts.	cts.	cts.	cts.	cts.	cts.
January	27	26 -28	19	24 -25	22	22 -24	20 -22	23 -24	22	23
February	27 -28	26 -27	21-22	28 -30	20 -22	22 - 25	20 -22	22 -24	22 -23	30
March	17 -18	18 -20	20	26 -28	18 -19	23 -25	18 -20	14	15	22
April	14 -15	20 -21	11 -13	15½-19½	10½-11½	15 -16	14 -16	.....	10 -10½	18
May	12 -12½	11 -12	10½-11	10½-11½	9 -9½	10½	10	.....	9 -9½	11 -11½
June	13 -13½	11	10 -10½	11 -11½	9 -9¾	10 -10¼	9	9¼-9½	9 -10	11¼-11½
July	12 -12½	12½-12½	9½	11 -11½	11	10 -10½	9½-10	9¼-9½	10	14 -15
August	14½-15½	12½-13	11 -12	11 -11½	10 -10½	11 -11½	9½-10½	9½	13	15 -16
September	16 -17	12½-13½	11 -12	11 -12½	9 -10	12 -14	13 -14	12½-13	14	16 -17
October	16 -17	14	13 -14	15 -15½	13 -15	14 -15	15 -20	16 -16½	18	16 17
November	18 -19	15½-16½	18 -20	16	17 -22	18	15 -22	15 -15½	19	19 -21
December	22 -23	20	24	20 -21	17 -22	20 22	22	20	21	18 -20
Average	17·435	16·298	14·625	17·239	14·375	16·392	15·690	15·441	14·688	17·113

Month.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.
	cts.	cts.	cts.	cts.	cts.	cts.	cts.	cts.	cts.	cts.	cts.
January	23 -24	23 -24	30	23 -25	26 -28	24 -27	40 -50	.....	30	35 -40	40 -42
February	25 -26	24 -25	25 -27	23 -24	32 -33	29 -30	25	40 -60	35 -40	33 -35	36 -38
March	17 -18	20 -22	24 -26	16½-18	26 -27	25 -28	17	33 -34	28	28 -29	32 -35
April	14½-15½	13¼-14	12 -12½	12 -13	17 -18	17½-18	16 -17½	21 -22	18	23	20
May	11½-12	11 -12½	12½-13	12½-13	15 -15½	13½-14½	15 -15½	17½-18	16½-17	19 -19½	23 -24
June	11½-13	11 -14½	14 -15½	13 -14	15½-16	18	16½	18 -18½	17 -17½	19 -19½	22 -22½
July	13½	.....	14 -14½	15 -16	14½-15	18 -19	16 -17	16½-17	16½-17	18½-19	17 -17½
August	14 -15	13 -14	15 -16	16 -17	16 -16½	18 -19	.....	16½-17	20	.....	18
September	16 -16½	13 -14	18 -19	17 -18	20 -21	20 -22	.....	18 -18½	20	.....	18
October	20	22 -23	17½-18	19 -20	21 -22	21 -21½	.....	19 -20	20	.....	21
November	20 -21	22 -23	21 -22	23 -24	23 -24	22 -23	.....	21	27	.....	23 -24
December	20 -22	26 -27	22 -23	26 -27	23 -24	24 -25	.....	23 -24	29 -30	33 -35	46 48
Averags	17·562	18·477	19·219	18·542	22·031	21 417	22·4	23·4	23·4	26·5	26·8

EGGS STRICTLY FRESH.—*Continued.*

Prices per dozen at Montreal, on the first market day of each month, 1911-1914.

Month.	1911.	1912.	1913.	1914.
	cts.	cts.	cts.	cts.
January	46 -48	40	50 -60	55 -60
February	32	45	28 -30	40 -41
March	25 -27	28 -30	28 -30	34 -36
April	22 -23	25 -26	23 -24	25
May	21 -22	23 -23½	21	26
June	21½-22½	23	25	26 -27
July	21½-22½	25	25 -26	26 -27
August	21½-23	28	29	27 -28
September	24 -26	29 -30	32	28 -28
October	25 -27	29 -30	34 -36	34
November	26½-28	45	41 -42	35 -37
December	33 -34	45 -50	55 -60	48 -50
Average	27·043	31·917	34·950	35·190

Selected.

YEAR—AVERAGE Wholesale Prices of Eggs in certain cities of the United States and Canada, 1906-13.

Commodity.	Market.	1906.	1907.	1908.	1909.	1910.	1911.
Eggs—							
Fresh	Halifax	.....	.....	20	22	23	23
Selects	"	17	20	20	22	21	.....
Strictly fresh laid	Montreal	22	23	23	27	27	27
Selects	"	20	23	23	24	25	.....
New laid	Toronto	21	23	23	26	26	24
Storage	"	17	20	20	23	23	21
Manitoba fresh gathered	Winnipeg	21	23	21	25	22	23
Fresh, candled	Minneapolis	19	20	20	24	25	21
Refrigerator, No. 1 candled	"	19	20	23	25	24	.....
New laid	New York	26·2	27·7	27·9	31·5	32·6	29·8
Firsts	Boston	21·2	21·6	22·3	25·1	25·6	23·1
State, selected, white	Buffalo	23·9	26·2	27·6	31·2	30·6	23·7
" candled, fresh	"	25·0	24·2	23·8	28·0	28·6	21·7
Storage, candled	"	17·9	21·4	21·1	26·0	26·3	20·5

Commodity.	Market.	1912.				1913.			
		Mar.	June.	Sept.	Dec.	Mar.	June.	Sept.	Dec.
Eggs—									
Fresh	Halifax	33	20·5	26	30	26	23	.....	34
Selects	"	.....	.....	.....	.....	.....	.....	.....	.....
Strictly fresh laid	Montreal	29	23	29·5	47·5	29	25	32	57·5
Selects	"	.....	.....	.....	.....	21	25	29	37·5
New laid	Toronto	31	22·5	27	42·5	28	20·5	27	43·5
Storage	"	31	22·5	23·5	27	19	20·5	24	31·5
Manitoba fresh gathered	Winnipeg	27·5	19	25	27	26	20·5	24	28
Fresh, candled	Minneapolis	24	17	22	28	18	18	23·5	31
Refrigerator No. 1 candled	"	.....	.....	.....	.....	.....	.....	.....	.....
New laid	New York	26	22	31	45	27	23·5	30	57
Firsts	Boston	.....	.....	.....	.....	.....	.....	.....	.....
State selected white	Buffalo	.....	.....	.....	.....	.....	.....	.....	.....
" candled, fresh	"	.....	.....	.....	.....	.....	.....	.....	.....
Storage, candled	"	.....	.....	.....	.....	.....	.....	.....	.....

The 1911 price for Bostons and Buffalo is the average for the months of January to June.

RETAIL PRICES OF EGGS (strictly fresh) in certain cities in the United States and Canada, 1900-13.

City.	1900.	1905.	1910.	1911.	1912.				1913.			
	Dec.	Dec.	Nov.	Dec.	Mar.	June.	Sept.	Dec.	Mar.	June.	Sept.	Dec.
Boston, Mass	27·0	27·9	47·3	53·8	31·5	31·5	44·6	52·1	32·7	34·4	47·1	57·2
New York, N.Y.	22·8	31·9	44·0	44·5	31·6	31·3	37·3	46·3	31·4	32·8	44·7	54·3
Montreal, Quebec	40	55	35	39	34	30	38	60	32	29	40	75
Buffalo, N.Y	19·2	24·7	36·3	42·8	24·7	23·3	31·0	39·5	24·8	25·8	33·8	47·2
Toronto, Ont	22	26	42·5	60	28·5	26	33·5	50	27·5	25	31	52·5
Fall River, Mass	26·2	27·7	49.0	54·6	29·3	30·0	42·0	32·8	32·4	33·4	46·8	36·2
St. John, N.B.	32	32	40	50	35	25	40	50	30	25	35	60
Washington, D.C.	22·1	27·1	36·3	38·8	24·0	25·3	31·5	38·0	22·6	24·8	34·5	42·1
Ottawa, Ont.	20	24	39	*35	28	25	34	50	30	24·5	30	60
Pittsburg, Pa.	19·4	27·3	35·0	45·0	24·9	23·8	29·5	39·3	25·4	25·5	34·8	49·2
Hamilton, Ont	24	23	43·5	47·5	26·5	25	30	47·5	25	25	29	55
Milwaukee, Wis.	19·2	22·8	38·0	44·0	24·7	21·7	27·8	42·7	23·4	22·2	28·8	40·0
Port Arthur, Ont.	20	28	47·5	45	42·5	32·5	32·5	32·5	45	30	40	40
St. Paul, Minn.	15·9	22·0	.....	.....	.....	.....	.....	.....	.....	22·8	28·1	37·5
Winnipeg, Man.	17·5	22·5	35	40	25	26	35	45	45	25	35	45
Minneapolis, Minn.	17·1	21·8	36·0	39·6	23·6	21·8	28·4	33·0	22·7	22·3	30·3	39·3
Regina, Sask.	30	30	40	50	50	25	35	50	50	25	30	50
Denver, Col.	19·9	25·7	33 6	43·8	30·0	25·0	34·0	38·0	26·9	25·0	32·1	47 1
Calgary, Alta.	.....	.....	50	.....	.....	32·5	40	...	40	30	32·5	55
Edmonton, Alta.	30	35	30	50	40	30	35	50	45	25	35	50
Seattle, Wash.	25·4	26·2	59·2	51·0	26·5	27·5	42·5	43·0	23·5	28·8	43·8	53·6
Vancouver, B.C.	35	35	65	65	.....	.....	.....	75	37·5	40	60	65
Portland, Ore.	.....	28·3	50·8	47·5	25·8	25·0	36·4	48·6	24·6	26·0	40·0	50·6
San Francisco, Cal.	32·3	35·5	61·7	48·5	23 9	24.6	42·4	40·4	25·5	29·6	46·4	65·0
Victoria, B.C.	60	60	65	70	35	40	50	80	30	35	50	65

*October.

Prices in U.S. cities for the year 1900 and 1905 are yearly averages.